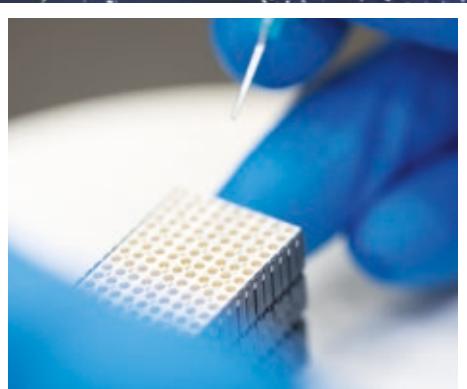


MAKING A SAFER, MORE EFFICIENT AND BETTER CONNECTED WORLD



FY2019 FINANCIAL HIGHLIGHTS CONTINUING OPERATIONS

REVENUE

£2,498m

FY2018: £2,328m

UNDERLYING REVENUE GROWTH

+3%

FY2018: +3%

HEADLINE OPERATING PROFIT

£427m

FY2018: £388m

HEADLINE OPERATING PROFIT MARGIN

17.1%

FY2018: 16.7%

DIVIDEND

45.90p

FY2018: 44.55p

Figures in this report are for continuing operations unless otherwise stated

OPEN THIS FLAP
TO FIND OUT HOW
**SMITHS IS CREATING
INNOVATIVE SOLUTIONS
FOR THE WORLD**

WWW.SMITHS.COM

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CHAIRMAN'S STATEMENT **BUILDING A SUSTAINABLY COMPETITIVE COMPANY**

"We believe that achieving above market organic growth is the best way to build a sustainably competitive company. This is clearly our long term goal."



→ 74–124

GOVERNANCE



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FINANCIALS



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CHIEF EXECUTIVE'S Q&A **A SIGNIFICANT YEAR IN THE EVOLUTION OF SMITHS**

"We made further progress on our strategic plan – delivering continued, sustainable growth on the way to outperforming our markets. In this context of progress and confidence in the future, we announced plans to separate Smiths Medical to create two stronger, industry-leading companies with distinct strategies and focus."



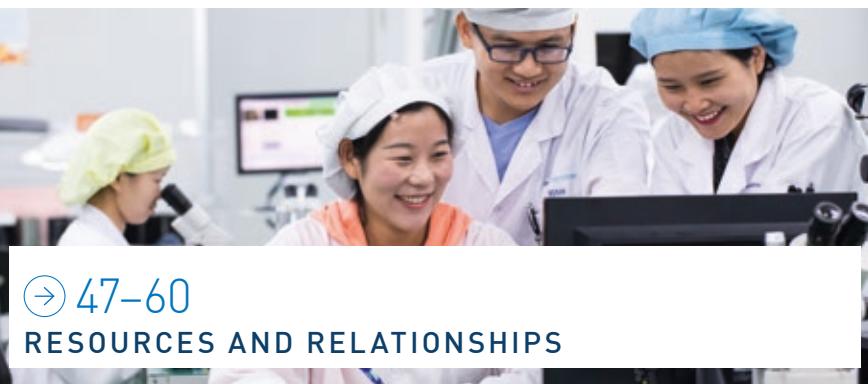
→ 19–27

STRATEGY AND KPIs

→ 22–25

STRONG FINANCIAL FRAMEWORK

"In FY2019 the Group successfully built on its return to growth with continued margin improvement. Our rigorous capital allocation continues, supporting a portfolio that is well positioned to deliver sustainable growth ahead of its markets."



→ 47–60

RESOURCES AND RELATIONSHIPS

OUR PURPOSE

MAKING A SAFER, MORE EFFICIENT AND BETTER CONNECTED WORLD

Smiths is a world leader in the practical application of advanced technologies.

Our businesses share the same characteristics which embody how we create value, underpinned by our culture and values.

We actively manage our portfolio to target growing markets where we can sustainably achieve top three leadership positions.

We drive excellence and innovation through the Smiths Excellence System, maximising value for all our stakeholders.



→ 28–31
JOHN CRANE



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SMITHS DETECTION



→ 36–39
FLEX-TEK



→ 40–43
SMITHS INTERCONNECT



→ 44–46
SMITHS MEDICAL

FY2019 HIGHLIGHTS

The Group delivered another year of good growth – marking the next important milestone towards outperforming our chosen markets.

FINANCIAL SUMMARY

	Headline ¹				Statutory		
	FY2019 £m	FY2018 ² £m	Reported growth	Underlying ³ growth	FY2019 £m	FY2018 ² £m	Reported growth
Continuing Operations⁴							
Revenue	£2,498m	£2,328m	+7%	+3%	£2,498m	£2,328m	+7%
Operating profit	£427m	£388m	+10%	+4%	£326m	£342m	(5)%
Operating margin	17.1%	16.7%	+40bps		13.1%	14.7%	(160)bps
Pre-tax profit	£376m	£333m	+13%		£304m	£287m	+6%
Profit after tax	£273m	£246m	+11%		£142m	£119m	+19%
Discontinued operations⁵							
Profit after tax	£112m	£115m	(3)%		£85m	£160m	(47)%
Total Group							
Profit for the year	£385m	£361m	+7%		£227m	£279m	(19)%
Operating cash-flow	£474m	£538m	(12)%				
Operating cash conversion ⁶	83%	99%	(1,600)bps				
Free cash-flow	£234m	£302m	(23)%				
Net debt	£1,197m	£893m					
Net debt/EBITDA	1.8x	1.4x					
Return on capital employed	14.4%	14.6%	(20)bps				
Basic EPS	96.8p	90.7p	+7%	+3%	56.8p	70.0p	(19)%
Dividend	45.90p	44.55p	+3%				

¹ Headline: In addition to statutory reporting, the Group reports on a headline basis except for balance sheet and cash-flow. Definitions of headline metrics, and information about the adjustments to statutory measures are provided in note 3 to the financial statements.

² FY2018 has been restated for IFRS 15 and the Smiths Medical re-classification as discontinued operations.

³ Underlying modifies headline performance to adjust prior year to reflect an equivalent period of ownership for divested businesses and excludes the effects of foreign exchange, acquisitions and supplemental sales for divested businesses.

⁴ Continuing operations exclude Smiths Medical which is accounted for as 'discontinued operations – businesses held for distribution to owners', given the intended separation of Smiths Medical by the end of the first half of CY2020.

⁵ Discontinued operations is defined in note 27 to the financial statements.

⁶ Operating cash conversion is the ratio measuring total Group headline operating cash over total Group headline operating profit.

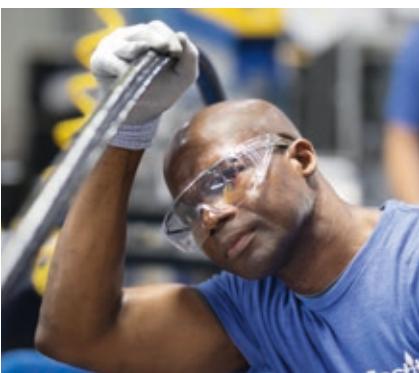
PORTFOLIO STRENGTH*

FY2018: ~80%

>90%

- >90% of the Group is well positioned in attractive markets, up from ~80% last year, driven by increased organic investment and targeted M&A activity
- Flex-Tek completed the acquisition of United Flexible and the integration is progressing well

* See definition on page 26



TOTAL GROUP STOCK TURNS*

FY2018: 3.7x

3.4x

Stock turns measures speed and efficiency across our operations. Underlying progress was offset by the timing of sales and deferred deliveries in Smiths Detection.

* Average inventory turns during the year



HIGHER-GROWTH REGIONS*

FY2018: 20%

20%

Revenue from higher-growth regions increased by 9% on an underlying³ basis with strong growth in China, Egypt, Brazil and Mexico.

* Comprised of territories whose real GDP growth exceeds the G7 average



TOTAL GROUP RECORDABLE INCIDENT RATE

FY2018: 0.39

0.41

per 100 colleagues

Health and safety remains a top priority and we are working to create safer and more secure workplaces for our people.

AFTERMARKET*

FY2018: 48%

49%

Aftermarket and services, a core characteristic of a Smiths business, increased by 100bps, taking aftermarket sales as a percentage of Group revenue to 49%, driven by Smiths Detection.

* Aftermarket relates to maintenance, repairs and digital upgrades

TOTAL GROUP VITALITY INDEX

FY2018: 13%

13%

Vitality measures the effectiveness of our innovation, showing revenue from products launched in the last three years as a percentage of total revenue.



OUR GLOBAL BUSINESS

We have operations in more than 50 countries and our products and solutions have a global reach.



20%
REVENUE FROM
HIGHER-GROWTH REGIONS

>14,000
EMPLOYEES
WORLDWIDE



OUR MARKETS

We target markets with strong long-term growth prospects.

SECURITY AND DEFENCE

Our threat detection equipment helps keep people and assets safe. Demand in the security market is driven by persistent and evolving terror threats, changing security regulations, and increased global air travel and trade. Aftermarket opportunities rise as the installed base grows. The defence market is served by Smiths Detection through imaging and sensing detection products and by Smiths Interconnect through secure connectivity solutions. Growth in this market is primarily driven by defence and security spending.



GENERAL INDUSTRY

Customers put their trust in our products and services to support a wide range of general industrial applications in sectors including petrochemical, mining, pulp & paper, water treatment, semiconductor testing, heating elements, automotive and rail transportation. These sectors and others are served by John Crane, Smiths Interconnect and Flex-Tek, with growth generally tracking increases in GDP worldwide.



ENERGY

John Crane's mechanical seals and systems support energy operations worldwide including downstream and midstream oil & gas and power generation. Growth is driven by increases in global demand for energy, productivity, and enhanced environmental and safety requirements. There is a growing requirement for aftermarket and service contracts.

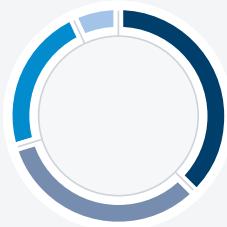


SPACE AND AEROSPACE

Satellite launches, deep space exploration and emerging activities such as asteroid mining are driving demand for high-reliability solutions in the space market. Growth in aerospace is coming from new fuel-efficient aircraft and increasing passenger and freight traffic. Flex-Tek provides hydraulic hoses and fuel lines for airframes and engines and Smiths Interconnect supplies ultra high-quality connectors, microwave components and antenna systems for aircraft and satellite communications.



REVENUE BY MARKET



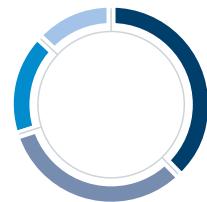
■ Security and defence	38%
■ General industry	33%
■ Energy	23%
■ Space and aerospace	6%

OUR DIVISIONS

Our divisions are experts in their chosen markets.

CONTINUING OPERATIONS

DIVISIONAL REVENUE



DIVISIONAL HEADLINE OPERATING PROFIT



MARKETS

- Security and defence
- General industry
- Energy
- Space and aerospace

JOHN CRANE



Mission-critical solutions for global energy and process industries

REVENUE

£945m

HEADLINE OPERATING PROFIT MARGIN

23.3%

- A global leader in flow control for rotating equipment
- Strong proprietary technology and expertise in applied engineering
- Broad installed base in energy and industrials
- Strong aftermarket service offering with c.200 sales and service centres
- Long-term customer relationships

SMITHS DETECTION



Detection and screening technologies for the identification of security threats and contraband

REVENUE

£798m

HEADLINE OPERATING PROFIT MARGIN

16.0%

- A global market leader with differentiated technologies leveraged across a broad range of markets
- Significant R&D capability
- Operating in regulated markets that require product certification
- Increasing digitisation and aftermarket revenue
- Long-term customer relationships

DISCONTINUED OPERATIONS

FLEX-TEK



Innovative components to heat and move fluids and gases

REVENUE

£436m

HEADLINE OPERATING PROFIT MARGIN

19.2%

- High performance products
- Leading capability in design and manufacture
- A market leader in residential gas tubing products
- High performance flexible tubing for aerospace
- Strong customer relationships

SMITHS INTERCONNECT



Solutions for high-speed, secure connectivity in demanding applications

REVENUE

£319m

HEADLINE OPERATING PROFIT MARGIN

14.7%

- Innovative and technically differentiated products
- Ultra-high reliability solutions used in demanding applications
- Strong research and engineering capabilities
- Customer intimacy, responsiveness and product customisation
- Global presence, reach and support

SMITHS MEDICAL



Quality devices and consumables that are vital to patient care

REVENUE

£874m

HEADLINE OPERATING PROFIT MARGIN

16.8%

- A category leader in served segments
- Trusted brands with a reputation for safety
- Strong, defensible intellectual property
- C.80% of revenue from single-use devices and proprietary consumables
- Strong customer relationships and extensive global sales network



36



40



44

MEGATRENDS

There are many possible futures for Smiths. We monitor megatrends to inform our strategy, which drives our innovation agenda so we can make a safer, more efficient and better connected world.

ARTIFICIAL INTELLIGENCE (AI)

AI – the capability of a machine to imitate intelligent human behaviour, learn from past iterations and enhance its capabilities and knowledge – is nascent but evolving rapidly and applications can already be found in many industries.

How Smiths is well positioned

- Our Digital Forge centre of excellence is supporting Group-wide progress in the application of AI
- Our Smiths Detection CORSYSTM software platform leverages AI to enable our customers to make better informed decisions
- Our John Crane Sense™ platform uses sophisticated machine learning algorithms to monitor seal performance



INCREASED DIGITISATION AND CONNECTIVITY

Converting information into digital formats supports connectivity, making products smarter and able to exchange information with other devices and platforms. This is driving new business models and value creative solutions for our customers.

How Smiths is well positioned

- Digital solutions are central to many of our products, e.g. software in Smiths Detection equipment, John Crane's predictive diagnostic sensors and Smiths Interconnect's digital networks for space applications
- We are close to our customers and offer cutting edge technological expertise
- Our Digital Forge is helping to leverage software expertise across the Group

ENERGY DEMAND AND EFFICIENCIES

Energy demand is increasing worldwide, with estimated growth of 1.2%* per annum, and a changing mix with gas growing faster than oil. Environmental regulations and the need to reduce harmful emissions are also impacting the energy landscape.

How Smiths is well positioned

- We are focusing on technology and new product development that will enable a smarter, greener future, such as John Crane's dry gas seals that help to reduce methane emissions
- Customer intimacy enables us to jointly deliver solutions that meet specific needs

DEMAND FOR TALENT

Advances in technology, globalisation, demographic trends and competition are increasing the demand for specialised talent. Our People Plan is focused on building a learning organisation to attract, retain, develop, engage and inspire our people.

How Smiths is well positioned

- Our people are a sustainable source of competitive advantage and we are committed to enabling them to be the best they can be
- We reward our colleagues for their contributions and enable them to share in our success. We aim to engage them so that they feel valued, supported, and driven to succeed

* BP 2019 Global Energy Outlook



MOBILITY AND GLOBALISATION

The growth of infrastructures supporting travel and trade is creating a smaller world for people and goods. With this comes the need for enhanced security and speed of transaction.

How Smiths is well positioned

- We have a global footprint with operations in over 50 countries
- Growth in air travel, urbanisation and global trade are key demand drivers for Smiths Detection and Flex-Tek
- Applications at Smiths Interconnect support high speed trains and secure connectivity for aircraft and satellite communications



NEW BUSINESS MODELS

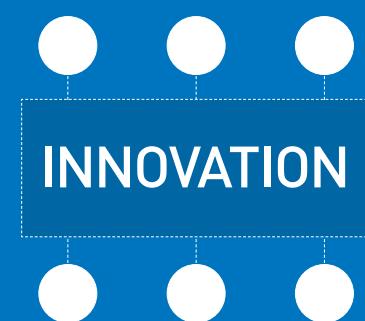
Business models enabled by new technology will emerge and these require agile structures. Trends include customisation, new service models and the sharing economy. We are embracing this evolution to remain competitive and create new value propositions.

How Smiths is well positioned

- We are asset-light, helping us to be competitive and agile in a sustainable way
- A high proportion of our revenue (49%) comes from aftermarket and services
- Customer intimacy and technological expertise are key elements of the Smiths Excellence System, our shared operating model which drives excellence and innovation

OUR GROUP-WIDE INNOVATION FRAMEWORK

Our Group-wide innovation framework is used by the divisions to drive the innovation agenda, enabling us to stay at the cutting edge of knowledge and product development.



OUR BUSINESS MODEL

OUR BUSINESSES ARE DEFINED BY FOUR CHARACTERISTICS

We actively manage our portfolio of businesses to ensure they are targeted in growing markets where we can sustainably achieve a top three leadership position. Our businesses share the same characteristics which embody how we create value.



TECHNOLOGY
DIFFERENTIATION

INCREASING
DIGITISATION

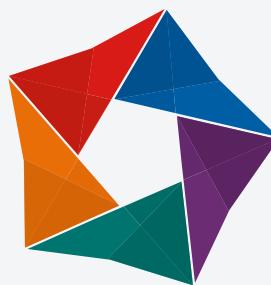
SUSTAINABLY
COMPETITIVE AND
ASSET LIGHT

HIGH PROPORTION
OF AFTERMARKET
AND SERVICES



UNDERPINNED BY OUR CULTURE AND VALUES

Our shared culture and values guide how we behave. Our values are more than just words, we use them to guide every decision to make Smiths a place where people want to work and an organisation that people want to do business with.



PASSION
INTEGRITY
RESPECT
OWNERSHIP
CUSTOMER FOCUS



MAXIMISING VALUE FOR ALL OUR STAKEHOLDERS

As a globally aligned organisation, we are committed to doing business responsibly, maximising value for all our stakeholders.

Measures below based on total Group

PEOPLE

Lean Awareness training

18,000
colleagues

Safety RIR

0.41
per 100 colleagues

CUSTOMERS AND SUPPLIERS

OTIF

84%
On time in full

COPQ

1.4%
Cost of poor quality

AND OUR SHARED OPERATING MODEL DRIVES EXCELLENCE AND INNOVATION

The Smiths Excellence System (SES) helps us apply best practice across the Group. We work to ensure consistent execution and a culture of continuous improvement.

PEOPLE

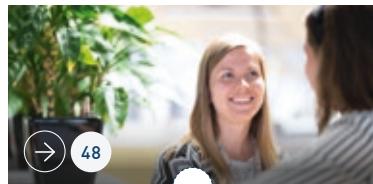
Our people are vital to achieving a sustainable competitive advantage. We work to attract, retain, develop, engage and inspire the best.



→ 47

CUSTOMER

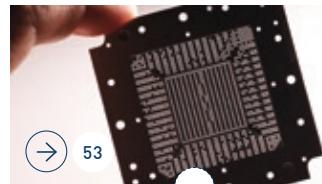
Working closely with our customers to predict and fulfil their needs with our innovative product and value-adding support is central to the success of the Group.



→ 48

TECHNOLOGY

Technology and innovation are what drives Smiths. They help fill our future product pipeline, create new business models, bring value to our customers and drive sustainable growth into the future.



→ 53

PROGRAMME

We aim for consistent and flawless execution in everything we do. Collaboration, consistency and best practice drive the development and implementation of products and solutions that delight customers and create value.



→ 54

INNOVATION

PRODUCTION

We leverage our years of manufacturing experience to drive for enhanced production efficiency, effectiveness, quality and safety, while minimising our impact on the environment.



→ 55

SUPPLY

We build strong, strategic supplier relationships to ensure quality, efficiency and flexibility. We apply our shared values to everything we do and ask our suppliers to do the same.



→ 59

2

SOCIETY AND THE ENVIRONMENT

Direct economic contribution

£2.6bn

Tax paid + employee costs + supplier costs

GHG reduction

(12)%

Greenhouse gas

OUR SHAREHOLDERS

Underlying EPS growth

+3%

See underlying definition on page 02

Dividend growth

+3%

CHAIRMAN'S STATEMENT

BUILDING A SUSTAINABLY COMPETITIVE COMPANY



In writing these statements each year, I have always tried to make them interesting and informative. Hopefully, I will be successful in continuing that trend in my letter this year.

I think that many of you know my readiness to become the Chairman of Smiths was because I wanted to perform an experiment of sorts. That experiment was to see whether we could use the same approach to revitalising growth in a UK engineering company that had proved so successful in the United States. We believe that achieving above market organic growth is the best way to build a sustainably competitive company. This is clearly our long-term goal.

We all know that if a company participates in a 2% growth market, except with vigorous intervention to alter the outcome, that company will also grow at 2%, or perhaps even a little less as new competitive entrants nibble away at its market share.

As I have set out in previous Chairman's letters, there are only five general ways to achieve above-market growth and three of these require innovation. So, becoming better at innovation was always going to be a key piece to solving this growth puzzle. Although Smiths had innovated here-and-there in a couple of its reporting divisions, for many years we did not innovate very much in Smiths Medical, Flex-Tek and John Crane. Innovation had not been a Company-wide focus for many years. The faster moving electronics markets that our Smiths Interconnect business competes in, naturally required a greater level of innovation than in some other parts of the Company and the same was true in Smiths Detection, where global security threats have continued to present more challenges every year. But even there, the rate of innovation was still not fast enough to secure consistent above-market growth because the core market was eroding faster than we were replacing it.

In any company, establishing a pathway to deliver sustainable organic growth requires a substantial culture change. If that company has not innovated for many years, putting in place the necessary cultural and technological building blocks can be a longer road than most people realise. The natural sequence of new market familiarisation, technology awareness, ideation, invention, innovation, and then product release is almost always a several year process, depending on how technologically advanced the ultimate new product business process is. I'm happy to report that the cultural change necessary for innovation to thrive appears to have taken root in the Company. I see innovation happening now in almost every corner of Smiths.



**I SEE INNOVATION HAPPENING
NOW IN ALMOST EVERY
CORNER OF SMITHS."**

Operational excellence was another abiding need to be able to remake Smiths into the company we dreamed of. Every company has a set of underlying KPIs which, although not necessarily reported GAAP measures, are still strong leading indicators of the underlying health of a company. The important underlying KPIs in Smiths case are the new product Vitality Index (VI), the cost of poor quality (COPQ), on time in full delivery (OTIF), working capital as a percent of sales (WC%) and, finally, the operating leverage ratio (OLR), which is the ratio of earnings growth to sales growth. Consistent execution along these KPI vectors had been challenging for the Company going back many years.

We are now publicly reporting VI, WC%, COPQ and OTIF, all of which are showing improvements. We have more work to do on improving the OLR and on WC%, but this is quite normal when companies are trying to restart innovation and are making the necessary upfront investments which understandably reduces operating leverage.



AFTER MORE THAN FOUR YEARS OF EFFORT ON THIS REINVENTION TASK, THE COMPANY IS REPORTING ORGANIC GROWTH THIS YEAR IN LINE WITH ITS COMBINED MARKETS AT ABOUT 3%.”

After more than four years of effort on this reinvention task, the Company is reporting organic growth this year in line with its combined markets at about 3%. We see this as an achievement but not as success; rather purely a stepping stone along the road to reporting consistent above market growth in every line of business. That absolutely is our overall longer-term objective.

Many consultants and bankers who advise companies on which ideas to invest in, often believe there is a linear relationship between money invested in R&D and the resultant new product vitality index and time. Nothing could be further from the truth. I have seen this mistake made many times in my career, with occasionally near tragic results for a company, and sometimes its customers. A company has to have the innate creativity and imagination to even begin the innovation process.

That in itself is a difficult cultural change and the resulting new products and business models that bring better financial output, always take time to deliver. Within a reasonable degree of accuracy, once invented, it is possible to mathematically model the way in which new products penetrate and diffuse into a market. The results are often surprising to the unfamiliar, and they are absolutely not linear. The rate of growth is a double or even a triple exponential or a modified Fibonacci series.

In a company whose sales are spread across many relatively low-volume product groupings, the company is required to invest in innovation everywhere because no one or two product categories are large enough to arithmetically alter the growth outcome. In some senses, that fact makes the innovation choices easier, while it simultaneously makes the broader innovation effort harder and more complex because there's just more of it to do.

If a company has a few key products, say like Apple does with its iPhone, as long as it innovates, it can rely on them to deliver above-market organic growth for the entire company. If not, the company must inevitably encourage innovation across its entire portfolio. That's what Smiths has been doing these past few years.

In these circumstances, a company can't pick winners and losers in the innovation game, if for no other reason than the arithmetic doesn't work. For really innovative products there is, anyway, no data on the future. When people say to me that invention and innovation is risky, so why do it, my response to them is always that the alternative of not doing it is much worse. That approach just leads to average products, lower than average market growth and eventual stagnation.

Innovation, no matter how powerful its effect, is only one of the competitive weapons a company uses. For industrial companies there are six or seven competitive platforms the company needs to be good at to be sustainably competitive.



INNOVATION, NO MATTER HOW POWERFUL ITS EFFECT, IS ONLY ONE OF THE COMPETITIVE WEAPONS A COMPANY USES.”

These are cost, technology, people, distribution, customer service, brands and marketing and lastly, industrial design. If you are going to design new products, they may as well look beautiful. Even great products with a large amount of innovation in them still need to pay proper attention to manufactured cost. Ironically, sometimes products with the highest level of technology, can also have the lowest cost. No matter how good a product is, however, without effective distribution and good customer service, it will fail. The entire figurative orchestra of competitive platforms all have to play in tune. For example, a new car cannot be shipped from the factory if it's missing something as simple as a single windscreen wiper blade.

Nevertheless, even with innovative products, low cost is always the ultimate competitive weapon a company has at its disposal. In my former life before Smiths, on one product where we already had the world's leading position, we challenged ourselves to invent a simpler but effective form of that product and reduce the manufactured cost by 95%. We were successful and we shared the bounty with our customers, but it also enabled us to compete better.

Innovation is not always about what features or technology you add, but in how you make a product and what unnecessary things you might take away. In some of our divisions there are big opportunities to be taken with this philosophy.

We have been focusing a lot more this year on the subsurface KPIs and, in particular, a division's OLR. As innovation and growth begins to gather momentum and pay for itself, OLRs should rise, and then operating margins become easier to maintain or improve.

To make sure we do not fall behind on operational excellence, the Company has also placed significant emphasis this year on Lean and Six Sigma training, primarily for use in operations. Five years ago, there were few if any Black Belt or Master Black Belt qualified Six Sigma employees in our operations departments. Companies that are good at Lean and Six Sigma are ultimately better managed companies with lower costs and higher-quality products. These investments in operating efficiency and quality will undoubtedly produce cost reductions and quality improvements going forward. Several hundred of our colleagues have attended Green or Black Belt programmes this year with hundreds more queuing.



WITH YOUR SUPPORT, WE WILL CONTINUE TO INVEST IN THE FUTURE OF THIS FINE COMPANY VIA INNOVATION, OPERATIONS EXCELLENCE AND THE COMPANY'S PEOPLE."

The big news of the year was the decision to separate Smiths Medical from the Company. After such a long association, this was a hard decision to have to take, but it will facilitate our emphasis on industrial technology and create two stronger, standalone companies. Smiths Medical is a leader in infusion technologies and the innovation we have driven into that business will ensure its future success.

We have also continued our programme of portfolio streamlining to bring a more cohesive core to the Group's businesses. The largest of these activities, the acquisition of United Flexible, brings real scale to a number of different areas of technology in Flex-Tek and we are very encouraged by its progress.

Nobody in the Company believes that finally getting the Company back onto a growth footing in any way indicates that we have crossed the finish line. Not at all. What we do believe, however, is that it indicates we have crossed the start line and, with your support, we will continue to invest in the future of this fine Company via innovation, operations excellence and the Company's people.

In closing, I again want to thank all our investors for your continued support and we shall do our level best not to let you down.

Respectfully submitted,

Sir George Buckley
CHAIRMAN



CHIEF EXECUTIVE'S Q&A

A SIGNIFICANT YEAR IN THE EVOLUTION OF SMITHS



2

FY2019 was a significant year in the evolution of Smiths. We made further progress on our strategic plan – delivering continued, sustainable growth on the way to outperforming our markets. In this context of progress and confidence in the future, we announced plans to separate Smiths Medical to create two stronger, industry-leading companies with distinct strategies and focus.

In this review of the year I address some of the key questions our stakeholders have been asking us during this important time for the Group, and the exciting value creation potential we have at both Smiths and Smiths Medical.

Q For those new to the Smiths story, or who haven't followed the Group that closely, can you set this year's results in context?

A Back in 2016 we set out our vision to transform Smiths and, since then, we've been through a programme of extensive change and development. We defined the types of businesses we believe we're good at running and targeted them in attractive markets where we can achieve a top three leadership position. We put in place the building blocks that will support sustainable growth above our markets. We focused on driving relentless execution through our Smiths Excellence System (SES) shared operating model, and sustainable competitiveness through targeted investment in innovation. Through our global People Plan, we are investing the right way in our people – our most valuable resource – to deliver best performance.

Last year, we returned Smiths to growth for the first time in five years. We have built on that return to growth this year with underlying revenue growth of 3%. Our growth is now in line with the markets that we serve which, in aggregate, grow around 3% per year; and we are on our way to outperformance.

Importantly, this growth is coupled with enhanced margins. Our margins have improved by 300bps since 2016 and we strongly believe that, in time, Smiths can deliver margins of between 18 and 20%.

It was against this context of progress, and our confidence in the future, that we announced plans to separate Smiths Medical.

Q Why have you chosen to separate Smiths Medical now?

A There are three fundamental beliefs driving the separation of Smiths Medical.

Firstly, it will create two stronger, industry-leading companies with distinct strategies, focus, and management teams. Secondly, it will enable us to concentrate on growing the Smiths business as a leading industrial technology group, united by its shared business characteristics and common operating model. And, thirdly it will allow Smiths Medical to capitalise on its leading positions, large programme of new product launches, and value creating opportunities in what is a rapidly changing market.



Our plan will provide immediate clarity through a separation of the two businesses, with the overriding objective of maximising value for all our stakeholders.

Smiths Medical has some great leading brands, positioned in attractive markets. Approximately 80% of its revenue is recurring; it has gross margins of over 50% in all segments; and it routinely delivers high cash conversion. Its challenge had been underinvestment, but we've been working hard to address that, with average investment in new products up 40% in the last four years.

This targeted innovation spend has driven the launch of 33 new products in the last 24 months, and their increasing contribution is a key factor in Smiths Medical's successful return to growth in the second half of FY2019.



OUR PLAN WILL PROVIDE IMMEDIATE CLARITY THROUGH A CLEAN SEPARATION OF THE TWO BUSINESSES, WITH THE OVERRIDING OBJECTIVE OF MAXIMISING VALUE FOR ALL OUR STAKEHOLDERS."

Returning to growth was a key milestone for Smiths Medical, as was the appointment of JehanZeb Noor as CEO. JehanZeb is an impressive leader, with an intimate understanding of the MedTech industry and a strong track record of delivering growth and enhanced performance. I'm sure that he will be a great success as the company builds a strong, sustainable future.

The other significant point of progress achieved by Smiths Medical this year was the submission of its new large volume pump to the US regulators for first phase review. This has been a long-term project that represents a significant opportunity. Global sales of large volume pumps and dedicated consumables are approximately £2bn per year and Smiths Medical currently does not participate in this segment.

I am sure you can see why I have such a strong conviction in Smiths Medical's attractive future as a standalone business.

What is your strategy for future Smiths?

Our ambition is to count ourselves amongst the world's elite industrial technology companies. Based on the superior quality of our businesses I believe that is eminently achievable.

Over the last four years we've been gradually reshaping the Group, organically and inorganically. Our businesses share the same four characteristics which embody how we create value – differentiated by their technology; with increasing digitisation; that are asset light; have a high proportion of aftermarket and services; and are targeted in growing markets where we can achieve a top three leadership position.



We actively manage our investment decisions with these business characteristics in mind and, over the last three years, we have completed 18 transactions with a total value of £1.4bn, supporting the continued strengthening of the portfolio. As a result of the organic and inorganic actions we have taken, over 90% of the Group is now well positioned.

Having honed the portfolio, we then focus on running our assets as effectively as we can through excellence, innovation and people. Consistent and robust execution is the difference between just a set of good assets and a good set of assets delivering consistently great performance. This is at the heart of SES, which is driving tangible improvements in our working capital, productivity and cost metrics; with significant potential still to come.



CONSISTENT AND ROBUST EXECUTION IS THE DIFFERENCE BETWEEN JUST A SET OF GOOD ASSETS AND A GOOD SET OF ASSETS DELIVERING CONSISTENTLY GREAT PERFORMANCE."

As a technology company, innovation is critical to our sustained success. To support that we've increased Group-wide R&D spend by 25% in the last four years. To be effective and drive higher sales, investment needs to be commercially targeted and quick to market. We use our Vitality Index as a barometer for new product introduction success. The index currently stands at 13% and our ambition is to reach 20% in the medium term.



I PASSIONATELY BELIEVE THAT PEOPLE AND LEADERSHIP IS OUR SINGLE MOST SUSTAINABLE DIFFERENTIATOR. WE'RE BUILDING A LEARNING ORGANISATION AND ARE FOCUSED ON DIVERSITY AND INCLUSION AT ALL LEVELS TO MAKE SURE WE ATTRACT, RETAIN, DEVELOP, ENGAGE AND INSPIRE THE VERY BEST PEOPLE."

As I've said before, I passionately believe that people and leadership is our single most sustainable differentiator. We're building a learning organisation and are focused on diversity and inclusion at all levels to make sure we attract, retain, develop, engage and inspire the very best people. At the end of the day, it is Smiths people who drive excellence and innovation. Without the very best, our strategy just isn't achievable.

Our approach is underpinned by a strong financial framework. We're an asset light business, which is highly cash generative, and has a disciplined approach to leverage, and all capital allocation decisions. This supports our ability to generate long-term sustainable growth and superior returns.

Q What are the capital allocation priorities for the Group going forwards?

A Cash generation and a strong balance sheet are both trademarks of Smiths, but they're not ends in themselves. They go hand in hand with disciplined capital allocation, which we apply to all the investment opportunities we have.

Re-investment in organic growth remains priorities one, two and three. We will then complement organic growth with disciplined M&A to create additional value. Our most recent example was the acquisition of United Flexible, which strengthened Flex-Tek's position in aerospace and industrial markets globally. Acquisitions such as United Flexible can help us to access new technologies or new markets which we may not be able to reach as quickly through organic investment channels.

And we will continue to use our cash generation to pay a secure and progressive dividend.

Q What could derail your strategy?

A Our biggest challenge remains pace. We're pulling a lot of levers throughout the Group to enact change but seeing the full effect of that change takes time. I'm very pleased with the progress that we've made so far, and I am excited about our continued trajectory of improvement and the huge potential we still have to go; but, as with any Chief Executive, I'm keen to see the full effect of our transformational strategy coming through as fast as it can.

Q How is the Group positioned for FY2020?

A In FY2020 we expect to make further progress, with year on year growth weighted towards the first half and resulting in a more even balance in overall performance between the first and second halves. At current rates, foreign exchange will provide a tailwind to revenue and profit.

We remain on course to grow faster than our markets over the medium term. Our strategy is to focus the portfolio for growth and deliver world-class competitiveness, within a strong financial framework. The Board remains confident that this will drive long-term sustainable growth and attractive returns.

Andy Reynolds Smith
CHIEF EXECUTIVE

OUR EXECUTIVE COMMITTEE

Our Executive Committee is responsible for implementing our strategy, ensuring consistent execution and embedding our culture and values.



10.....9.....7.....3.....5.....2.....1.....6.....8.....4.....

1. ANDY REYNOLDS SMITH

Chief Executive

Joined Smiths in 2015. Background: Chief Executive, Automotive, GKN plc; Ingersoll Rand; Siebe plc and Delphi Automotive Systems. For full biography see page 76.

2. JOHN SHIPSEY

Chief Financial Officer

Joined Smiths in 2017. Background: CFO at Dyson for 12 years; 13 years in senior finance and strategy roles at Diageo plc. For full biography see page 76.

3. KAREN BOMBA

President, Smiths Interconnect

Joined Smiths in 2017. Background: President and CEO of Morpho Detection; CEO of Labinal; COO of Zoltek; CEO of Messier-Bugatti, USA.

4. ROLAND CARTER

President, Smiths Detection President, Asia Pacific

Joined Smiths in 1991. Appointed President of Asia Pacific in 2017 and President of Smiths Detection in 2018; previously President of Smiths Interconnect and Managing Director for Smiths Connectors.

5. JULIAN FAGGE

Group Strategy and M&A Director President, Flex-Tek

Joined Smiths in 2013 as Group Financial Controller. Appointed Group Strategy and M&A Director in 2017. Appointed President of Flex-Tek in 2019. Background: Royal Caribbean Cruises; Procter & Gamble; PwC.

6. SHEENA MACKAY

Group HR Director

Joined Smiths in 2016. Background: Group HR Director at Aggreko plc, BBA Aviation plc and SSL International plc, and HR roles at GEC plc.

7. JEHANZEB NOOR

Chief Executive Officer, Smiths Medical

Joined Smiths in 2019. Background: Vice President and General Manager of Healthcare for Amcor Flexibles Americas; Partner at McKinsey & Company.

8. PHILIPPE ROMAN

Group Operations Director

Joined Smiths in 2016. Background: Group Purchasing, Supply Chain and IT Director at GKN plc; Global Operations Director at GKN Driveline; Faurecia; Valéo; PSA; Deloitte Consulting.

9. MEL ROWLANDS

Group General Counsel

Joined Smiths in 2013. Appointed Group General Counsel in 2018. Previously Company Secretary and Deputy Group General Counsel. Background: BG Group plc; Linde AG; Edwards Group; Centrica plc.

10. JEAN VERNET

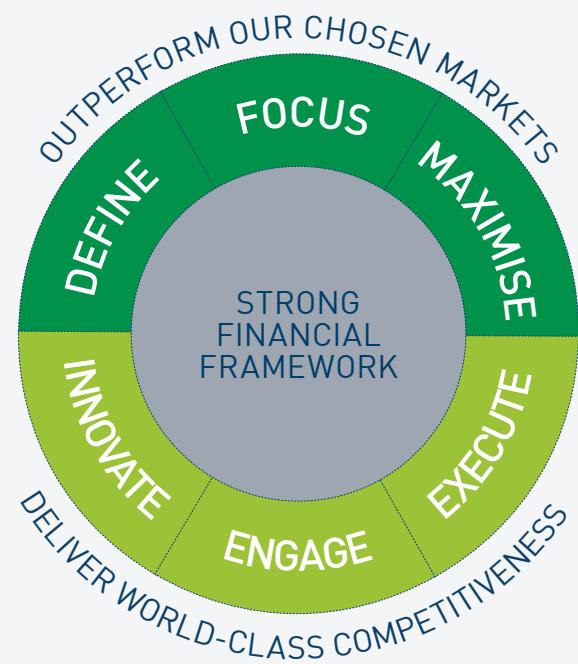
President, John Crane

Joined Smiths in 2017. Background: CFO of Expro; Grid Net and Formfactor; Director of Risk at Rio Tinto Alcan; Schlumberger.

More information is available on our website

OUR STRATEGY

We are seeing comprehensive benefits from implementing our three key strategic objectives.



26 See our KPIs

1 OUTPERFORM OUR CHOSEN MARKETS	2 DELIVER WORLD-CLASS COMPETITIVENESS	3 STRONG FINANCIAL FRAMEWORK
We actively manage our portfolio of businesses to be targeted in growing markets where we can sustainably achieve a position of top three leadership. Our businesses share the same characteristics, which embody how we create value	We drive sustainable competitiveness through focused innovation and investment; attracting and retaining the best talent; and relentless execution through our shared operating model the Smiths Excellence System (SES)	Our financial framework underpins everything we do: <ul style="list-style-type: none"> - Focus the portfolio on sustainably competitive and asset light businesses - Deliver profitable growth with sustainable margins - Manage the business and invest with strong financial discipline
DEFINE OUR BUSINESSES Our businesses share the same characteristics: technology differentiation; increasing digitisation; high proportion of aftermarket and services; and sustainably competitive and asset light	INNOVATE TO EXCEED CUSTOMER EXPECTATIONS Our Group innovation framework drives change and helps our businesses to incubate key projects	
FOCUS ON ATTRACTIVE MARKETS We focus the portfolio on attractive markets with strong long-term growth drivers	ENGAGE OUR PEOPLE TO DRIVE BEST PERFORMANCE Our People Plan is focused on building a learning organisation to attract, retain, engage, develop and inspire our people and embed our values	
MAXIMISE GROWTH We maximise growth through organic investment and a highly disciplined approach to acquisitions, disposals and integration	EXECUTE CONSISTENTLY SES ensures that we focus on continuous improvement, speed and efficiency	



OUTPERFORM OUR CHOSEN MARKETS



DEFINE OUR BUSINESSES

FOCUS ON
ATTRACTIVE MARKETS

MAXIMISE GROWTH

What we said we would do in FY2019

- Drive the market share growth of our businesses in chosen markets through effective R&D investment
- Continue to focus the portfolio and grow the percentage of the Group that is well positioned in attractive markets
- Maintain a disciplined approach to acquisitions that will enhance our capabilities and leadership
- Continue to embed and execute our new operating model and strategy for Asia Pacific
- Look for partnership opportunities in India and China to strengthen our business

How we did in FY2019

- Organic investment continued to increase with R&D up 40bps to 4.5% of sales. Key launches included: a new CT hand baggage scanner in Smiths Detection and FlashShield+™, next generation gas tubing in Flex-Tek
- Completed Flex-Tek's acquisition of United Flexible in February 2019 and John Crane's acquisition of the industrial division of Advanced Diamond Technologies (ADT) in April 2019, with the integration of previous acquisitions on track
- Completed first orders with our Sichuan Huafeng Chinese JV in Interconnect
- Signed multiple new contracts in the Group's higher-growth regions including John Crane, Smiths Interconnect and Smiths Detection contracts across Asia

FY2020 priorities

- Continue to effectively invest in R&D to drive market share
- Grow percentage of the Group that is well positioned in attractive markets via continued focus on the portfolio
- Maintain a disciplined approach to acquisitions that will enhance our capabilities and leadership
- Continue to successfully integrate previous acquisitions
- Further embed new operating model and execute strategy in Asia Pacific
- Seek further growth opportunities in China and India

The acquisition of the industrial division of Advanced Diamond Technologies (ADT) in John Crane expanded our technology into diamond coatings, improving the performance and reliability of our products.





DELIVER WORLD-CLASS COMPETITIVENESS



**INNOVATE TO EXCEED
CUSTOMER EXPECTATIONS**



**ENGAGE OUR PEOPLE TO
DRIVE BEST PERFORMANCE**



EXECUTE CONSISTENTLY

What we said we would do in FY2019

- Increase our Vitality Index with new revenue streams, product lines and capabilities
- Translate our future scenario planning into near-term products and services
- Drive the culture of innovation deeper into the organisation
- Expand our strategic partner network to help accelerate innovation and commercialisation

- Progress our People Plan and diversity & inclusion strategy
- Launch our enhanced leadership programme
- Globalise our finance graduate programme and launch our engineering programme

- Safety and zero-harm remain our top priority
- Continue to drive Group-wide capability development and continuous improvement
- Implement IT roadmaps
- Expand SES projects to accelerate associated business performance benefits through best practices

How we did in FY2019

- Vitality at 13% with successful new product launches
- Digital Forge now fully up and running. Key projects progressed during the year include John Crane Sense™
- Established innovation partnerships with leading universities across the globe in the areas of AI and key technologies

- Launched the SES Green and Black Belt programme focused on developing Lean leadership across the organisation
- Completed the UCLA leadership programme with more than 110 of the Group's senior leaders now trained
- Launched Leadership@Smiths, developing leadership capabilities through the Accelerate programme (c.350 delegates) and e-learning modules

- Continued strong LTIR/ RIR performance
- Delivered £20m procurement savings in both direct and indirect purchasing
- Cost of poor quality dropped by 30bps to 1.4% in FY2019
- Expanded the use of robotic assisted manufacturing across the Group driving efficiency and safety

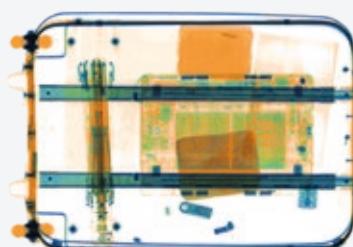
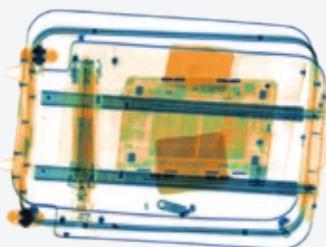
FY2020 priorities

- Drive further improvement in our Vitality Index through expanded capabilities, new revenue streams and product lines
- Execute learnings from future scenario planning to deliver new products and services
- Drive the culture of innovation deeper into the organisation
- Accelerate innovation and commercialisation via expansion of strategic partner network

- Progress our People Plan and continue to execute diversity & inclusion strategy
- Build on Leadership@Smiths with the ongoing global roll out of the Accelerate programme and additional modules of e-learning
- Implement finance graduate programme in the UK, US and Asia Pacific

- Safety and zero-harm remain our top priority
- Continue to focus on expanding Group-wide capability and driving continuous improvement at all levels
- Execute IT roadmaps
- Accelerate business performance using further SES projects to drive best practice

Smiths Detection developed a new CT hand baggage scanner which enables passengers to keep their liquid and laptops in their bags and enhances security.





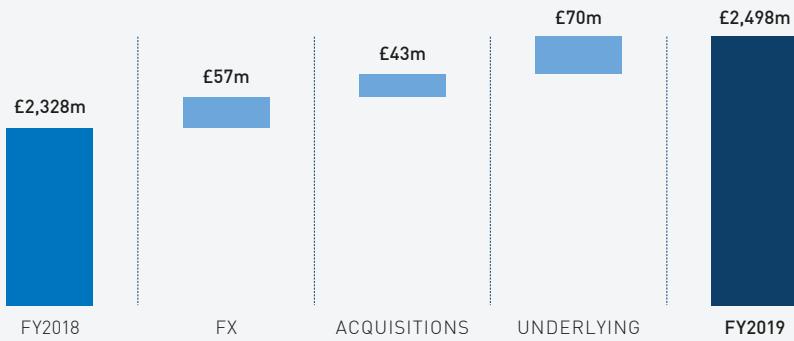
STRONG FINANCIAL FRAMEWORK

66

IN FY2019 THE GROUP SUCCESSFULLY BUILT ON ITS RETURN TO GROWTH WITH CONTINUED MARGIN IMPROVEMENT. OUR RIGOROUS CAPITAL ALLOCATION CONTINUES, SUPPORTING A PORTFOLIO THAT IS WELL POSITIONED TO DELIVER SUSTAINABLE GROWTH AHEAD OF ITS MARKETS."



REVENUE

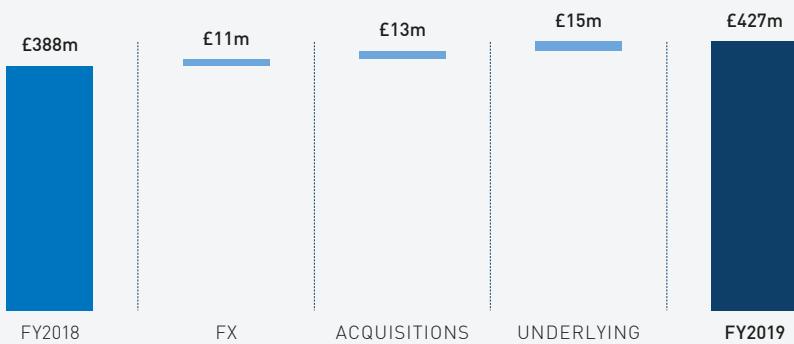


CONTINUING OPERATIONS – EXCLUDING SMITHS MEDICAL

Revenue

In FY2019 the Group successfully built on its return to growth. Underlying revenue growth of 3% was in line with expectations and marks another important milestone on our journey towards sustained outperformance versus our markets. All divisions delivered growth, except for Smiths Detection where some large orders were deferred into the first half of FY2020. The net impact of acquisitions and disposals (£43m), and favourable foreign exchange translation (£57m) each added a further 2% to revenue growth. As a result, reported revenue increased to £2,498m (FY2018: £2,328m), up 7% or £170m. Revenue from higher-growth regions, which now represents 20% of Group sales, grew 9% on an underlying basis.

HEADLINE OPERATING PROFIT



Operating profit

The net impact of acquisitions and disposals (£13m), and favourable foreign exchange translation (£11m) each added a further 3% to profit growth. As a result, reported headline operating profit increased to £427m (FY2018: £388m), up 10% or £39m.

Central costs reduced by £6m to £(51)m (FY2018: £(57)m), reflecting continued focus on central cost efficiencies.

The £(101)m difference between headline and statutory operating profit is non-headline items as defined in note 3 to the financial statements. The two largest constituents relate to amortisation of acquired intangibles and GMP equalisation. On a statutory basis, after taking into account all items excluded from headline performance, operating profit of £326m was £(16)m lower than last year (FY2018: £342m).

Operating margin

Headline operating margin increased 40bps to 17.1% on a reported basis. This improvement was driven by a continued focus on operational excellence, as well as good volume growth, partially offset by mix and pricing in Smiths Detection and re-investment for future growth in John Crane. Since 2016 the Group's operating margin has increased 300bps, evidencing good progress towards our medium-term ambition of achieving Group operating margins of 18-20%.

Finance costs

Headline finance costs of £(51)m (FY2018: £(55)m) were lower than last year driven by early repayment of higher coupon bonds. Statutory finance costs were £(22)m (FY2018: £(55)m) with the £33m reduction driven by a £39m foreign exchange gain on an intercompany loan with discontinued operations, (which is

neutral on a Group basis), partially offset by hedge ineffectiveness on fair value hedges, which are treated as non-headline.

R&D and capex

The Group's investment in R&D grew, with income statement costs up by £8m or 9% on a reported basis, to £93m (FY2018: £85m). This translated into cash costs of £111m or 4.5% of sales (FY2018: £96m or 4.1%). Our Vitality Index measures the effectiveness of organic investment, tracking revenue from new products launched in the past three years. Our Total Group Vitality Index was 13% (FY2018: 13%), with an ambition to reach ~20% in the medium-term.

Capex at £(68)m (FY2018: £(60)m) represented 1.3x depreciation and amortisation (FY2018: 1.0x). The increase was driven by planned investment in John Crane to support growth.

Portfolio

We actively manage our portfolio of businesses and review all options to enhance our leadership positions and maximise value for shareholders. We made further progress on portfolio optimisation through organic and inorganic investment; over 90% of the Group is now well positioned in attractive markets.

In February 2019, Flex-Tek completed the acquisition of United Flexible for an enterprise value of \$345m. This acquisition strengthens Flex-Tek's positions in aerospace and industrial end-markets globally. The integration is progressing

well. In April 2019, John Crane completed the acquisition of the industrial division of Advanced Diamond Technologies (ADT) for an enterprise value of \$8m. ADT is a leader in the development and application of diamond films for industrial, electronic, mechanical and medical applications. The acquisition enhances John Crane's technological leadership. For more information, please read notes 26 and 28 of the financial statements.

DISCONTINUED OPERATIONS – SMITHS MEDICAL

Smiths Medical returned to growth in the second half with revenue up 2%, delivering flat revenue for the year overall at £874m, in line with expectations. The improved trend reflects an increased contribution from new products and a change in sales channel for our chronic obstructive pulmonary disease (COPD) product, both of which offset the previously announced impact of the transition to a new Notified Body in Europe and associated product re-certifications.

Headline operating profit of £147m was down (6)% on an underlying basis. Operating profit was impacted by the £15m cost associated with re-certification in Europe, as anticipated, and some operational inefficiencies. As a result, headline operating margin reduced (110)bps to 16.8%, with margin showing signs of improvement in the second half at 17.0%. Smiths Medical's

PENSION

The net accounting pension surplus was £311m (FY2018: £381m), driven by actuarial losses arising from the application of a lower discount rate. The Group continues to de-risk the pension schemes, for example through a £176m buy-in agreement with Canada Life for Smiths Industries Pension Scheme (SIPS) in July 2019.

The Group made contributions for the year of £36m (FY2018: £49m). For FY2020, we expect total cash contributions of around £40m across all schemes.

GMP is a portion of UK pension that was accrued by individuals who were contracted out of the UK State Second Pension prior to 6 April 1997. Historically there was an inequality of benefits between male and female members who have GMP, which is

not unique to Smiths. A total £(29)m past service cost (FY2018: £nil) was recognised in the current period as a non-headline item following the UK High Court ruling that GMP equalisation is required for all such UK schemes.

	Accounting valuation		Cash contribution	
	FY2019	FY2018	Going forward	FY2019
SIPS scheme	£263m	£303m	£12m	£12m
TI scheme	£206m	£223m	£12m	£12m
Total UK schemes	£469m	£526m	£24m	£24m
Total Group	£311m	£381m	c.£40m	£36m



STRONG FINANCIAL FRAMEWORK

headline profit after tax was £112m, as displayed in the Group income statement. The difference between headline and statutory total profit are non-headline items of £(27)m which include a foreign exchange loss on an intercompany loan with the Group and separation costs, partially offset by profit on disposals of non-core assets and tax credits on non-headline items.

During the year, Smiths Medical completed the disposal of two non-core businesses for a total consideration of c.£30m, further focusing the business on scalable leading positions in its chosen markets.

The separation of Smiths Medical is progressing well; we are on track to complete the demerger by the end of the first half of CY2020, conditional on the approval of Smiths shareholders. The Board of Smiths continues to evaluate all opportunities for value maximisation as the separation process progresses, with the overriding objective of optimising shareholder value. The separation will create two stronger, industry-leading companies with distinct strategies and focus.

Smiths Medical successfully achieved its FY2019 performance milestones supporting the separation process. The division returned to growth in the second half, with the sustainability of this growth underpinned by the ongoing launch of new products. One of the division's most significant new product investments, the large volume pump, has now been submitted to the US regulator for first phase review. The large volume pump market represents a c.£2bn extension to Smiths Medical's addressable market.

In July, JehanZeb Noor joined as Chief Executive Officer of Smiths Medical to oversee the separation and continue building a strong, sustainable future for Smiths Medical. He is focused on accelerating growth and driving enhanced performance to deliver the division's medium-term ambition of growing ahead of its markets, with operating margins in excess of 20% and attractive returns.

TOTAL GROUP

Taxation

The principles of the Group's approach to taxation remain unchanged. The Group manages the cost of taxation in a responsible manner to protect its competitive position. The fundamental principle of our approach to managing our tax affairs is to engage with tax authorities around the world transparently, cooperatively and on the basis of legal compliance. Through this responsible management of our tax affairs we aim to enhance long-term shareholder value while contributing to public expenditure and the overall welfare of the communities in which we operate. The headline tax charge for the year of £(135)m (FY2018: £(126)m) represents an effective rate of 25.9% (FY2018: 25.8%).

Non-headline taxation items of £(52)m included a £(36)m UK deferred tax write-off as a result of the proposed Medical demerger and a £(18)m US deferred tax write-off. Therefore, the statutory tax rate is 45.1%. Please refer to note 3 of the financial statements for further details.

An effective tax rate in the range of 25-27% is expected for the year ending 31 July 2020.

Statutory total profit and EPS

Total statutory profit after tax decreased by (19)% to £227m (FY2018: £279m). Statutory basic EPS was also down (19)% to 56.8p (FY2018: 70.0p) due to the non-headline items referred to previously.

Cash generation

During the year stock turns were 3.4x (FY2018: 3.7x) and average working capital as a percentage of sales was stable at 26% (FY2018: 26%). Headline operating cash-flow was £474m (FY2018: £538m). This reflected an increase in year-end working capital of £(104)m (FY2018: £(16)m), caused by higher current receivables following a strong end to the year and higher inventory associated with order phasing in Smiths Detection and John Crane. As a result, operating cash conversion was 83% (FY2018: 99%). Strong cash generation remains a distinguishing feature of Smiths performance and over the last four years the Group has averaged 100% operating cash conversion.

Statutory net cash inflow from operating activities was £346m (FY2018: £405m). Free cash-flow of £234m (FY2018: £302m) decreased by (23)% reflecting lower operating cash. See note 29 to the financial statements for a reconciliation of headline operating cash to statutory cash-flow measures.

Dividend

The Board has a progressive dividend policy, aiming to increase dividends in line with long-term underlying growth in earnings and cash-flow. This policy enables us to retain sufficient cash-flow to finance investment in the drivers of growth and meet our financial obligations. In setting the level of dividend payments, the Board considers prevailing economic

CAPITAL ALLOCATION

We apply disciplined capital allocation to all investment opportunities. Reinvestment in organic growth remains our priority as measured by the R&D % to sales and our Vitality Index which tracks the effectiveness of our innovation. We complement organic growth with disciplined M&A, to create additional value. We use our cash generation to deliver a secure and progressive dividend to our shareholders.

CASH GENERATION

INVESTMENT IN ORGANIC GROWTH

VALUE CREATIVE M&A

PROGRESSIVE DIVIDEND

conditions and future investment plans, along with the objective to maintain minimum dividend cover of around 2.0x.

The Board is recommending a final dividend of 31.80p per share, bringing the total dividend for the year to 45.90p, a year-on-year increase of 3% (FY2018: 44.55p). The final dividend will be paid on 15 November 2019 to shareholders on the register at close of business on 18 October 2019.

Litigation

Smiths Group faces different types of litigation in different jurisdictions. Please see below an update on the two litigation provisions. For more information, refer to note 22 of the accounts.

John Crane, Inc. litigation

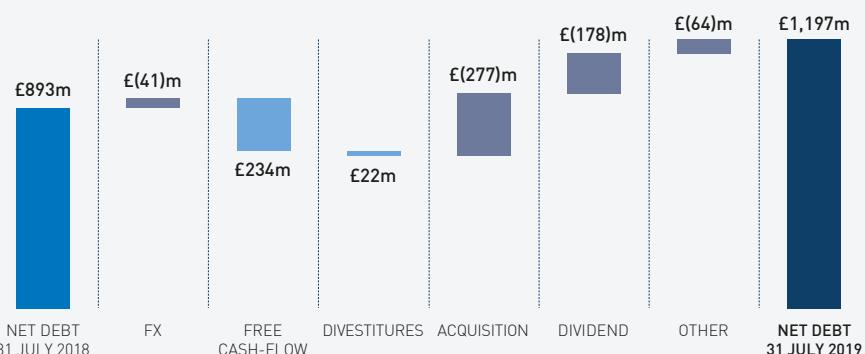
John Crane, Inc. (JCI), a subsidiary of the Group, continues to actively monitor the conduct and effect of its current and expected asbestos litigation, including the effective presentation of its 'safe product' defence, and intends to resist asbestos cases based on this defence. Approximately 285,000 claims against JCI have been dismissed before trial over the last 40 years. JCI is currently a defendant in cases involving approximately 38,000 claims. Despite these large numbers of claims, since the inception of asbestos litigation against JCI it has had final judgments against it in 144 cases, and has had to pay awards amounting to approximately \$168m.

At 31 July 2019, the aggregate provision for JCI asbestos litigation, including for adverse judgments and defence costs, amounted to £237m (FY2018: £223m) expressed at the then current exchange rate. In deciding upon the amount of the provision, JCI has relied on independent expert advice from a specialist.

Titeflex Corporation litigation

Titeflex Corporation, a subsidiary of the Group in the Flex-Tek division, has received a number of claims in recent years from insurance companies seeking recompense on a subrogated basis for the effects of damage allegedly caused by its flexible gas piping products being energised by lightning

NET DEBT TOTAL GROUP



strikes. It has also received a number of product liability claims relating to this product, some in the form of purported class actions. Titeflex Corporation believes that its products are a safe and effective means of delivering gas when installed in accordance with the manufacturer's instructions and local and national codes; however some claims have been settled on an individual basis without admission of liability.

At 31 July 2019, a provision of £74m (FY2018: £78m) has been made for the costs which the Group expects to incur in respect of these claims.

For both litigation provisions, because of the significant uncertainty associated with the future level of claims and of the costs arising out of the related litigation, there is no guarantee that the assumptions used to estimate the provision will result in an accurate prediction of the actual costs that may be incurred.

ROCE

ROCE reduced marginally to 14.4% (FY2018: 14.6%). The ROCE movement reflects recent investments, such as the acquisition of United Flexible, which are expected to generate superior returns over the longer-term.

Debt

Net debt at 31 July 2019 was £(1,197)m, an increase of £(304)m in the period. Net debt to EBITDA increased to 1.8x mainly driven by the acquisition of United Flexible. Gross debt was £(1,512)m (FY2018: £1,610m) and cash reserves

were £315m (FY2018: £717m). Of the gross debt, £nil falls due within one year. Our strong balance sheet continues to allow us to deploy significant further investment capacity to support sustainable growth.

The maturity profile of the major tranches of the debt in issue is as follows:

2022 – £(329)m (\$400m 3.625% bond)
2023 – £(564)m (€600m 1.25% bond)
2027 – £(607)m (€650m 2.00% bond)

Foreign exchange

The results of overseas operations are translated into sterling at average exchange rates. The net assets are translated at period-end rates. The principal exchange rates, expressed in terms of the value of sterling, are shown in the following table.

	Average rates		Period-end rates	
	31 July 2019	31 July 2018	31 July 2019	31 July 2018
USD	1.29	1.35	1.22	1.31
EUR	1.13	1.13	1.10	1.12

With over 95% of our revenue originating outside the UK, we are exposed to foreign exchange movements, mainly the US Dollar and the Euro. For each \$0.10 move, the annual operating profit impact is c.£15m. For each €0.10 move, the annual operating profit impact is c.£10m. Current foreign exchange will provide a tailwind to revenue and profit, if current rates prevail.

John Shipsey

CHIEF FINANCIAL OFFICER

KEY PERFORMANCE INDICATORS

OPERATIONAL PERFORMANCE

Why we measure	Performance	Ambition	Strategic objective
PORTFOLIO STRENGTH <small>We continuously review our portfolio of businesses to target top three leadership positions in attractive markets.</small>	In FY2019, >90% of our business was well positioned. The improvement was driven by organic improvement as well as M&A activity.	FY2017 ~75% FY2018 ~80% FY2019 >90%	90%+ revenue from top three positions in attractive markets
AFTERMARKET & SERVICES as measured by Aftermarket % of sales <small>Aftermarket is a core characteristic of a Smiths business; part of our DNA.</small>	In FY2019, Aftermarket reached 49% of sales, driven by strong growth in Smiths Detection.	FY2017 44% FY2018 48% FY2019 49%	50%+ aftermarket revenue sales as a percentage of total revenue
<hr/>			
EFFECTIVE INNOVATION as measured by Vitality Index <small>Following a period of accelerated re-investment into the business, we are focusing on measuring the effectiveness of our investment.</small>	In FY2019, Vitality Index was 13%. Key launches in the year included a new CT hand baggage scanner in Smiths Detection and FlashShield+™ in Flex-Tek.	FY2018 13% FY2019 13%	~20% revenue from products launched in the last three years as a percentage of total revenue
OPERATIONAL EXCELLENCE as measured by stock turns <small>Stock turns measure speed and efficiency in the business.</small>	In FY2019, our underlying progress was more than offset by timing of sales and delivery delays in Smiths Detection.	FY2017 3.5x FY2018 3.7x FY2019 3.4x	6x stock turns
EMPLOYEE ENGAGEMENT <small>One focus of our People Plan is colleague engagement, which we measure twice annually in a confidential survey.</small>	In FY2019, 87% of colleagues responded and we retained our healthy engagement score of 73.	FY2017 71 FY2018 73 FY2019 73	
SAFETY as measured by RIR <small>Health and safety remains our top priority. Our key metric is Recordable Incident Rate (RIR) per 100 colleagues.</small>	Group RIR continued its strong performance.	FY2017 0.38 FY2018 0.39 FY2019 0.41	

All operational and financial KPIs above the dotted lines are shown on a continuing operations basis. All operational and financial KPIs below the dotted lines are shown on a total Group basis as they are the key measures of the Group's cash and returns performance.

FINANCIAL PERFORMANCE

Why we measure	Performance	Ambition	Strategic objective			
SUSTAINABLE GROWTH as measured by underlying ¹ revenue growth	<p>Growth is a top priority for the Group and a key part of management incentives.</p> <p>The Group delivered further good growth in FY2019.</p>	<table> <tr> <td>FY2017 0%</td> <td>FY2018 3%</td> <td>FY2019 3%</td> </tr> </table>	FY2017 0%	FY2018 3%	FY2019 3%	<p>Outperform our chosen markets</p>
FY2017 0%	FY2018 3%	FY2019 3%				
ENHANCED PERFORMANCE as measured by headline operating margin	<p>Growth needs to be delivered with a strong margin.</p> <p>In FY2019, headline operating margin was 17.1%, up 40bps driven by volume growth and continued focus on operations and costs.</p>	<table> <tr> <td>FY2017 16.3%</td> <td>FY2018 16.7%</td> <td>FY2019 17.1%</td> </tr> </table>	FY2017 16.3%	FY2018 16.7%	FY2019 17.1%	<p>18-20% headline operating margin</p>
FY2017 16.3%	FY2018 16.7%	FY2019 17.1%				
<hr/>						
ATTRACTIVE RETURNS as measured by ROCE	<p>Measuring ROCE ensures we are focused on the efficient use of assets and capital, but can be distorted by M&A activity.</p> <p>In FY2019, we delivered a 14.4% ROCE, reflecting recent investments.</p>	<table> <tr> <td>FY2017 16.2%</td> <td>FY2018 14.6%</td> <td>FY2019 14.4%</td> </tr> </table>	FY2017 16.2%	FY2018 14.6%	FY2019 14.4%	<p>16-18% ROCE through the cycle</p>
FY2017 16.2%	FY2018 14.6%	FY2019 14.4%				
ASSET LIGHT as measured by working capital % sales ²	<p>Working capital measures speed and efficiency in the business from manufacturing to debt collection. Working capital translates into cash.</p> <p>In FY2019, working capital represented 26% of sales, flat year on year, with underlying progress being offset by timing of sales.</p>	<table> <tr> <td>FY2017 27%</td> <td>FY2018 26%</td> <td>FY2019 26%</td> </tr> </table>	FY2017 27%	FY2018 26%	FY2019 26%	<p>~20% working capital as a percentage of total revenue</p>
FY2017 27%	FY2018 26%	FY2019 26%				
STRONG CASH GENERATION as measured by operating cash conversion	<p>Our focus on cash demonstrates our focus on efficiency as well as enabling us to fund future growth.</p> <p>In FY2019, cash conversion of 83% fell from 99% in FY2018 driven by working capital as described above.</p>	<table> <tr> <td>FY2017 118%</td> <td>FY2018 99%</td> <td>FY2019 83%</td> </tr> </table>	FY2017 118%	FY2018 99%	FY2019 83%	<p>100%+ operating cash conversion</p>
FY2017 118%	FY2018 99%	FY2019 83%				
<p>¹ See underlying definition on page 02</p> <p>² Calculated as the 12-month rolling average of inventory, trade receivables and associated provisions, unbilled receivables, trade payables and deferred revenue as a percentage of total annual sales</p>						
LINK TO STRATEGIC OBJECTIVES		LINK TO REMUNERATION	AMENDMENTS TO KPIs			
		<p>Our KPIs are aligned with our strategic objectives. Progress against them is monitored by our management processes and they drive our executive remuneration policy.</p> <p>See page 102 where we show the impact of the operating cash conversion, organic revenue growth and ROCE KPIs from total operations on the FY2019 annual bonus and the LTIP for the three years ending 31 July 2019.</p>	<p>As a result of the planned separation of Smiths Medical, our ambition for Aftermarket has moved from 60%+ to 50%+ as Smiths Medical had over 80% of consumables.</p> <p>R&D % sales has been removed as a KPI as we are focusing on the effectiveness of R&D using our Vitality Index.</p> <p>RIR has been added as a measure of safety.</p>			

JOHN CRANE

MISSION-CRITICAL SOLUTIONS FOR GLOBAL ENERGY AND PROCESS INDUSTRIES

John Crane is a global leader in rotating equipment solutions, supplying engineered technologies and services to process industries including oil & gas, pharmaceutical, chemical, petrochemical, power generation, mining, water treatment, pulp & paper, and turbo machinery.

John Crane designs and manufactures a variety of products including mechanical seals and systems, couplings, filtration systems and predictive digital monitoring technologies. John Crane sales and service is accessed through a global network of more than 200 sales and service facilities in over 50 countries.

FY2019 PERFORMANCE

Revenue

£945m

+8%*

Headline operating profit

£220m

+6%*

Headline operating margin

23.3%

+40bps

Revenue by sector



■ Energy	~61%
■ Industrials	~39%

Revenue mix



■ Original equipment	34%
■ Aftermarket	66%

COMPETITIVE STRENGTHS

- A global leader in flow control for rotating equipment
- Strong proprietary technology and expertise in applied engineering
- Broad installed base in energy and industrials
- Strong aftermarket service offering with c.200 sales and service centres
- Long-term customer relationships

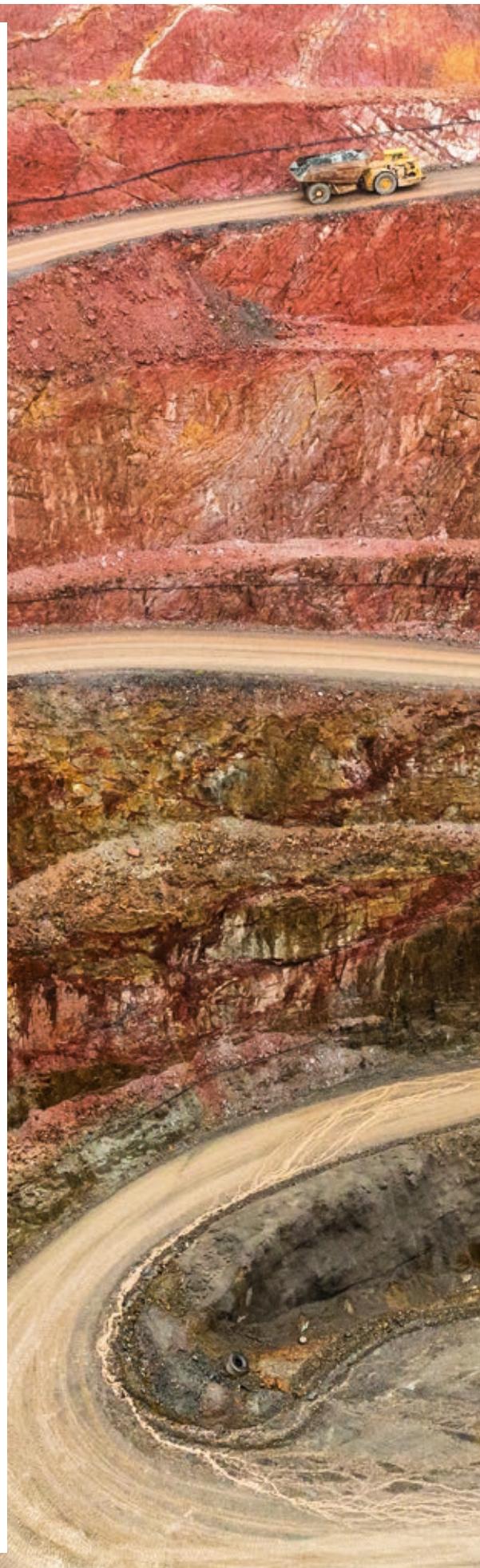
GROWTH DRIVERS

- Underlying energy demand
- Pent-up demand for maintenance and upgrades in oil & gas and petrochemical
- Expansion in higher-growth markets
- Need for operational improvements in industrial process industries
- Disruptive innovations, including materials science advancements and digital transformation

COMPETITORS

Competitors range from large multinationals to small, more focused companies across the product portfolio. Examples include: Flowserve, EagleBurgmann, AES, Danaher, Hydac, Rexnord

* Underlying change. Underlying modifies headline performance to: adjust prior year to reflect an equivalent period of ownership for divested businesses; and excludes the effects of foreign exchange, acquisitions and supplemental sales for divested businesses.





JOHN CRANE'S SEAL UPGRADES HELP ONE OF THE WORLD'S LARGEST GOLD MINES SAVE \$250,000 A YEAR

2

One of the world's largest gold mines, located in a remote section of Peru, was experiencing high seal failure rates on their slurry pumps (designed for pumping liquid containing solid particles). In addition, the mine's existing seal provider was not producing adequate technical information for seal operation and implementation.

John Crane was asked to conduct a survey of the mine's equipment to understand the failure issues and provide a solution. The team provided first-class customer service and delivered a quick, in-depth analysis. This, paired with a track record of high-performing seals, meant John Crane was chosen as the new slurry seal provider to replace the existing seals, packing rings and bearing isolators on 120 of the mine's pumps.

The mine is now saving \$250,000 per year in purchases of mechanical seals, and the failure rate has improved from an average of once per month to once every six months. And within six months, the team was also able to improve service and product delivery of high rotation equipment from six weeks to one week.

With decades of experience serving the mining and minerals industries, John Crane has the engineering expertise and high-reliability pump solutions needed to solve the most difficult challenges in the harshest environments while delivering maximum performance.

DIVISIONAL STRATEGY

Our strategy is to reinforce our global leadership in technologies and services for rotating equipment, with a competitively differentiated offering that will deliver above-market, long-term growth in the most attractive process industries.

We will maintain differentiation by investing in product development, continuing to diversify into industrial segments and higher-growth regions, and broadening our aftermarket value proposition. We will also evaluate strategic bolt-on acquisitions to accelerate growth.

We will further drive competitiveness through operational improvements based on safety, quality and improved lead times.

LINK TO GROUP STRATEGY



OUTPERFORMING OUR CHOSEN MARKETS

- Industrial market penetration
- Product development to support end-market diversification and digitisation
- Continued focus on higher-growth regions with contract wins in China, Thailand, Singapore and Korea
- Strong new product pipeline and constant portfolio review



DELIVER WORLD-CLASS COMPETITIVENESS

- Continue to implement SES pillars focusing on lean and continuous improvement
- Focus on business process standardisation using automated systems
- Develop strategic manufacturing and supply strategy

PRODUCTS

Our comprehensive product portfolio includes mechanical seals, seal support systems, power transmission couplings, specialised filtration systems and digital monitoring. These engineered solutions drive improvements in reliability and reduced environmental impact in our customers' operations.

Our large installed base – built over the last century across a number of vertical markets – drives significant aftermarket demand. We have one of the largest networks of global sales and service centres, ensuring proximity and rapid service to customers. These centres provide a range of services, including repair and refurbishment, upgrades and retrofits, root cause analysis, and alignment and condition monitoring to improve equipment performance and reduce operational downtime.

MARKETS WHERE WE OPERATE

Energy: Following a period of significant downturn, the oil & gas markets continue to recover, driven by underlying energy demand. Customers are investing in growing areas such as liquefied natural gas and pipelines, and we have recently seen increased aftermarket activity in the form of demand for ongoing maintenance and upgrades.

Industrials: We also have a significant and growing presence in other process industries, including pharmaceutical, chemical, power generation, mining, water treatment, and pulp & paper. We expect these verticals will continue to grow in the near-term, helped by increasing demand in higher-growth regions.

Original equipment (OE) is cyclical and is linked to new capacity coming on stream, as well as improved efficiency in existing locations where higher performance seals are installed.

Aftermarket: We continue to expand our footprint through new service centres in selected higher-growth markets, as well as the best-in-class field service teams. We continue to support and partner with our customers, delivering long-term solutions and reliability contracts, focusing on operational efficiencies.

TRENDS SHAPING OUR INNOVATIONS

We believe megatrends, such as the global demand for energy and efficiencies and increased digitalisation and connectivity, will continue to generate demand for our products over the longer term.

Megatrend

Energy demand and efficiencies

Innovation in FY2019

A new dry gas seal in the Aura™ range which reduces methane emissions

An advanced seal for light hydrocarbon pipeline pumps which supports pump efficiency and tolerance of harsh operating environments

An innovative smaller footprint filtration system to enhance performance

Increased digitisation and connectivity

Continued development of John Crane's Sense™ predictive diagnostics systems

FY2019 FINANCIAL PERFORMANCE

	FY2019 £m	FY2018 £m	Reported growth	Underlying ¹ growth
Revenue	945	881	+7%	+8%
Original Equipment	313	292		+13%
Aftermarket	632	589		+5%
Headline² operating profit	220	202	+9%	+6%
Headline² operating margin	23.3%	22.9%	+40bps	
Statutory operating profit	191	199	(4)%	
Return on capital employed	23.4%	22.9%	+50bps	
R&D cash costs % sales	1.7%	1.3%	+40bps	

Revenue

John Crane delivered a continued good performance, with revenue up 8% on an underlying basis. Reported revenue was up 7%, including £(13)m net impact from the disposal of the Bearings business and the acquisition of Seebach GmbH in the prior year and £10m favourable foreign exchange translation.

Underlying revenue from John Crane's Energy and Industrial activities was up c.10% and c.4% respectively, reflecting the improved trend in global energy markets and continued growth in John Crane's industrial sales. These market conditions also drove improved underlying sales of Original Equipment (OE), up 13%. Investment in OE projects and the expansion of the installed base continued during the period. Multiple new project agreements were secured, including oil & gas expansion projects in the Middle East, United States, APAC and Europe, an oil field development project in Brazil, as well as new power, petrochemical, pulp and paper, and chemical contracts across all regions. John Crane's large installed base and leading service offering position it well to satisfy strong aftermarket demand for repairs, maintenance and upgrades; underlying aftermarket revenue grew 5% during the year and now represents 66% of John Crane's revenue.

Operating profit

Headline operating profit of £220m increased 6% on an underlying basis, mainly driven by strong volumes. Headline operating profit margin was 23.3%, up 40bps, with the positive impact of volume growth and the disposal of a lower margin business partially held back by the higher mix of OE, the costs of restarting capacity and increased investment in R&D. The difference between statutory and headline operating profit includes the net cost in relation to the provision for John Crane, Inc. asbestos litigation.

Portfolio

In April 2019, John Crane completed the acquisition of the industrial division of Advanced Diamond Technologies (ADT) for an enterprise value of \$8m. ADT is a leader in the development and application of diamond films for industrial, electronic, mechanical and medical applications. The acquisition enhances John Crane's technological leadership.

ROCE

ROCE was up 50bps at 23.4% driven by the impact of disposals and increased profitability, partially offset by acquisitions and investments in capex.

R&D

Cash R&D expenditure during the period increased by 33% or £(4)m to 1.7% of sales (FY2018: 1.3%). John Crane's innovation is primarily focused on using materials science advancements and coatings to enhance seal performance and efficiency, as well as leveraging the Group's digital expertise to support the development of predictive diagnostic platforms and other innovative digital technologies. During the year John Crane launched a simplified cartridge seal design for process industries, supporting faster and easier installation. The advanced seal for crude oil pipeline pumps, launched last year, saw rapid adoption by some of the world's leading pipeline companies.

Outlook

John Crane continues to see strong order intake for both OE and aftermarket. This supports our expectations of good growth in FY2020, albeit against a strong comparator.

¹ **Underlying:** modifies headline performance to adjust prior year to reflect an equivalent period of ownership for divested businesses and excludes the effects of foreign exchange, acquisitions and supplemental sales for divested businesses

² **Headline:** In addition to statutory reporting, the Group reports on a headline basis except for balance sheet and cash-flow. Definitions of headline metrics, and information about the adjustments to statutory measures are provided in note 3 to the financial statements

SMITHS DETECTION

DETECTION AND SCREENING TECHNOLOGIES FOR THE IDENTIFICATION OF SECURITY THREATS AND CONTRABAND

Smiths Detection is a global leader in detection and screening technologies for the protection of people and assets, supporting safety, security and freedom of movement in today's world. We work with customers in a broad range of markets including aviation, ports & borders, defence and urban security, providing complete solutions that address existing and emerging threats. Smiths Detection's reputation is underpinned by extensive experience, differentiated technology, and a strong track record of success.

FY2019 PERFORMANCE

Revenue

£798m (2)%*

Headline operating profit

£127m (7)%*

Headline operating margin

16.0% (90)bps

Revenue by sector



Revenue mix



* Underlying change.

COMPETITIVE STRENGTHS

- A global market leader with differentiated technologies leveraged across a broad range of markets
- Significant R&D capability
- Operating in regulated markets that require product certification
- Increasing digitisation and aftermarket revenue
- Long-term customer relationships

GROWTH DRIVERS

- Persistent and evolving terror threats
- Changing security regulations in the aviation market
- Growing urbanisation and the need to protect people and assets in these environments
- Global growth in e-commerce and passenger numbers
- Equipment replacement cycle, typically 7-10 years
- Growth of transportation infrastructure in Asia, Latin America and Africa

COMPETITORS

Across the product portfolio, our competitors range from large multinationals through to smaller, single product companies. Examples include: Rapiscan, L-3 SDS, Nuctech



EXPANDING IN INDIA

India is projected to be the world's fastest-growing economy for the rest of the decade and will soon become the world's fifth largest economy.

Smiths Detection has continued to expand into India's aviation sector, which is witnessing unprecedented growth. This means it is more important than ever that airports in the country are well equipped and prepared to handle safety and security challenges for the future.

Smiths Detection is presently installing screening and detection solutions in many airports across the country so that they stay ahead of evolving threats. Within the ports & borders market, Smiths Detection is installing a High-Energy X-ray container scanner-portal for Adani, India's largest port operator in Northern Chennai. Additionally, Smiths Detection is supplying 120 chemical warfare agent identifiers, which will be deployed by the Indian armed forces.

Smiths Detection has recently opened a state-of-the-art Service, Training and Experience Centre in Gurugram, India to support its customers across airports, ports and borders, hospitality industries, critical infrastructure, logistics providers and e-commerce platforms in the region.

Smiths Detection's reputation as a trusted, best-in-class partner alongside our ground-breaking detection technologies is helping drive further customer wins in all major markets across the Asia Pacific region.



DIVISIONAL STRATEGY

Our strategy is to maintain our position as a leading technology provider by building high-integrity detection solutions that support our customers' evolving security needs.

We will accelerate growth by working closely with our partners, suppliers and regulatory bodies to deliver a highly agile approach to changing security threats. We will create value by continually improving our hardware and digital solutions, making it easier for customers to engage with us and by becoming more efficient.

LINK TO GROUP STRATEGY



OUTPERFORMING OUR CHOSEN MARKETS

- At least maintaining our share of the installed base during recapitalisation periods
- Continued product development and certifications to support growth
- Continued focus on higher-growth regions supported by contract wins



DELIVER WORLD-CLASS COMPETITIVENESS

- Globalise, standardise and streamline our internal processes utilising continuous improvement initiatives and leveraging global best practices
- Focus on supplier development and reduction of COPQ

PRODUCTS

Our comprehensive product portfolio comprises x-ray and computed tomography (CT) scanners for hold baggage and checkpoint, people screening scanners, tray handling solutions and trace detection devices for checkpoint secondary screening, as well as digital solutions. We produce portable devices for chemical, explosive and narcotic detection and identification. Our product portfolio also includes stationary and mobile heavy cargo vehicle inspection systems. CORSYS™, our digital analytics platform, is an integrated security screening management solution that hosts purpose built applications.

MARKETS WHERE WE OPERATE

Demand for trace and detection equipment and service is forecast to continue to grow over the long term. As ongoing geopolitical unrest and terrorist and criminal threats evolve, so do security measures – but there is variation by geography within our markets.

Aviation, our largest market, has strong, long-term growth drivers. Regulatory changes, combined with growing passenger numbers and increasing global e-commerce, are driving demand for integrated solutions that improve efficiencies and movement, while enhancing the security of people and infrastructure. Digital technological advances will see the continued evolution of this industry.

In **Other Security Systems** we have three sub-segments:

In ports & borders, the growth of worldwide trade volumes is expected to increase demand for security screening equipment and digital solutions that drive inspection processing speeds. Powerful digital technologies and next-generation connected hardware are needed to tackle escalating cross-border smuggling, limit illegal activities and minimise threats – without affecting trade.

In defence, emerging threats are generating global demand for mobile and adaptable detection equipment for chemical warfare agents and other threat-specific sensors in key NATO-orientated markets. This market is affected by the nature of its associated procurement cycles.

Urban security is a large but fragmented and mainly unregulated market. Critical infrastructure, mass transit and crowded spaces have specific customer needs and challenges. Demand is growing – driven by increasing urbanisation and the response by both the public and the private sector to an ever-growing range of threats – for solutions that will allow the public to go about their lives as normal, with the peace of mind that their security and welfare are being protected.

Almost half of our customers are government funded and, consequently, budget constraints affect market revenues. Original equipment (OE) drives the programmatic nature of our business. The lifecycle of OE is typically 7-10 years. Aftermarket as a percentage of revenue is increasingly driven by our growing installed base, advances in our digital capability, and our focus on providing a complete solution to our customers.

TRENDS SHAPING OUR INNOVATIONS

Megatrends, such as increasing digitisation and connectivity, artificial intelligence, and mobility and globalisation are likely to continue to generate demand for our products over the longer term.

Megatrend	Innovation in FY2019
Increasing digitisation and connectivity	CORSYS™ – a digital platform for advanced security screening management
Artificial intelligence	iCMORE™ – automated threat/target identification digital applications
Mobility and globalisation	HCVM LORRY – next generation mobile high energy inspection system

FY2019 FINANCIAL PERFORMANCE

	FY2019 £m	FY2018 £m	Reported growth	Underlying ¹ growth
Revenue	798	793	+1%	(2)%
Aviation	522	540		(6)%
Other Security Systems	276	253		+6%
Headline² operating profit	127	134	(5)%	(7)%
Headline² operating margin	16.0%	16.9%	(90)bps	
Statutory operating profit	91	93	(2)%	
Return on capital employed	11.5%	12.1%	(60)bps	
R&D cash costs % sales	8.4%	7.4%	+100bps	

Revenue

Smiths Detection's underlying revenue decreased by (2)%. This reflects an improved second half performance but the customer deferral of some large deliveries in to the first half of FY2020. Aftermarket revenue grew 2% on an underlying basis and now accounts for 46% of the division's revenue (FY2018: 44%). Reported revenue was up 1%, including £22m favourable impact from foreign exchange translation.

Revenue from Aviation activities decreased (6)% on an underlying basis against a strong comparator. The compound annual growth rate of Aviation revenue over the past two years is c.6%. Aviation is Smiths Detection's largest segment, representing 65% of total revenue. We continued to see strong demand for hold baggage screening (HBS) systems in EMEA, associated with the ECAC Standard 3 Regulation, and globally as airports upgrade their HBS fleets. Some significant HBS contracts signed recently include a £128m order by Aena in Spain due for delivery through FY2020-2023. Smiths Detection's Computed Tomography (CT) based screening systems for cabin baggage are being successfully trialled globally. The new scanners enable more efficient detection of threats and eliminate the need to take liquids and laptops out of bags. The CT cabin baggage scanners have already

been purchased by airports in Korea, Japan, Australia and the TSA has recently placed a \$96.8m order for installations, some of which were originally anticipated in FY2019.

Revenues from Other Security Systems grew by 6%, reflecting an improved focus in Smiths Detection's other core vertical markets, particularly ports and borders. Major deliveries during the year included Egypt, India and Azerbaijan. Further wins included a contract with Meridian Port Services Limited (MPS) to provide scanning portals for the major Tema Port Expansion project in Ghana.

Operating profit

Headline operating profit decreased (7)% on an underlying basis, reflecting pricing pressure in the latter stages of the European hold baggage recapitalisation cycle and the mix of programmes delivered. This is partially offset by a higher proportion of aftermarket revenues, which typically have higher margins than original equipment sales. Headline reported operating margin decreased (90)bps to 16.0%. The difference between statutory and headline operating profit primarily reflects amortisation of acquired intangibles.

ROCE

ROCE decreased by (60)bps to 11.5% reflecting the division's lower profitability and higher working capital during the period.

R&D

Cash R&D expenditure during the period was 8.4% of sales, or 6.6% excluding customer funded R&D (FY2018: 7.4% and 6.3% respectively). We continue to invest in the development of the next generation of detection devices for the defence market, new algorithms to improve the detection of dangerous goods for cargo applications and operational efficiency, and digital solutions to strengthen our aftermarket proposition.

Outlook

In Smiths Detection, we expect low single digit revenue growth for the year supported by a robust order book, with deliveries weighted towards the first half.

¹ **Underlying:** modifies headline performance to adjust prior year to reflect an equivalent period of ownership for divested businesses and excludes the effects of foreign exchange, acquisitions and supplemental sales for divested businesses

² **Headline:** In addition to statutory reporting, the Group reports on a headline basis except for balance sheet and cash-flow. Definitions of headline metrics, and information about the adjustments to statutory measures are provided in note 3 to the financial statements

FLEX-TEK

INNOVATIVE COMPONENTS TO HEAT AND MOVE FLUIDS AND GASES

Flex-Tek is a global provider of engineered components that heat and move fluids and gases for the aerospace, medical, industrial, construction and domestic appliance markets. Our flexible hosing and rigid tubing provide fluid management for fuel and hydraulic applications on commercial and military aircraft, deliver gas and conditioned air in residential and commercial buildings, and provide respiratory care for medical applications. Flex-Tek heating elements and thermal systems improve the performance of medical and diagnostic equipment as well as that of domestic appliances such as clothes tumble dryers and HVAC equipment.

FY2019 PERFORMANCE

Revenue

£436m

+3%*

Headline operating profit

£84m

+4%*

Headline operating margin

19.2%

+30bps

Revenue by sector



Aerospace	28%
Industrials	72%

Revenue mix



Original equipment	49%
Aftermarket	51%

COMPETITIVE STRENGTHS

- High performance products
- Leading capability in design and manufacture
- A market leader in residential gas tubing products
- High performance flexible tubing for aerospace
- Strong customer relationships

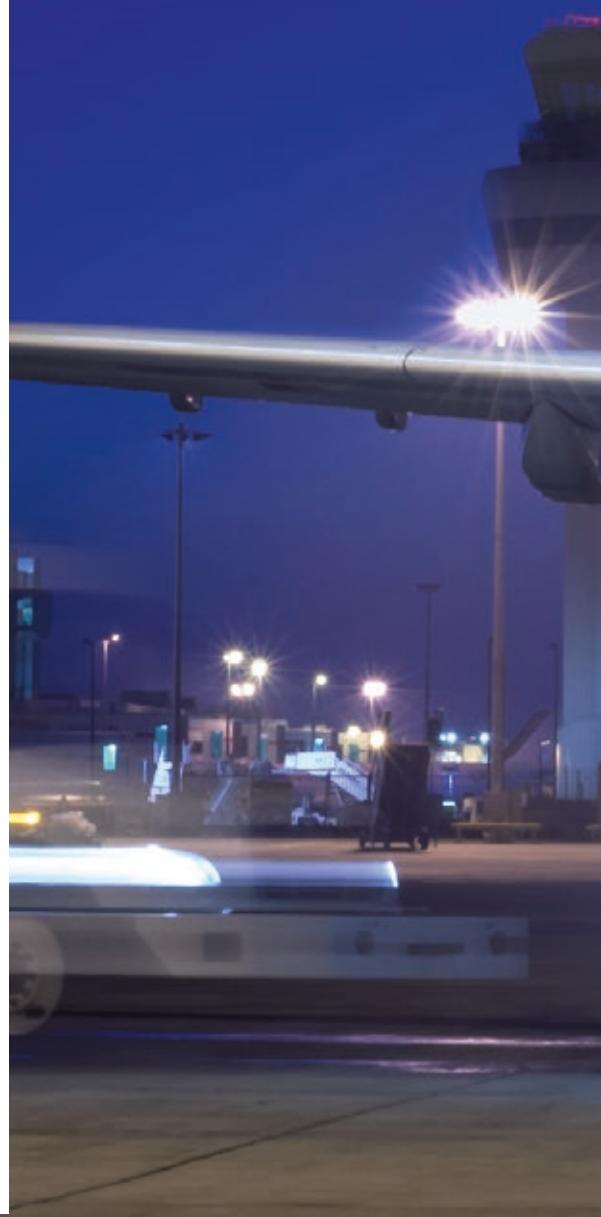
GROWTH DRIVERS

- Through cycle growth of the US housing construction market
- Expanding international market for corrugated stainless steel tubing for residential housing
- Continued increase in large commercial aircraft production
- Growth of medical devices, especially for the treatment of sleep apnoea
- Expansion in higher-growth markets

COMPETITORS

Competitors range from large multinationals through to small, more focused companies across the product portfolio. Examples include: Parker-Hannifin, Eaton, Omega Flex, Nibe

* Underlying change.



INTEGRATING UNITED FLEXIBLE

The integration of United Flexible into Flex-Tek is progressing to plan. The rebranding and re-organisation of the United Flexible companies is now complete and cross business and cross-functional teams are in place, focused on delivering the acquisition synergies and implementing the Smiths Excellence System across the business.

In Aerospace, the combination will help penetrate new markets and expand the existing customer base. Shared capabilities will open up new product opportunities, for example applying United Flexible's capability in hydroforming technologies for the manufacture of larger diameter, complex ducts with greater quality and efficiency than other forming methods.

In the Industrial business there will be benefits from new product capabilities, for example, in the metal bellows and thermal actuator platforms, as well as the opportunity to leverage United Flexible's footprint in Europe to help accelerate Flex-Tek's growth in new geographies.

DIVISIONAL STRATEGY

Our strategy is to outperform our chosen markets through technological differentiation, with the need for safer, more energy-efficient solutions providing opportunities for us to establish leadership positions across our segments.

We aim to do this by developing our product portfolio, expanding in our target regions, growing existing market share and driving operational excellence to increase competitiveness. We also consider the right strategic bolt-on acquisitions to support growth.

Specific focus areas include growing our market share in the US housing market, expanding our international markets for gas tubing and securing positions on next-generation aircraft.

We drive competitiveness through operational improvements.

LINK TO GROUP STRATEGY



OUTPERFORMING OUR CHOSEN MARKETS

- Integration of United Flexible progressing to plan
- Launched new innovative products including FlashShield™
- Progress in international expansion



DELIVER WORLD-CLASS COMPETITIVENESS

- Continue the lean transformation of all sites, including the newly acquired United Flexible sites using the SES site development guide
- Focus on quality by adopting a formal supplier quality methodology and optimise supply base

PRODUCTS

In **Aerospace**, we are a market-leading provider of specialty tubing assemblies that provide reliable, efficient delivery of hydraulic fluids and jet fuel for commercial and military aircraft globally.

In **Industrials**, we are one of the world's largest manufacturers of open coil heating elements, supplying electric resistance heating elements for a broad range of applications, including compressors, clothes dryers, duct heaters, heat pumps, window air conditioners, and vending machines. We also provide flexible ducting for commercial and residential HVAC applications, hoses for the automotive market to deliver fuel and brake fluid, as well as corrugated stainless steel tubing that supplies natural gas or low-pressure gas to appliances.

MARKETS WHERE WE OPERATE

Key markets include US residential and commercial construction, global aerospace tubing and hoses, and electrical heating elements.

Our business performance generally follows macroeconomic indicators such as US GDP, US housing growth, healthcare spending and capital goods expenditure. Population growth drives residential construction and domestic appliance demand in the US, while high-growth markets drive commercial aerospace demand through increasing air passenger and freight volumes and investment in next-generation aircraft. The diverse nature of our markets reduces our reliance on any specific technology, although we are primarily exposed to the US economy.

In **Aerospace**, the market for commercial aircraft remains strong, with a current strong Original Equipment Manufacturer (OEM) order book.

In **Industrials**, growth is driven by the US housing market, along with an increasing number of specialty heating applications and flexible gas piping and HVAC ducting in North America and Asia. Our products are also used in the manufacture of medical devices such as sleep apnoea devices, where increasing global healthcare spend is driving growth.

TRENDS SHAPING OUR INNOVATIONS

We believe megatrends, such as energy demand and efficiencies, and mobility and globalisation, will continue to generate demand for our products over the longer term.

Megatrend	Innovation in FY2019
Energy demand and efficiencies	Energy efficient heating, lower weight aerospace products and more sustainable building practices
Mobility and globalisation	Expanding in Europe with Gastite and leveraging the United Flexible European footprint Expanding product breadth in China to support industrial applications

FY2019 FINANCIAL PERFORMANCE

	FY2019 £m	FY2018 £m	Reported growth	Underlying ¹ growth
Revenue	436	354	+23%	+3%
Aerospace	121	87		+3%
Industrials	315	267		+3%
Headline² operating profit	84	67	+25%	+4%
Headline² operating margin	19.2%	18.9%	+30bps	
Statutory operating profit	68	68	–	
Return on capital employed	23.3%	35.0%	(1,170)bps	
R&D cash costs % sales	0.6%	0.6%	–	

Revenue

Flex-Tek delivered a good performance with revenue up 3% on an underlying basis, driven by growth in both the Industrial and Aerospace segments. On a reported basis, revenue increased 23%, including £56m incremental revenue associated with the acquisition of United Flexible and £14m favourable foreign exchange translation.

Aerospace revenue was up 3% on an underlying basis, driven by growth in new engine and airframe platforms including the Joint Strike Fighter, the GE GEnx engine and Airbus A320 models as well as growth in the aftermarket business. Industrial revenue was up 3% driven by growth in specialty products for process heating solutions and US housing construction, and Gastite penetration in Europe.

Operating profit

On an underlying basis headline operating profit increased 4% to £84m, driven by revenue growth and a £3m credit from a litigation settlement offset by a £(3)m one-off cost relating to a facility closure in Asia. Headline operating margin increased 30bps to 19.2%. The difference between statutory and headline operating profit is primarily due to a reduction in the provision for Titeflex Corporation for subrogation claims, and acquisition costs.

Portfolio

In February 2019, Flex-Tek completed the acquisition of United Flexible for an enterprise value of \$345m. This acquisition strengthens Flex-Tek's positions in aerospace and industrial end markets globally. The integration is progressing well.

ROCE

ROCE decreased (1,170)bps to 23.3%, driven by the acquisitions of Osram's heating element business in the prior year and United Flexible this year.

R&D

Cash R&D expenditure remained consistent at 0.6% of sales (FY2018: 0.6%), focused on market-leading innovative solutions to meet specific customer needs. The most significant product launch was Gastite Flashshield+ which provides easier installation for contractors while maintaining best in class safety performance.

Outlook

In Flex-Tek, we expect to deliver a similar rate of growth in FY2020 bolstered by the impact of the acquisition of United Flexible. Strong demand for aerospace and heating solution components, as well as increased penetration into the European construction markets, is expected to be partially offset by some signs of softening in the US housing construction market.

¹ **Underlying:** modifies headline performance to adjust prior year to reflect an equivalent period of ownership for divested businesses and excludes the effects of foreign exchange, acquisitions and supplemental sales for divested businesses

² **Headline:** In addition to statutory reporting, the Group reports on a headline basis except for balance sheet and cash-flow. Definitions of headline metrics, and information about the adjustments to statutory measures are provided in note 3 to the financial statements

SMITHS INTERCONNECT

SOLUTIONS FOR HIGH SPEED, SECURE CONNECTIVITY IN DEMANDING APPLICATIONS

Smiths Interconnect is a leading provider of technically differentiated electronic components, subsystems, microwave and radio frequency products that provide secure connectivity of critical applications in the defence, aerospace, communications and industrial markets. Our advanced, high-quality solutions ensure high speed connectivity, reliability and safety for demanding applications operating in harsh environments.

FY2019 PERFORMANCE

Revenue

£319m

+3%*

Headline operating profit

£47m

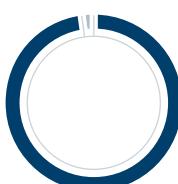
+6%*

Headline operating margin

14.7%

+60bps

Revenue mix



Original equipment	98%
Aftermarket	2%

COMPETITIVE STRENGTHS

- Innovative and technically differentiated products
- Ultra-high reliability solutions used in demanding applications
- Strong research and engineering capabilities
- Customer intimacy, responsiveness and product customisation
- Global presence, reach and support

GROWTH DRIVERS

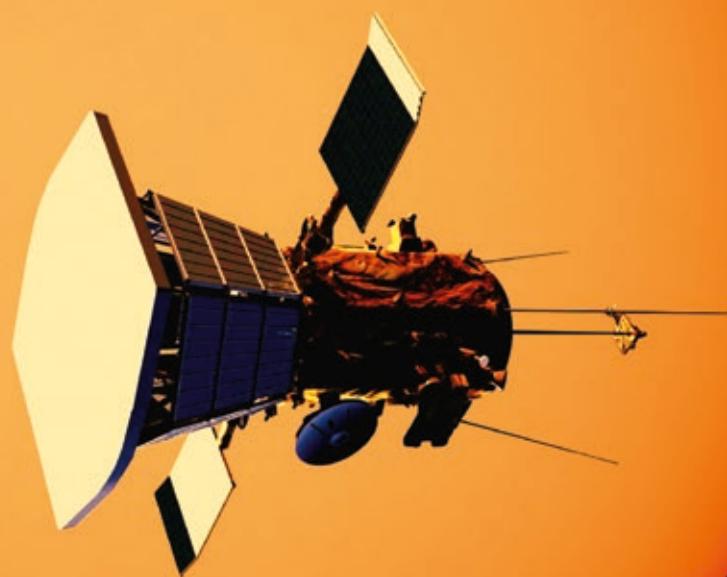
- Increased connectivity in space and aerospace
- Growing urbanised population requiring transport and infrastructure
- Increasing geopolitical uncertainty
- Extension of internet connectivity to improve efficiency and data accuracy (Internet of Things, Industry 4.0)

COMPETITORS

Competitors range from large multinationals through to small, more focused companies across the product portfolio. Examples include: Amphenol, TE Connectivity, Molex, Leeno, Cobham

* Underlying change.

SPACE CONNECTORS GET TOUGH FOR NASA'S ROBOTIC SPACECRAFT



The most mission-critical of aerospace systems are the ones that journey into space, where they encounter the toughest environments. When they leave the Earth's surface they must contend with huge radiation levels, vibration, shock and temperature extremes, making durability and reliability critical features of our connectivity components.

Smiths Interconnect's microwave RF (radio frequency) components, delivering high-reliability and connectivity performance, are used in the data and control transmission systems of the Parker Solar Probe, a NASA robotic spacecraft. It was launched in 2018, with the mission of repeatedly probing and making observations of the outermost part of the sun's atmosphere. In 2024, it is expected to approach to within 3.83 million miles of the centre of the sun, achieving a top speed of about 430,000 miles (700,000km) per hour. That's fast enough to get from Washington D.C. to Tokyo in under a minute.

The Parker Solar Probe has just successfully completed its second close approach to the sun, the closest any other spacecraft has been before. For projects of such significance, Smiths Interconnect's engineering expertise, superior technology and customer service enable our customers to push the limitations of what's possible and help bring the boundaries of the universe a little closer.

DIVISIONAL STRATEGY

Our strategy is to outperform our chosen market segments through customer focus, new technology, operational excellence and targeted geographical investment. We aim to be a supplier of choice to customers that value our broad portfolio of innovative and technically differentiated connectivity solutions by having strong key account partnerships and efficient channels to market.

We will continue to focus on specific market segments including defence and aerospace, communications and industrial applications. We will drive competitiveness through R&D and we will fund our investments through manufacturing efficiency.

LINK TO GROUP STRATEGY



OUTPERFORMING OUR CHOSEN MARKETS

- Continued emphasis on key account management to develop customer intimacy
- Increased focused R&D investment of over 7% of sales to drive growth in our Vitality Index
- Build presence in India, focusing on defence, satcom, space and rail market segments
- Continued focus on higher-growth regions with our Sichuan Huafeng JV in China



DELIVER WORLD-CLASS COMPETITIVENESS

- Continuous improvement and lean manufacturing through Six Sigma process improvement, deployment of mechanised/automated processes, and use of disruptive technologies to enable new manufacturing methods
- Simplified global operational structure through single enterprise resource planning (ERP) implementation, legal entity simplification and network optimisation (regional end-to-end supply chain)

PRODUCTS

We provide technically differentiated electronic components, subsystems, microwave and radio frequency products that connect, protect and control critical applications in harsh environments in a number of focus market segments.

Our products are used in radar, communication and surveillance systems that are mission-critical and operate in extreme environments in aerospace and defence. Our solutions in engine systems, power distribution and avionics ensure reliability in flight-critical systems. Our microwave components and connectors ensure optimal performance, durability and safety in space, including LEO, MEO and GEO (Low, Medium and Geostationary Earth Orbit) satellites.

Our semi-conductor test products are used to test highly sophisticated semiconductors and electronic circuits in use in communication systems, gaming products and computing devices. Our in-flight antenna systems give passengers internet connectivity gate-to-gate on planes around the world. Our connectivity solutions are used in surgical and monitoring systems, imaging systems and disposables applications. Our products control the reliable operation of train rolling stock (driver cabin braking systems) and ensure the integrity and speed of data transmission in signalling (train monitoring by satellites).

MARKETS WHERE WE OPERATE

Increasing geopolitical uncertainty and operations in extreme environments create a platform for growth for defence applications. Increased demand for communication and data transmission requires additional satellites, especially LEO and MEO. Increasing passenger numbers and freight demand, as well as upgrades to aircraft fleets to more efficient models, generate growth for our aerospace business.

The growth in big data, which requires more bandwidth and increased computing power, combined with a high rate of technology refresh with increased functionality and connectivity, creates further opportunities for the growth of Smiths Interconnect products. An ageing population and the rise of chronic diseases continues to drive growth for our products in medical applications. Sophisticated digital train systems that improve safety, security and high data-rate connectivity for passengers drives growth in our rail market segment.

TRENDS SHAPING OUR INNOVATIONS

Megatrends, such as increased digitisation and connectivity and mobility and globalisation are likely to continue to generate demand for our products over the longer term.

Megatrend

Increased digitisation and connectivity

Innovation in FY2019

High speed data, smaller packaging and increased power needs

Smart devices, intelligent systems, device to device

Mobility and globalisation

Space constellations, increased bandwidth, big data and 5G

FY2019 FINANCIAL PERFORMANCE

	FY2019 £m	FY2018 £m	Reported growth	Underlying ¹ growth
Revenue	319	300	+6%	+3%
Headline ² operating profit	47	42	+10%	+6%
Headline ² operating margin	14.7%	14.1%	+60bps	
Statutory operating profit	45	37	+22%	
Return on capital employed	12.8%	11.9%	+90bps	
R&D cash costs % sales	7.2%	7.0%	+20bps	

Revenue

Smiths Interconnect built on its return to growth with underlying revenue up 3%, reflecting good growth in Asia and North America. On a reported basis, revenue increased by 6% including £11m favourable foreign exchange translation.

Revenue growth was driven by sales associated with large defence and aerospace programmes in the US – notably the Joint Strike Fighter, Next Generation Jammer and B-21 programs, as well as successes in the semiconductor segment in Asia. We are beginning to see benefits from investments we have made in capacity and capabilities in the region, including the joint venture with Sichuan Huafeng Enterprise Group Co. Ltd established in 2018. The joint venture is supporting our growth in the commercial aerospace and high-speed rail segments in Asia.

Operating profit

Headline operating profit increased 6% on an underlying basis to £47m, reflecting the division's sales growth as well as procurement and restructuring savings. Headline operating margin of 14.7% increased 60bps. The difference between statutory and headline operating profit reflects adjustments for amortisation of acquired intangibles.

ROCE

ROCE increased 90bps to 12.8%, driven by increased profitability.

R&D

Cash R&D expenditure was 7.2% of sales (FY2018: 7.0%) (6.4% excluding customer funded R&D, FY2018: 6.0%). Product launches included connectors from our SpaceNXT range for space applications, board level components, cable assemblies and high-speed contact technology for defence and space applications as well as next generation power connectors for rail applications.

Outlook

Smiths Interconnect is expected to make further progress, with continued growth in our key end markets, partially offset by softening in the semiconductor market.

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DISCONTINUED OPERATIONS

SMITHS MEDICAL

Quality medical devices and consumables that are vital to patient care

FY2019 PERFORMANCE

Revenue

£874m

=*

Headline operating profit

£147m

(6)%*

Headline operating margin

16.8%

(110)bps

FY2018 performance has been restated for IFRS 15

Revenue by sector



Revenue mix



* Underlying change.

COMPETITIVE STRENGTHS

- A category leader in served segments
- Trusted brands with a reputation for safety
- Strong, defensible intellectual property
- C.80% of revenue from single-use devices and proprietary consumables
- Strong customer relationships and extensive global sales network

GROWTH DRIVERS

- Ageing populations with increasing personalised healthcare and patient expectation/quality of life
- Increasing incidence of chronic diseases
- Increasing need for connected systems and data analytics
- Growth of alternate site and home-based healthcare
- Growing healthcare spend in developing markets

COMPETITORS

Competitors range from large multinationals through to small, more focused companies across the product portfolio. Examples include: Becton Dickinson, Baxter, B-Braun, Medtronic

DIVISIONAL STRATEGY

Our strategy is to achieve category leadership in the infusion segment and selected vascular access and vital care segments. We will achieve this with commercially focused innovations, differentiation in our customer support model, and delivery of complete solutions that optimise patient outcomes. We will continue to enhance both our own R&D and our external partnerships to execute our strategy in line with healthcare megatrends.

In order to invest in our future, we will continue to improve our efficiency and operational excellence. Part of this investment, besides customer solutions, will include further developing our people.

We will also continue to improve our capabilities in growing markets outside of North America and Western Europe, enhancing our current global footprint and sales reach. In addition, we will continue to pursue channel optimisation and access to care outside of hospitals.

LINK TO GROUP STRATEGY



OUTPERFORMING OUR CHOSEN MARKETS

Launched 12 new products in the past year including:

- The CADD®-Solis VIP multi-therapy ambulatory infusion pump
- Acapella® choice vibratory positive expiratory pressure therapy system
- HOTLINE® blood and fluid warmer



DELIVER WORLD-CLASS COMPETITIVENESS

- Continuous improvement and lean manufacturing
- Sales focused on: customer retention and top line growth; implementation of cloud based sales technology; expanding market reach with an increased emphasis on commercial partnerships

PRODUCTS

In **Infusion Systems**, our products deliver medication treatment for conditions including acute and chronic pain, cancer, pulmonary hypertension and Parkinson's disease. Smiths Medical products are used in acute settings, surgery centres, oncology centres, and home settings. We have strong positions in ambulatory infusion and in the syringe market.

In **Vascular Access**, our products cover a range of venous access methods including drawing blood, peripheral intra-venous catheters, ports and needles for the infusion of fluids and medication, and invasive blood pressure monitoring.

Our **Vital Care and Specialty Products** cover a wide range of critical-care and chronic disease management products including tracheostomy, temperature management, general anaesthesia, respiratory and bronchial hygiene.

MARKETS WHERE WE OPERATE

The medical device industry remains attractive, with strong growth drivers. The global market we serve is estimated to be c.£7.5bn and growing at 3-4% annually, with growth drivers such as expansion of developing markets, ageing populations, increasing need for connected systems and data analytics, and growth of alternate site and home-based healthcare and innovation.

In **Infusion Systems**, the increasing rate of chronic conditions and outpatient treatment favour ambulatory infusion solutions. Healthcare providers are advancing digital integration between infusion devices and their respective hospital information systems.

In **Vascular Access**, continued growth is expected due to safety regulations driving to prevent needlestick injuries, blood exposure, and hospital-acquired infections.

In **Vital Care and Specialty Products**, key growth drivers include the expansion of enhanced recovery after surgery and the prevalence of chronic obstructive pulmonary disease (COPD).

TRENDS SHAPING OUR INNOVATIONS

We believe megatrends, such as ageing populations and healthcare demand and increased digitisation and connectivity will continue to generate demand for our products over the longer term.

Megatrend	Innovation
Ageing populations and healthcare demand	<ul style="list-style-type: none"> – Focus on alternate site and home-based healthcare in developing markets – Developing focused technologies targeting chronic conditions
Increased digitisation and connectivity	<ul style="list-style-type: none"> – Smart pump programming with electronic medical record system integration – Launched software subscription and service model

FY2019 FINANCIAL PERFORMANCE

	FY2019 £m	FY2018 ³ £m	Reported growth	Underlying ¹ growth
Revenue	874	869	+1%	-
Headline ² operating profit	147	156	(6)%	(6)%
Headline ² operating margin	16.8%	17.9%	(110)bps	
Statutory operating profit	151	152	(1)%	
Return on capital employed	11.7%	13.1%	(140)bps	
R&D cash costs % sales	6.0%	5.9%		

Revenue

Smiths Medical's underlying revenue was flat year-on-year. The division returned to growth in the second half with revenue up 2%. The improved trend reflects the increased contribution from new products and a change in sales channel for our chronic obstructive pulmonary disease (COPD) product, both of which offset the previously announced impact of the transition to a new Notified Body in Europe. Reported revenue was up 1% including £16m impact of divestments and £23m favourable foreign exchange translation.

The costs associated with the Notified Body transition and implementation of the new EU Medical Device Regulation were £15m, as anticipated. For FY2020 we continue to expect costs of £10-15m.

Underlying revenue was flat year-on-year in Infusion Systems, with good growth in ambulatory pumps offset by the delayed release of the new Medfusion syringe pump as a result of component supply issues. Vascular Access underlying revenue declined by (3)% as a result of lower peripheral intravenous catheter (PIVC) sales but showed 1% growth in the second half due to strong performance of ViaValve in the blood control space. Underlying revenue from Vital Care and Specialty Products grew 3%, with strong growth in the COPD product line, which is now being sold directly, offsetting lower volumes in tracheostomy, general anaesthesia and respiratory products.

Operating profit

Headline operating profit declined (6)% on an underlying basis. Operating profit during the year was impacted by the costs associated with the new EU Medical Device Regulation and operational inefficiencies in the first half which are being addressed. Headline operating margin was (110)bps lower than the prior year at 16.8%, with margin showing signs of improvement in the second half at 17.0%. The difference between statutory and headline operating profit included £17m profit on disposals and separation costs.

ROCE

ROCE decreased (140)bps to 11.7%, reflecting lower profitability during the period.

Portfolio

During the year, Smiths Medical completed the disposal of two non-core businesses for a total consideration of c.£30m.

R&D

Cash R&D expenditure was 6.0% of sales (FY2018: 5.9%). Smiths Medical continues to invest in the development of innovative, commercially focused products across the portfolio to support long-term, sustainable growth. In the last 24 months, 33 products have been launched, including 12 in this year.

Update on separation

In March 2019 we announced plans to separate Smiths Medical, to create two stronger, industry-leading companies with distinct strategies and focus. We are on track to complete the demerger of Smiths Medical in the first half of CY2020, conditional on the approval of Smiths shareholders.

Smiths Medical successfully achieved its FY2019 performance milestones supporting the separation process. The division returned to growth in the second half, with the sustainability of this growth underpinned by the ongoing launch of new products. One of the division's most significant new product investments, the large volume pump, has now been submitted to the US regulator for first phase review. The large volume pump market represents a c.£2bn extension to Smiths Medical's addressable market.

In July, JehanZeb Noor joined as Chief Executive Officer of Smiths Medical to oversee the separation and continue building a strong, sustainable future for Smiths Medical. He is focused on accelerating growth and driving enhanced performance to deliver the division's medium-term ambition of growing ahead of its markets, with operating margins in excess of 20% and attractive returns.

Outlook

The increasing contribution from new products, and the actions being taken by the reinvigorated management team to accelerate growth and enhance margins, support our confidence in Smiths Medical's improving performance in FY2020.

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³ FY2018: has been restated for IFRS 15

RESOURCES AND RELATIONSHIPS

We regard how we work and interact with our stakeholders as fundamental to our purpose of making a safer, more efficient and better-connected world.

Respecting others and doing things the right way are the essential foundations of being a responsible business and helping ensure the ongoing success of our organisation. LIVING OUR VALUES IN THE SMITHS WAY Our values – Respect, Integrity, Customer Focus, Passion and Ownership – underpin the way we operate. They guide how we manage our key resources and relationships, helping ensure we do the right things in the right way as we work to build long-term value for all our stakeholders. We strive to continuously improve everything we do and here we outline some of our key successes and focus areas. DIRECT ECONOMIC CONTRIBUTION FY2019 £2.6bn Calculated as tax paid + employee costs + supplier costs	CUSTOMER CREATING CUSTOMER VALUE We drive value by working closely with our customers across the entire product lifecycle, starting with understanding the voice of the customer. We actively engage with our customers during concept and design stages of our New Product Introduction (NPI) process and provide integrated, full lifecycle support. We deliver value by focusing on five core areas – pricing, deal follow-up, key account management, customer complaint management, and order-to-delivery management – as well as using our futuring process to predict how our customers' needs will evolve. ON TIME IN FULL (OTIF) FY2019 84% Figures in this section are for total Group unless otherwise stated
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CUSTOMER

ANTI-BRIBERY AND ANTI-CORRUPTION

We reduce exposure to bribery through regular review of our policies and procedures, which include the giving and receiving of gifts and hospitality, and how we interact with government officials. We have a gift register to help us monitor compliance.

To help ensure that we know who we're dealing with, and that they operate in line with our expectations, in FY2019 we enhanced our distributor and agent due diligence processes and implemented an audit programme. We also use third-party services to supplement our own due diligence, using investigators on the ground in locations where risks of bribery can be higher.

In FY2020 we will continue to monitor activities and educate colleagues through our ethics and compliance training programmes.

ANTITRUST

We are committed to competing fairly within the markets where we operate. In FY2019 we refreshed our Antitrust Policy and supporting materials, including establishing our Trade and Industry Event Register. This identifies employees who attend industry events at which competitors may be present so we can make sure that they understand what they may and may not discuss with competitors. We also continued to provide colleagues whose roles may expose them to competition law risks with regular training.

HELPING AIR AND NAVAL TACTICAL COMMUNICATION

Smiths Interconnect was selected by a major global Original Equipment Manufacturer (OEM) to supply connectivity solutions for a new air and naval tactical radio, offering faster transmission speeds, enhanced security and extended interoperability.

Designed to deliver high levels of security, the tactical radio can communicate precise information in a highly-secured environment.

Smiths Interconnect's customer needed to integrate more functions into a reduced space. Our high reliability spring probe contact technology was selected due to its small size and high performance which met the customer's demanding technical requirements.

Our spring probe contact technology allows high signal density, in a compact size, to be reached in a hi-tech electronic environment and is expected to be a key component for the space and defence market segments.



Our people are vital to achieving a sustainable competitive advantage.

Our People Plan is a multi-year strategy that is focused on building a learning organisation to attract, retain, develop, engage and inspire our people.

SES helps provide a framework for bringing our People Plan to life, with our recently launched SES People Handbook helping our business make the most of aligned best practice guidance and centrally provided tools, resources and initiatives.

CULTURE, ENGAGEMENT AND COMMUNICATION

Our 'Smiths Way' of working and our values align our culture, strategy and operating model to help ensure everything we do is pulling in the same direction.

We celebrated our culture with our second annual Smiths Day global event, where colleagues all over the world get together to mark being part of the Smiths family.

We continue to enhance our internal communication activities, including our weekly Smiths Signal newsletter which sets out all of our top company news and our innovative Smiths Now colleague smartphone app that gives all colleagues a common platform on which to hear about our business.

Around Smiths Day, our Smiths Now app received c.10,000 visits to our social wall, where all colleagues, irrespective of role, can post their stories, images and videos for the whole business to see. We have also implemented a new language tool which translates posts into our core ten languages.

Twice a year we run Smiths European Forum meetings, hosted by the Group HR Director with involvement from the Chief Executive and senior leaders. Colleague representatives from across Europe come together to learn more about our strategy, voice their opinions, provide feedback and ask questions on behalf of

PEOPLE



their co-workers. Everything is translated live so attendees can listen and respond in their own languages. This is just one of the ways we are building more open and honest two-way communication between employees and leadership.

Engagement with our annual Smiths Excellence Awards which recognise achievement across our six SES pillars; outstanding contributions to HSE, to our communities, and to innovation; and our highest honour, the Smiths Cup – continues to rise, evidenced by a doubling of entries since last year to a new record total of c.600 from across the business.

MY SAY SURVEY

We track our engagement twice yearly to inform the co-creation of action plans by colleagues and managers to help make Smiths a better place to work. Since launching My Say in 2017, we've improved on all measures.

The latest May 2019 survey maintained a high 87% response rate, with more than 37,000 comments from colleagues; and we maintained an engagement measure of 73.

MAY 2019 SURVEY

37,000

colleague comments
2018: 30,000

ENGAGEMENT MEASURE

73

2018: 73

OUR APPROACH TO HEALTH AND SAFETY

Health and safety remain our top priorities. We work together across the world to create a safe and secure workplace for our people, customers, suppliers and visitors. This is fully integrated into the way we operate and manage all our key resources and relationships, and underpins our SES.

Safety is discussed at Board and Executive levels. Our safety culture is driven by a cross-divisional network of Health, Safety and Environment (HSE) leaders, who share ideas and best practices, and implement initiatives to help improve our safety performance.

Safety is embraced at every level, as evidenced by our My Say colleague survey where safety is consistently our highest ranked and continually improving response.

As part of our journey towards zero harm, we completed a range of Group-wide initiatives in FY2019, including training all Smiths colleagues on our ten safety Cardinal Behaviours (see below), a hand safety campaign, forklift safety assessments and the celebration of innovative safety initiatives through our

Group-wide Excellence Awards. We also continued to use safety leading indicator activities to assess initiatives undertaken by individual sites to improve performance.

We monitor our recordable incident rate (RIR) – where incidents require medical attention beyond first aid – and lost-time incident rate (LTIR) – where a colleague is unable to work following an incident – per 100 colleagues, per year across Smiths. In FY2019 we achieved an RIR of 0.41 and an LTIR of 0.18.

We again experienced no work-related workplace fatalities this year, and with our increasing focus on risk factors for serious injuries, our commitment to send everyone home safely from work is stronger than ever.

For FY2020, we are planning to reinvigorate our peer-to-peer safety observation programme, complete machine guarding reviews and upgrades globally, and develop new tools to better track and communicate to our travellers and our colleagues who work remotely.

We also plan to complete driver safety awareness training for all drivers of company vehicles.

RECORDABLE INCIDENT RATE (per 100 colleagues)

FY2019		0.41
FY2018*		0.39
FY2017		0.38
FY2016		0.47
FY2015		0.57

* FY2018 shows increase vs. FY2018 report due to reclassification of injuries

LOST TIME INCIDENT RATE (per 100 colleagues)

FY2019		0.18
FY2018		0.17
FY2017		0.19
FY2016		0.16
FY2015		0.23

CARDINAL BEHAVIOURS

- Stay fit and focused at work
- Identify and manage safety hazards
- Always use machinery safely
- Stop work if it isn't safe
- Take care when using electrical equipment

- Follow safety protocol in vehicles
- Take care when working at heights
- Always wear protective gear
- Report all safety incidents and near misses
- Minimise our environmental impact

PEOPLE

LEADERSHIP AND LEARNING

We are building a learning organisation supporting our colleagues to own and drive their careers through formal and informal development programmes.

In FY2019 we launched a new Careers@Smiths portal, in direct response to My Say survey feedback. It allows colleagues more visibility of their potential next career move by pulling all our vacancies together into one place. The system also gives Smiths managers easy control over their vacancies and recruitment and makes it easier for external candidates to see the opportunities available to join us.

In FY2019 we launched the SES Academy – an online training portal open to all colleagues – through which we have already engaged nearly 18,000 colleagues with Lean Awareness training. We also trained over 250 in our Lean Six Sigma belted programme in partnership with Oxford University, and, at the time of this report, we had 35 graduated Black Belts. Our aim is to graduate around 1,000 belted colleagues by the end of calendar year 2021.

In FY2019 we launched Accelerate, our first Group-wide people leadership capability programme, attended by c.350 people leaders so far. Next year we will increase the number of attendees and include programmes in more languages, with the aim of around 50% of our leaders completing Accelerate by the end of FY2020. We also continued our executive development programme at UCLA, enhancing the strategic leadership capabilities of our most senior leaders.



SES ACADEMY

Our new SES Academy provides learning opportunities around the knowledge and skills needed to deliver operational excellence across Smiths. It has been crafted alongside our world-class academic and professional partners, and is designed to help develop professional capabilities at all levels of the organisation. It gives colleagues a stronger understanding of operating processes, enabling individuals to lead and deliver our organisation's overall objectives.

The new SES Academy has seen nearly 18,000 colleagues from across Smiths complete Lean Awareness training and has received a 91.2% favourable feedback rating to date.

Hundreds of colleagues from Asia, Europe, the US and Mexico are also taking part in Smiths Lean Six Sigma Belted programmes, and excellence programmes in procurement and supply chain. Together, this is driving a radical increase in the capabilities and skills we have in the company, which is vital to the future success of our business.

In FY2019, around 120 Smiths leaders attended our Global Leadership Conference 'Innovate>Accelerate' to help drive a culture of innovation and accelerate our rate of change as well as aligning understanding of our business strategy.

In FY2019 finance and engineering graduates came together for a development week and to participate in the Graduate Innovation Challenge, with one team design currently being developed into a viable solution for Smiths Interconnect. We continue to develop our graduate offering with a graduate engineering programme in China.

In FY2020 we will launch Learning@Smiths, a new learning space, to pull together all development programmes available to colleagues across the organisation.

REWARD AND RECOGNITION

Recognising and rewarding our colleagues in a fair and open way helps them feel valued, supported and driven to succeed. To stay competitive and attract and retain the talented and innovative people we need to drive our growth, it's critical we offer a comprehensive and meaningful approach to reward and recognition.

We have been an accredited living wage employer in the UK since 2018. We are working to build on and increase cross-divisional job movement, align our incentive plans, improve international mobility and make career paths clearer. Creating a shared global job architecture enables greater movement and development opportunities for colleagues to expand and enhance their careers.



DIVERSITY & INCLUSION

Our success depends on the diverse perspectives our people bring to work every day.

Guided by the Smiths Way and our core value of respect, embracing diversity and inclusion is not only the right thing to do, but necessary. It helps us improve our understanding of our diverse markets, territories and stakeholders, unlock new and innovative thinking, outperform our competitors, and help colleagues feel they belong at Smiths.

It is our policy to provide equal employment opportunities. We recruit, select and promote our people on the basis of their qualifications, skills, aptitude and attitude. In employment-related decisions, we comply with all applicable anti-discrimination requirements in the relevant jurisdictions.

People with disabilities are given full consideration for employment and subsequent training (including retraining, if needed, for people who have become disabled), career development and promotion on the basis of their aptitude and ability. We endeavour to find jobs for those who are unable to continue in their existing job because of disability.

In FY2019, we conducted 14 visioning workshops with colleagues about the experiences and challenges they encounter. In FY2020 we are extending these to more languages. Feedback is being used to inform where we focus our efforts now and in the future.

We launched a Career Returners programme aimed at attracting prospective colleagues back in to the workplace after a career break, and have partnered with PwC to use their leading edge blind spots (unconscious bias) training materials for colleague education.

We are currently establishing a cross-divisional Diversity & Inclusion Council to help provide strategic direction, guiding principles and tactical initiatives on behalf of each division.

We report every year on our Gender Pay Gap in the UK in line with UK Government regulations, updating on our continuing efforts to close the pay gap as part of our work to build an inclusive and diverse culture across our entire global business. You can read our most recent report on our website.

Information about the Board Diversity Policy can be found on page 89.

INTERNATIONAL WOMEN IN ENGINEERING DAY

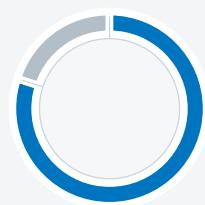
In June, Smiths celebrated International Women in Engineering Day for the second year, an important campaign to raise awareness of the engineering opportunities available to young women and career returners.

Women engineers at Smiths, from all different disciplines and geographies, shared their experiences of working in the industry. Our campaign showcased our colleagues' support for the profession through a collection of stories, videos and photos which were published on our website, social media channels and our Smiths Now internal colleague app. Dame Ann Dowling, one

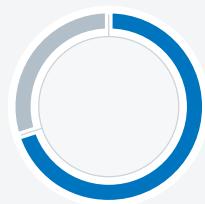
of our Non-executive Directors and an engineer herself (a world authority on combustion and acoustics), recorded a short video explaining what she enjoys about her work and why a career in engineering is an exciting choice for young people today.



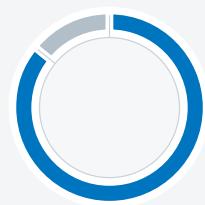
Board of Directors¹



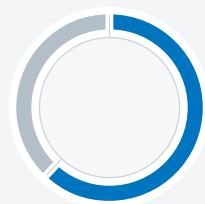
Executive Committee²



Senior managers³



Colleagues (total)



¹ When Pam Cheng joins the Board on 1 March 2020 female representation will increase to 27%.

² Andy Reynolds Smith and John Shipsey are included in the Board of Directors and the Executive Committee.

³ Senior managers as defined by the Companies Act 2006 (Strategic Report and Directors' Report) Regulations 2013. The Board of Directors and Executive Committee are not included in these numbers.

PEOPLE

ETHICS AND SUPPORT

Our shared values of Passion, Integrity, Respect, Ownership and Customer Focus are at the heart of what it means to be Smiths and guide our approach to ensuring all colleagues at Smiths feel safe, valued and respected.

Our Code of Business Ethics provides guidance, including through real-life scenarios, to help colleagues address challenging and ethical issues they may encounter at work. In FY2019, we updated our online Code of Conduct ethics training module to take account of updates to the Code.

We also ran Ethics and Compliance symposia in Japan, South Korea, India, Germany and Czech Republic. The symposia were an opportunity for leaders from across Smiths to discuss our ethics and compliance challenges and how best to navigate them.

We continued our 'Speak Out' campaign in FY2019 to remind and encourage colleagues to report behaviour inconsistent with the Code of Business Ethics and our values through their line manager, HR and legal teams, or through our confidential 'Speak Out' reporting line.

SECURITY

The safety and security of colleagues all over the world is of paramount importance to us. All our locations maintain security measures that comply with our comprehensive global security standards which were enhanced this year.

Our business travellers benefit from 24/7 advice and assistance provided by our travel security partners, with special arrangements in place for those that travel to high risk locations.

All colleagues are trained in security awareness with every Smiths facility assessed annually to determine the level of adherence to Smiths security standards.

In FY2020, we are planning to further enhance our security operations using GPS tools that will enable us to monitor the exact location of colleagues travelling in high risk locations as well as remote workers, and send them appropriate alerts and notices.

COMMUNITY ENGAGEMENT

We build strong relationships, a sense of pride in our business, and engage our people by getting involved in local communities. This is managed locally, with each business focusing on markets and communities important to them. We celebrate the best of these initiatives at our annual Group-wide Excellence Awards.

We offer Group-level support to charities and organisations that show how a donation will increase wellbeing through improvements to education, health, welfare or environment. In FY2019, the Group made charitable donations of £113,000.

During FY2019, Smiths Interconnect launched a pilot of Smiths Beyond Boundaries that gives colleagues a paid day to volunteer with their local community, donating more than 13,000 hours to good causes and organisations. We plan to adopt Smiths Beyond Boundaries across other divisions in FY2020.

SUPPORTING COMMUNITIES WORLDWIDE

The Smiths Beyond Boundaries outreach programme encourages colleagues to push beyond their work boundaries and better connect with their communities, customers and colleagues. It was piloted by Smiths Interconnect and involved each site organising a community project.

While the scale was global, the impact was intended to be local. The sites could choose any project that was meaningful to them, and volunteers could help however they wanted – donating time, skills, products or money.

This flexible approach optimised the scheme's appeal and it was swiftly adopted around Interconnect, with each site organising at least one activity.

Projects ranged from cleaning up rivers and beaches, constructing veterans' homes and children's play areas to bingo fundraisers and helping at foodbanks.

1,652 employees volunteered more than 13,000 hours to 54 projects around the world and raised funds for community initiatives.

Many projects focused on improving children's lives, particularly through educational activities that encouraged aspiring engineers.

Participants also felt personal benefits such as an increase in confidence because of the skills learnt from planning and leading these projects. Others recorded higher motivation, productivity and creativity on their return to work. Many were so inspired they gave additional personal time, got families and friends involved, and committed to ongoing involvement with their charities.



POLITICAL DONATIONS

As a Group, we made contributions to non-EU political parties totalling \$8,500 (£6,600) during FY2019. The political contributions were made on a bi-partisan basis in the US, in accordance with US state and federal election laws, in order to raise awareness and to promote Smiths interests.

Shareholder approval is sought each year for donations to registered political parties and other political organisations in the EU, but it is not Company policy to make such donations. The authority is sought to avoid inadvertent infringement of the relevant legislation.



TECHNOLOGY

Technology and innovation are what drives Smiths. They help fill our future product pipeline, create new business models, bring value to our customers and drive sustainable growth into the future.

The SES technology pillar provides standard operating mechanisms to support our approach to technology excellence and improve efficiencies throughout the business.

INNOVATION FRAMEWORK

Our Group-wide innovation framework is helping foster a future-focused, customer-centric culture through a disciplined approach to innovation, aligned with our strategy for growth. It's helping us translate our expertise and insight into transformative new products, services and business models.

Our Digital Forge centre of excellence in the San Francisco Bay area, opened in 2018, is accelerating digital projects and providing a co-innovation space for us, our customers and other partners. John Crane Sense™ is one example of the collaboration between the Digital Forge and John Crane.

Sense is a platform utilising sensors and software that allow customers to optimise performance and improve reliability. Working with John Crane experts, the Digital Forge has developed sophisticated machine learning algorithms that monitor seal performance, diagnose root causes of equipment issues, and predict and prevent potential failures.

John Crane experts build sensors into seals and integrate sensors with the surrounding equipment to capture critical data. The Digital Forge developed the technical infrastructure to move this data to a highly secure cloud-based server where it is processed using the latest algorithms and then stored for visualisation and continuous analysis over the life of the asset. Customers can

also access all of their own unique information and gain valuable insights via this secure web browser-based solution.

Our innovation framework is enabling increased collaboration such as this across Smiths and extends to external partnerships. In FY2019 we entered into new partnerships with leading universities to help share ideas and create innovations for the future.

RESEARCH AND DEVELOPMENT

We continue to refine our innovation investment profile and establish targets for R&D spend and our Vitality Index, which measures our percentage of total revenue derived from products launched in the last three years. The tools used to measure Vitality give us a holistic view of the organic pipeline, improving insight and decision-making. This helps to ensure we're investing in the biggest and best ideas that will bring the most value today and for the future.

INVESTMENT IN R&D FY2019*

4.5%

FY2018: 4.1%

FY2017: 3.8%

Cash costs as % of sales

* continuing operations



ADAPTING TECHNOLOGY FOR THE CUSTOMER NEED

Smiths Detection is collaborating with the US Department of Defence to develop an adaptor for the Joint Chemical Agent Detector (JCAD) product that significantly enhances detection capability. The Solid Liquid Adapter will allow JCADs to detect a broader library of explosives, chemicals and narcotics in solid, liquid and vapour phases.

The JCAD is based on Smiths Detection's Lightweight Chemical Detector (LCD) product line of advanced, easy-to-use and lightweight threat detection devices. The LCD protects military personnel, police and hazmat responders by alerting operators to toxic substances and dangerous chemicals detected.

JCAD is a widely-used chemical warfare agent detector and a flagship product for Smiths Detection, having sold over 99,000 units in its lifetime. Expanding its capabilities will provide additional protection for service personnel in the field.

PROGRAMME

We aim for consistent and flawless execution across all we do.

Our products and solutions are used in some of the most highly-regulated markets in the world, requiring compliance with strict regulatory requirements.

Our SES programme pillar brings consistency and best practice to bear on how we develop, implement and validate the success of programmes across the business.

PRODUCT LIFECYCLE MANAGEMENT

We design new products by thinking holistically, from customer need and problem definition, through product conception to introduction, and from end use to end of life. This approach is collaborative and cross-functional to create solutions that delight customers, create value and make the world safer and more productive.

NEW PRODUCT INTRODUCTION

We have a standard, flexible New Product Introduction (NPI) process across the Group. This scalable methodology is tailored to market and product, ensuring investment is proportionate, and helps maintain our crucial new product innovation pipeline. The methodology is based on a stage-gate approach with regular internal audits to ensure commercial effectiveness and improve our speed and effectiveness of bringing new products to market.

PRODUCT CYBER SECURITY

Our products are used in many mission-critical applications in highly-regulated industries. As our focus on digital transformation continues, we remain committed to ensuring the highest standards of cyber security for our products, and within the enterprise environment. We apply a unified, Group-wide approach to cyber security which leverages our scale.

In FY2019 we continued to execute against our cyber security plans with a focus on compliance, controls, product vulnerability and incident management. As part of these efforts, we updated guidance for security and privacy by design throughout the product lifecycle, and introduced new vulnerability and incident reporting standards and procedures. We also gained ISO/IEC 27001 information security management certification for select operations.

PRODUCT SAFETY

Our approach to product lifecycle management includes active consideration of safety at every step – including how the product is designed, manufactured, used and disposed of. We use common quality procedures to minimise product safety and quality issues, and monitor performance through robust quality control processes and systems. Our capabilities in this area will be enhanced in FY2020 through the introduction of a common Electronic Quality Management System (EQMS).

FLASHSHIELD+™

Flex-Tek's recently launched FlashShield+™ is a next generation corrugated stainless steel tubing system, used to supply natural gas and propane in residential and commercial structures. It features a four-layered design that makes installation fast and easy. The new jacketing system means it is the only product in its category to have the highest levels of safety against both lightning and household fault current.

The new product has been developed from customer feedback which said that customers wanted to reduce the time taken for installation. This new product offers superior performance advantages while being easier and more robust to install, and reduces labour costs.

Manufacturing costs have also been reduced by using innovation in material, and by improving our manufacturing processes so that we're able to selectively compete with less expensive products, enabling us to gain market share and remain a market leader in flexible gas piping.



PRODUCTION



We leverage our years of manufacturing experience and constantly drive for enhanced production efficiency, effectiveness and quality.

We are committed to ensuring every one of our products is manufactured efficiently, to the highest standard of quality and safety, while minimising our impact on the environment.

Our SES production pillar supports the continuous improvement of Smiths global manufacturing operations by providing standards, guidelines, templates and toolkits based on acknowledged best practice and Lean production. SES Model Value Stream application projects also support the focused implementation of manufacturing technologies across our divisions, to improve safety, quality and productivity.

WORKING CAPITAL % OF SALES FY2019

26%

FY2018: 26%
FY2017: 27%

PRODUCT QUALITY

Our cross-divisional quality council drives our approach to quality through standardised policies, processes and guidelines, to help our divisions embed quality in their work, supported by a culture of sharing knowledge and continuous improvement.

We focus our broad performance monitoring on two quality metrics – defects per million parts shipped (DPPM) and cost of poor quality (COPQ). COPQ includes the costs of waste, corrective work, warranty claims, returns and penalties, measured as a percentage of annual revenue.

DEFECTS PER MILLION PARTS SHIPPED FY2019

235

FY2018: 424
FY2017: 459

COST OF POOR QUALITY FY2019

1.4%

FY2018: 1.7%
FY2017: 2.1%

LEAN AND CONTINUOUS IMPROVEMENT

We incorporate continuous improvement and lean methodology to improve safety, quality, cycle time, delivery performance and productivity. We have certified continuous improvement leaders in all of our divisions that collaborate to standardise our Group-wide approach to Operational Excellence (OPEX) deployment through the Smiths Excellence System.

We continue to transform our manufacturing lines through development of Model Value Streams across our business. This allows us to test the effectiveness of new manufacturing technologies and lean approaches in a live environment. We are already recording significant improvements in HSE, quality, efficiency and lead times.

STOCK TURNS FY2019

3.4x

FY2018: 3.7x
FY2017: 3.5x

PRODUCTION

ENVIRONMENTAL MANAGEMENT

We believe that operating responsibly regarding the environment is simply the right thing to do, and have had annual reduction targets for environmental metrics since 2007.

Environmental performance is reported regularly to the Board and the Executive Committee. In FY2019 we launched an Executive Environmental Roundtable to advise the Board and Executive Committee on environmental matters including goals and targets, strategy, risk, and employee involvement.

We are committed to using energy and natural resources efficiently through advanced production processes that decrease waste and energy consumption, and reduce our greenhouse gas (GHG) emissions, in alignment with science-based targets. This is to help minimise the risk of a two degrees centigrade raise in global temperature and the associated potential impacts of global climate change.

We are also investing in low-carbon technologies and environmental management systems that drive improvement in our performance. We have set a long-range target to use more than 75% renewable energy (non-GHG) for all our electrical needs by 2040.

Our Health, Safety and Environment (HSE) and Environmental Emissions Reduction (EER) Policies are used by each division to develop tailored strategies, supported by a cross-divisional network of HSE professionals. We closely monitor energy and water use, waste generation and GHG emissions to identify potential improvements, sharing mitigating action plans and best practice across the Group. In FY2019 we again participated in the Carbon Disclosure Project (CDP) Climate and Water conservation modules, in which we earned a GHG score of A-, putting us in the CDP leadership category for our overall performance, management systems and robust reporting.

Our Supplier Code of Conduct sets out the environmental conditions we require of suppliers. Locally we measure and monitor energy consumption using tracking software that also provides a consolidated view of overall Group performance.

We align our environmental targets with United Nations Sustainable Development Goals 6, 13 and 14 for water conservation and protection, and greenhouse gas targets. We also have targets relating to recycling.

Smiths is aligned with the Task Force on Climate-related Financial Disclosures (TCFD) for our strategic planning and execution around GHG reduction and climate change targets including work on all four elements: Governance, Strategy, Risk Management and Metrics and Targets. In FY2020 we plan to conduct a sensitivity risk analysis around climate change impacts, the results of which will be reported to the Executive Committee and the Board.

JOHN CRANE'S ADVANCED PRODUCTION SYSTEM

In today's data-driven and connected world, it's imperative for businesses to adopt smart management and production systems for optimal operational performance.

An advanced production system (APS) is based on mutual interaction between people, machines and computer networks. Through real-time information and visualisation, an APS helps reduce business waste such as time spent waiting, machine performance and over processing, and facilitates shop floor production management.

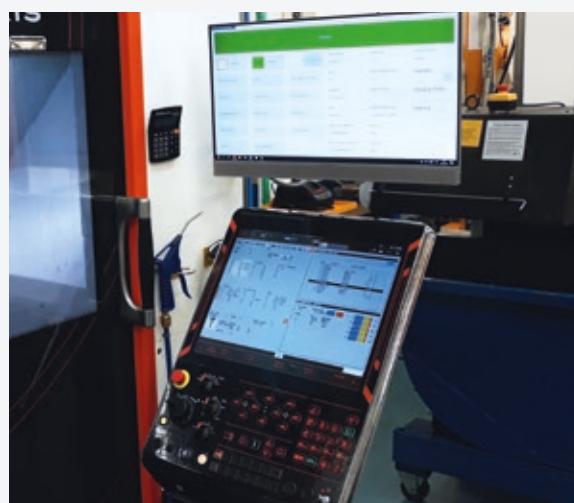
John Crane's Lutín site in the Czech Republic installed each of its production machines with touch-screen PCs which allow access to numerical control programme databases, the site's internal network, and machine data collection interfaces.

Paper forms containing standard operation procedures, instructions, guidelines and other manufacturing-related documents were also replaced by electronic documents making them easy to access and update.

Large monitor screens were also installed in manufacturing halls displaying operators' states, which helps support visual management during shifts. Additional smaller screens were placed in offices to notify shop floor management if a problem were to arise during the production process.

The integration of Lutín's new APS supports on-time delivery, while also reducing production lead time and unplanned downtime, increases efficiency of machinery, and promotes higher production efficiency and quality. Since implementation of the system,

average machine utilisation has grown by more than 25%, with numbers continuing to increase.





We're also aligned with the Global Reporting Initiative (GRI) reporting principles for environmental matters and have developed a comprehensive portfolio of policies including biodiversity protection, emissions reductions and product compliances. Performance against these policies is overseen through various auditing means with third parties, including using certified auditors for all our ISO14001 certified production sites with over 50 colleagues.

All divisions participate in a regular Restricted Substance forum to ensure compliance, share best practices and drive alignment for product compliance and adherence to conflict minerals requirements.

Our divisions are responsible for their products and continued efforts to reduce any lifecycle impacts on the environment.

CORE ELEMENTS OF RECOMMENDED CLIMATE-RELATED FINANCIAL DISCLOSURES



Governance

The organisation's governance around climate-related risk and opportunities

Strategy

The actual and potential impacts of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning

Risk Management

The processes used by the organisation to identify, assess and manage climate-related risks

Metrics and Targets

The metrics and targets used to assess and manage relevant climate-related risks and opportunities

JOHN CRANE DYNAMIC LIFT USP SEALS REDUCE WATER CONSUMPTION

As demand for fresh water grows around the world, and natural resources become increasingly limited, the need for companies to conserve both water and energy is extremely important.

An international pulp & paper packaging producer discovered that high volumes of treated water were being used in its bleaching process. In addition, the mechanical seal mean time between repair (MTBR) on its chlorine dioxide transfer pumps (used to lighten the colour of wood pulp) was far shorter than expected. Engineers needed a quick solution to reduce their water consumption and maintenance costs.

Familiar with the chlorine dioxide bleaching process, John Crane conducted an analysis on four transfer pumps to determine seal performance and discovered seal MTBR was only 14 to 18 months, much less than the two to three years expected by the mill. To help combat this, John Crane installed its Dynamic Lift Up-stream Pumping (USP) seals to achieve dramatic pump performance improvements.



PRODUCTION

ENVIRONMENTAL PERFORMANCE

We are on track to meet the new three-year goals we set in FY2018. We are decreasing our GHG emissions and water consumption, increasing our use of renewable energy, and holding flat on recycling. Markets for recycled materials are down due to geopolitical issues and we continue to investigate alternative recycling options.

Performance against environmental targets

	FY2019-FY2021 target	FY2019 outcome
Use of renewable energy	5% increase	0%
Greenhouse gas emissions	5% reduction	(12)%
Recycling rate	5% increase	(2)%
Water consumption in stressed areas	5% reduction	(9)%

Reduction targets are compared to the FY2018 baseline year and GHG and water are normalised to FY2018 revenue. Renewable energy and recycling are rate-based and therefore are not normalised. Water consumption targets are focused on stressed areas in alignment with the UN Sustainable Development Goals. Renewable energy includes all non-GHG producing sources and covers our electricity demand.

Energy and GHG emissions

Our GHG emissions calculations and reporting follows the Greenhouse Gas protocol (operational approach) and covers emissions from all sources under our control, grouped under: Scope 1 – direct GHG emissions from owned assets; and Scope 2 – GHG emissions from supplied electricity.

Emissions from company vehicles, production processes and fugitive sources are small and not deemed to be material, and so are not in our reported totals.

Emissions		FY2019	FY2018	FY2017	FY2016
Absolute values					
Scope 1 (direct emissions)	t CO ₂ e	10,963	12,241	11,143	12,088
Scope 2 (indirect emissions)	t CO ₂ e	47,312	55,841	62,072	81,092
Total	t CO ₂ e	58,275	68,082	73,215	93,180
Normalised values					
Scope 1 (direct emissions)	t CO ₂ e/£m revenue	3.35	3.65	3.74	3.95
Scope 2 (indirect emissions)	t CO ₂ e/£m revenue	14.47	16.63	20.83	22.56
Total	t CO ₂ e/£m revenue	17.83	20.28	24.57	26.51

ENVIRONMENTAL GOALS

We set new three-year environmental improvement targets for the period FY2019 to FY2021 in accordance with our Environmental Emissions Reduction Policy and the 2016 UN Sustainable Development Goals.

By the end of FY2021, we aim to reduce our GHG emissions by a further 5%, normalised to revenue, and increase renewable energy use by an additional 5%. Renewable energy currently accounts for over 43% of our electricity use, with our ambition to achieve 50% by the end of FY2021 by using more energy efficient equipment and green energy contracts.

We will continue to focus on reducing water usage in regions defined as 'stressed' by UNESCO, as well as certain locations in China, India and Mexico where water is constrained. Our goal is an additional 5% reduction in these areas by the end of FY2021, normalised to revenue, through water reduction efforts as well as water reuse programmes in certain locations.

We've also agreed to increase the amount we recycle by 5% to 69% including waste and other materials within our operations and local sites.

With the pending separation of Smiths Medical, we will be establishing adjusted baselines and reviewing targets.



SUPPLY



We build strong strategic supplier relationships to ensure quality, efficiency and flexibility. We apply our shared values to everything we do, and ask our suppliers to do the same.

Our SES supply pillar focuses on procurement and supply chain management, drawing on best practices to provide expected standards and operating guidelines in support of our continuous improvement journey. Application projects in supplier development and operational planning help to embed best practice and accelerate process improvements. The professional development of our supply colleagues is supported by the SES Academy, which offers APICS and CIPS accredited procurement and supply chain education programmes.

SUPPLIER ENGAGEMENT AND CONDUCT

Our Supplier Code of Conduct, which was updated in FY2019, makes clear our expectations of suppliers when it comes to ethical behaviour, the supply of minerals from socially and environmentally responsible sources, and the environment. Questionnaires covering modern slavery have been sent to more than 120 suppliers located in higher-risk territories.

To grow sustainably, we need strong, smart partnerships to generate and capture value. In FY2019 we held a supplier conference with more than 50 of our key vendors, to ensure they were familiar and in line with our Supplier Code of Conduct and to explain our strategy.

We continue to measure and develop supplier delivery and quality performance. In FY2020 we will increase focus on supplier delivery lead-time, involving our supply base further in the management of upstream inventory.

While supplier contracts and payment terms vary across the Group, our recently refreshed terms and conditions clarify how we want to work with our partners.

DELIVERING SUPPLY EXCELLENCE AT SMITHS DETECTION

Smiths Excellence methodologies have been adopted by Smiths Detection to help deliver supply excellence across the world.

Looking at the six elements of supply, Smiths Detection has been able to break down the supply chain process step-by-step and identify areas for improvement. The division has optimised supply chain processes across five manufacturing sites and 36 suppliers, leading to a 25% reduction of inventory associated with these suppliers; equating to a value of £1.3m.

Working alongside suppliers to develop more effective production processes, Smiths Detection has also been able to improve competitiveness and performance.

In addition to these benefits, the division has developed a more agile supply chain to the benefit of our customers.



SUPPLY

SUPPLY CHAIN MANAGEMENT

We continue to deploy best practices across our business, with emphasis on a total value approach to supply chain management; a key component of our SES Supply Chain Handbook.

In FY2019, we developed more robust sales and operation planning (S&OP) processes, with the aim of optimising business revenue and profitability, while improving customer delivery performance. In FY2020 we will pilot the use of advanced planning tools and continue supply chain capability development via the SES Academy.

PROCUREMENT SAVINGS (GROSS) FY2019*

£20m

FY2018: £21m

FY2017: £30m

* continuing operations

TRADE COMPLIANCE

Doing business the right way means respecting applicable laws wherever we operate.

Our trade compliance policies and procedures set out the necessary controls and provide corporate oversight of transactions. We provide in-person and online training to our trade compliance officers and other relevant colleagues. Our cross-divisional trade compliance working group meets regularly to share best practices and address emerging issues. We also regularly assess trade activities at site level to identify risks and review controls.

HUMAN RIGHTS AND TACKLING MODERN SLAVERY

We are committed to upholding all internationally recognised human rights standards wherever we do business, and to addressing modern slavery risks in our own operations and our supply chain.

During FY2019, we asked a second wave of Tier 1 suppliers to self-assess using a standardised questionnaire, selected based on a variety of factors, including their Global Slavery Index risk rating in relation to their countries of manufacturing.

We also audited some of our own sites and validated their compliance with our Code of Business Ethics, our Human Rights Policy and local labour laws. During our on-site audits we visited a sample of high-risk local suppliers to assess their compliance with our Supplier Code of Conduct. Any issues identified were investigated and remedial action taken.

We released new mandatory on-line training for our colleagues covering modern slavery. You can read our latest modern slavery statement on our website.

In FY2020, we will continue our due diligence drive with a focus on Tier 1 suppliers and enhance our monitoring capabilities and supplier controls.

NON-FINANCIAL INFORMATION STATEMENT

The disclosure below, and the information in this Annual Report which it refers to, is intended to assist our stakeholders in understanding our position on the following key non-financial areas: environmental, employee, society, human rights and anti-corruption and anti-bribery.

Our Code of Business Ethics (the Code) underpins everything we do at Smiths. It applies our shared values and ensures we comply with all applicable international and local rules and regulations. It provides guidance, including through real-life scenarios, to help colleagues address challenging and ethical issues they may encounter at work. The Code is available on our website, and our Group policies support and enhance our behaviour in line with the principles set out in the Code.

The following policies and guidelines govern our approach to the non-financial matters listed above. They are designed to help colleagues recognise and manage risks

- Health, Safety and Environment Policy
- Environmental Emissions Reduction Policy
- Environmental Health and Safety Technical Minimum Standards Policy
- Environmental Health and Safety Audits Policy
- Human Rights Policy
- Modern Slavery and Transparency Statement
- Fair Employment Policy
- Recruitment Policy
- Global Mobility Assignment Policy
- Data Protection Code of Conduct
- Data Protection and Privacy Policy
- Supplier Code of Conduct
- Supplier Terms & Conditions
- Anti-Facilitation of Tax Evasion Policy
- Antitrust Policy
- Conflict Minerals Policy
- Policy on Agreements with Agents and other Intermediaries
- Invitations to Government Officials Policy
- Prohibition on facilitation payments Policy
- Gifts, Meals and Hospitality Policy

Due diligence, outcomes and additional information

- Additional information about the areas covered in this Non-financial Information Statement can be found in the Resources and Relationships section on pages 47-60. This section details how we work and interact with our stakeholders, and provides additional information about our shared operating model, the Smiths Excellence System (SES), in practice. There is also information about how we monitor the effectiveness of key policies.
- In FY2019, we updated our online Code of Conduct ethics training module to take account of updates to the Code. All employees are required to undergo this training.
- The Human Rights Policy and the Policy on Agreements with Agents and other Intermediaries require due diligence to be conducted on new suppliers and other intermediaries in order to get a clear understanding of who we are dealing with and to avoid transacting with people who have demonstrated poor business conduct.
- The Gifts, Meals and Hospitality Policy sets out parameters for colleagues on what is and is not permitted. It also establishes a gifts register requiring gifts, meals and entertainment with third parties which exceed certain thresholds to be recorded. This register is regularly reviewed, and it provides additional transparency.

Further information

- Our business model, principal risks and key performance indicators can be found on pages 10, 64 and 26.

A PROACTIVE APPROACH TO RISK

We operate across a range of markets and geographies and are prepared to accept certain levels of risk in realising our ambitions, and our purpose to make a safer, more efficient and better connected world.

We are clear about the specific risks we face, and take a proactive approach to risk management in order to maximise opportunities, drive better commercial decision-making, and protect our people and our businesses.

RISK GOVERNANCE

The Board and its Committees determine the culture and approve the strategy of the Group. The Board ensures appropriate oversight and monitoring through a number of mechanisms, including strategy reviews, Committee meetings, management reports and focused reviews of selected risk areas.

On behalf of the Board, the Audit & Risk Committee is responsible for reviewing and assessing the effectiveness of the Group's risk management and internal control systems. The review process covers the Group's principal risks, as well as financial, operational and compliance controls.

The Executive Committee is responsible for designing the Enterprise Risk Management (ERM) framework and ensuring that it is effectively deployed throughout the Group. The Executive Committee also ensures that the Board's risk appetite is understood by risk owners and decision-makers, ensures risks are adequately managed, and conducts an annual assessment of strategic risk. All principal risks are owned by a member of the Executive Committee.

THE ENTERPRISE RISK MANAGEMENT (ERM) PROCESS

BOARD AND AUDIT & RISK COMMITTEE

- Setting the strategy and determining the culture of the Group
- Reviewing and assessing the effectiveness of risk management and internal control systems
- Monitoring through Board processes and good governance

EXECUTIVE COMMITTEE AND SENIOR MANAGEMENT

- Designing and establishing the risk management system and internal controls
- Ensuring that the risk appetite of the Board is understood by risk owners and decision-makers
- Ensuring risks are adequately managed

1 ST LINE OF DEFENCE	2 ND LINE OF DEFENCE	3 RD LINE OF DEFENCE
Risk ownership and mitigation Operational teams <ul style="list-style-type: none">– Understanding roles and responsibilities– Establishing and applying internal control systems– Complying with policies– Following risk management processes	Monitoring and compliance Risk and compliance functions <ul style="list-style-type: none">– Maintaining financial, legal and ethical compliance– Maintaining operational controls– Monitoring risks– Managing the ERM process– Ensuring security, quality and health and safety	Independent assurance Internal audit function <ul style="list-style-type: none">– Auditing and providing assurance on internal controls, programme controls, system controls and risk management processes

Regulators and external audit

Running a business involves constant risk management – it is an integral part of day-to-day operations. Our ERM process supports open communication on risk between the Board and Audit & Risk Committee, the Executive Committee, our divisions, functions and sites. It enables us to manage and monitor the risks which threaten successful execution of our Group strategy and ensures our strategic, financial, compliance and operational risks are appropriately considered by the Executive Committee and by the Board.

Within the ERM framework, we operate a ‘three lines of defence approach’. This ensures that the three lines – risk ownership and mitigation, monitoring and compliance, and independent assurance – are clearly defined and work effectively.

Our divisional and functional teams are responsible for day-to-day management and reporting of risks. They identify new and emerging risks, escalate where appropriate, and take action to manage risks as required. Our divisions also conduct an annual assessment of the strategic, financial, compliance and operational risks they face and make formal presentations to the Audit & Risk Committee each year.

Internal audit provides independent and objective assurance to both the Audit & Risk and Executive Committees on the adequacy and effectiveness of our risk management and internal control processes. It facilitates the ERM process and provides site-based controls and assurance reviews of key programmes, processes and systems.

The Audit & Risk Committee, on behalf of the Board, reviews the effectiveness of the risk management process; considering the principal risks and uncertainties, actions taken by management to manage those risks, and the Board’s risk appetite in respect of each risk.

During FY2019, ERM was discussed at the Executive Committee in order to agree the ERM timetable and the risks selected for ‘deep dive’ discussions at the Executive Committee and Audit & Risk Committee. These were: technology; cyber security; people; manufacturing concentration; and sole source of supply. The Group’s list of principal risks was also discussed and recalibrated by the Executive Committee.

The risk management process was further enhanced through the requirement for risk owners to demonstrate how they get assurance that controls are working effectively. Examples are provided in the following tables of principal risks.

In addition, a further 47 risk workshops were facilitated at operational sites during the year to gather a bottom-up view of risk which fed into divisional and functional risk assessments.

The Directors consider the risk management process to be effective. The Audit & Risk Committee recognises that this is an ongoing process and work will continue in FY2020.

PRINCIPAL RISKS AND UNCERTAINTIES

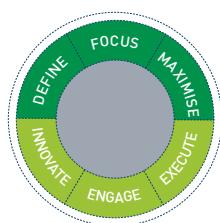
We maintain a register of principal risks and uncertainties covering the strategic, financial, compliance and operational risks faced by the Group.

We review each risk and rate a number of factors: gross impact, applying the hypothetical assumption there are no mitigating controls in place; residual impact and likelihood, taking into account existing mitigating controls; target impact; the reputational impact of a risk; and its velocity, which reflects the expected time we would have to react should a risk materialise. These, in turn, drive mitigation priorities. A trend metric shows the net position of the risk year-on-year.

We updated our register of principal risks and uncertainties following review by the Executive Committee and approval by the Board. Two risks reported in FY2018 have been merged to form the integrated supply chain risk. Customer has been added as a new principal risk.

While we continue to monitor and manage a wider range of risks, the risk map (right) and the tables that follow summarise those risks considered to have the greatest potential impact if they were to materialise.

OUR STRATEGIC OBJECTIVES



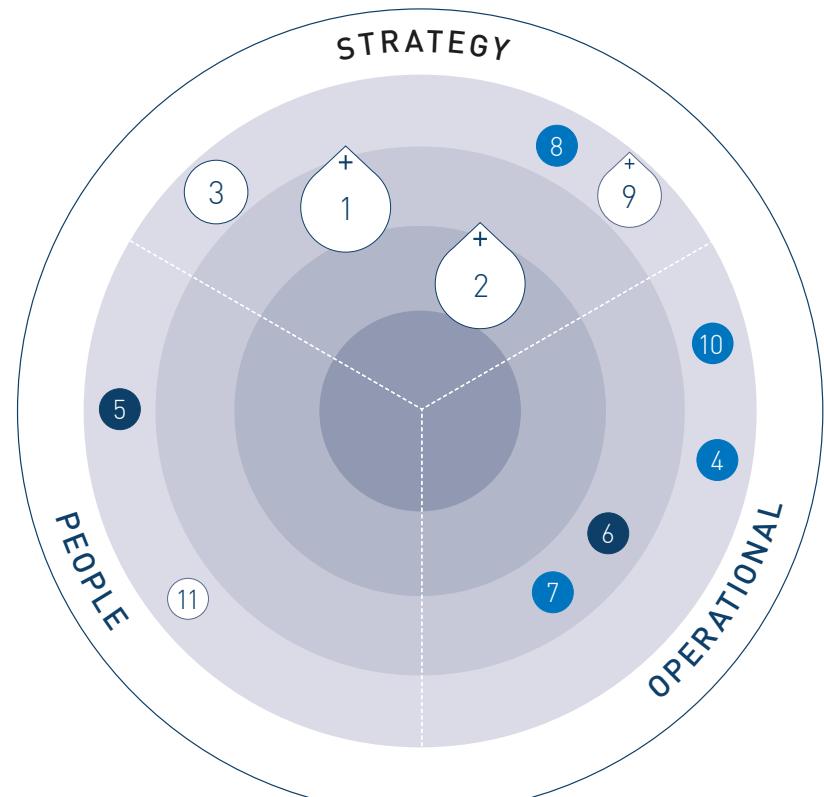
OUTPERFORM OUR
CHOSEN MARKETS



DELIVER WORLD-CLASS
COMPETITIVENESS



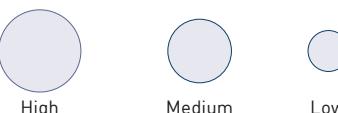
STRONG FINANCIAL
FRAMEWORK



Principal risks

1 Technology	6 Cyber security
2 Economy and geopolitics	7 Integrated supply chain
3 Acquisition/integration and divestment/separation	8 Markets
4 Product quality	9 Customers
5 Ethical breach	10 Contractual obligations
11 People	

Residual impact



Likelihood



Trend (net position of risk vs FY2018)



Velocity



TECHNOLOGY		
Differentiated new products and services are critical to our success. We may be unable to maintain technological differentiation or to meet customers' needs and may face disruptive innovation by a competitor.	Potential impact	- Targets to increase the proportion of spend on next generation and transformational initiatives - New Product Introduction (NPI) process established across divisions to accelerate projects - Vitality Index as KPI - Robust IP protection via patents and other protections, and litigation where appropriate
Risk owner Andy Reynolds Smith	Key mitigating controls	- Proactive repositioning of the portfolio around the most attractive markets where we can sustainably hold a top three position based on technology leadership - Diversified technology portfolio serving a range of sectors and geographies, mitigating exposure to any one sector or area - Increased and smarter investment in R&D (FY2019: 4.5% of continuing operations revenue, FY2018: 4.1%) - Focus on building a culture of innovation with a long-range Technology Roadmap for each division
Trend 	Link to SES TECHNOLOGY CUSTOMER PROGRAMME	Assurance - Vitality data is reviewed and is part of the SES dashboard - Adherence to NPI process is audited and embedded in systems - Technology Roadmap is part of the Group strategic cycle
Included in viability assessment: N/A	Link to strategic objectives 	

ECONOMY AND GEOPOLITICS		
There are external indicators that we are in the late stage of the economic cycle. Threats to free trade are increasing.	Potential impact	- Identification and application of learnings from past downturns through the cycle - Sustainable tax strategy to optimise the Group's position - Representation of our interests by the corporate affairs team - Network of trade compliance officers across the Group who monitor upcoming changes in regulation and oversee import and export activities - Monitoring of the ongoing negotiations between the UK and the EU in order to assess the potential impact of Brexit and any transitional arrangements which may be agreed
Risk owner John Shipsey	Key mitigating controls	- Impact of US sanctions to date has been absorbed - Order tracking reported and monitored - Brexit coordination group working effectively
Trend 	Link to SES PRODUCTION	
Included in viability assessment: N/A	Link to strategic objectives 	

ACQUISITION/INTEGRATION AND DIVESTMENT/SEPARATION

Our strategy is predicated primarily on organic growth. However, acquisitions/divestments can also play a role in building and/or strengthening competitive positions.

Acquisitions bring risk as well as opportunity. We may invest substantial funds and resources in acquisitions which fail to deliver on expectations – due to incorrect appraisal of the target and/or poor execution. The opposite risk is that (perhaps through an excess of caution) we miss out on opportunities to build market-leading positions and growth.

Divestments also carry risk. We may divest an asset at the wrong time, or may not realise appropriate value for the asset. Separation may be complex and, if poorly executed, may impact the wider business.

Risk owner John Shipsey

Trend 

Link to SES PROGRAMME

Included in viability assessment: N/A

Link to strategic objectives

**Potential impact**

- Poor acquisitions/divestments, or poorly managed integrations/separations, lead directly to financial damage and indirectly to loss of shareholder confidence
- Newly-acquired products and solutions deliver less value, fewer synergies, or require more investment than anticipated
- Fall in our return on capital employed measure
- Financial performance suffers from goodwill or other acquisition-related impairment charges or inheritance of material unknown liabilities

Key mitigating controls

- Investment in greater internal capability for the evaluation and execution of transactions
- Regular reviews of the acquisition pipeline and a stage-gated M&A process
- Detailed due diligence and integration work in accordance with our acquisitions and disposals policy

- Detailed separation planning, in accordance with our acquisitions and disposals policy
- Governance ensures multi-disciplinary sign off
- Larger transactions approved by the full Board
- Post-transaction reviews with lessons learned incorporated into future projects
- Use of external advisors

Assurance

- Strong internal team
- Proper governance and oversight
- Learnings from previous acquisitions (Morpho Detection, Seebach GmbH, United Flexible) and divestments (PDI, Microwave, Wallace, Bearings)
- Ongoing evaluation measured against original business case

PRODUCT QUALITY

In the ordinary course of business we are potentially subject to product liability claims and lawsuits, including potential class actions. The mission-critical nature of many of our solutions makes the potential consequences of failure more serious than may otherwise be the case.

Risk owner Divisional Presidents

Trend 

Link to SES TECHNOLOGY PROGRAMME PRODUCTION

Included in viability assessment: 

Link to strategic objectives

**Potential impact**

- Recall of products due to manufacturing flaws, component failures, damage to persons/property, and/or design defects, in order to avoid serious, or potentially catastrophic, failure
- Damage to our reputation amongst customers and reduction in market acceptance of, and demand for, our products from an adverse event involving one of our products
- Exposure to losses in the event of a cyber security breach relating to our products
- These include not only customer losses, but also those of a potentially large class of third parties

Key mitigating controls

- Divisional quality risk assessments which address product failures, product compliance, regulatory compliance, product performance, product safety and market authorisation risks
- Quality assurance processes embedded in manufacturing locations for critical equipment, supporting compliance with industry regulations (e.g. FAA, FDA, API, etc.)

- Quality development and quality integration built into NPI processes

- Risk analysis and mitigation processes relating to product cyber resilience embedded in the product lifecycle process. Proactive steps taken to ensure product cyber related risks are continually monitored and managed
- Group-wide Quality Council drives standard definitions, identifies and shares best practice, and reduces the cost of poor quality
- Insurance cover for product liability
- Material litigation managed under the oversight of the Group General Counsel

Assurance

- Quality KPIs (e.g. DPPM, COPQ) are measured and action plans put in place to drive their improvement – these are regularly reported
- Group and divisional governance frameworks (including Delegation of Authority) ensure a close working relationship between legal and commercial teams (includes quality) to manage risks
- Fewer quality issues at launch of new products

ETHICAL BREACH

We have more than 22,000 employees in more than 50 countries. Individuals may not all behave in accordance with the Group's values and ethical standards. We operate in highly regulated markets requiring strict adherence to laws with risk areas including:

- bribery and corruption;
- anti-trust matters;
- international trade laws and sanctions;
- human rights, modern slavery and international labour standards;
- General Data Protection Regulation (GDPR); and
- government contracting regulations

Risk owner Mel Rowlands

Trend 

Link to SES PEOPLE
CUSTOMER
SUPPLY

Included in viability assessment: 

Link to strategic objectives 

Potential impact

- Failure to comply with export regulations leads to significant fines and a loss of export privileges
- Failure to meet strict conditions within government contracts, particularly in the US, could have serious financial and reputational consequences
- Increased risk of illegal anti-competitive activity such as collusion with competitors as a result of operating in relatively consolidated markets
- US fines and penalties imposed for price fixing, bid rigging and other cartel-type activities can exceed \$100m per violation
- Ethics or compliance breach causes harm to our reputation, financial performance, customer relationships and our ability to attract and retain talent

Key mitigating controls

- Group-wide ethics framework which includes the Smiths Way, the Code of Business Ethics and the Supplier Code of Conduct
- Policies and procedures to mitigate distributor and agent related risks including due diligence, contractual controls and internal approvals
- Anti-bribery and corruption training for all employees supported by the 'Speak Out' line encouraging the reporting of ethics violations (includes ability to report anonymously and a non-retaliation policy)

- Reporting and investigation mechanisms
- Antitrust training programmes and guidance
- Network of trade compliance officers across the Group that monitor upcoming changes in regulation and oversee import and export activities
- Legal function monitors legislative changes and reports and monitors actions as necessary
- Modern Slavery and Transparency Statement and procedures to reduce the risk of modern slavery within the Group and our supply chain
- Multi-functional programme for GDPR compliance

Assurance

- Multiple sources to assess culture including My Say results, 'Speak Out' reports, internal audit findings, exit interviews and ethics questions in performance reviews
- Monitoring and reporting on compliance with ethics and compliance policies
- Tracking of on-line ethics training and compliance modules
- Reporting non-compliance cases to business, Executive and Audit & Risk Committees

CYBER SECURITY

Cyber attacks seeking to compromise the confidentiality, integrity and availability of IT systems and the data held on them are a continuing risk. We operate in markets and product areas which are known to be of interest to cyber criminals.

Risk owner Philippe Roman

Trend 

Link to SES TECHNOLOGY PROGRAMME

Included in viability assessment: 

Link to strategic objectives 

Potential impact

- Compromised confidentiality, integrity and availability of our assets resulting from a cyber attack, impacting our ability to deliver to customers and, ultimately, financial performance and reputation
- Exposure to significant losses in the event of a cyber security breach relating to our security or medical products. These include not only customer losses, but also those of a potentially large class of third parties

Key mitigating controls

- Board oversight of the approach to mitigating cyber risk
- Proactive focus on information and cyber security risks supported by a strong governance framework
- Group-wide assessment of critical information assets and protection to enhance security

- Information Security Awareness programme

- Security monitoring to provide early detection of hostile activity on Smiths networks and an incident management process

- Partnership and monitoring arrangements in place with critical third parties, including communications service providers
- Cyber risk analysis and mitigation processes embedded in the product lifecycle process to increase resilience

Assurance

- Formal reviews with Executive Committee and the Board
- Vulnerability scanning/event reporting embedded
- External reviews of vulnerability controls
- Mandatory staff training
- Compliance with recognised standards
- Cyber leads at divisions

INTEGRATED SUPPLY CHAIN

Timely, efficient supply of raw materials and purchased components is critical to our ability to deliver to our customers. Manufacturing continues to be exposed to external events which could have significant adverse consequences, including natural catastrophes, disease pandemics and terrorist attacks.

We are also affected by the social, economic, regulatory and political conditions where we operate. This applies to our own manufacturing sites and those of our key component suppliers.

Risk owner Philippe Roman

Trend 

Link to SES SUPPLY

Included in viability assessment: 

Link to strategic objectives 

Potential impact

- Inability to deliver products/solutions to customers, impacting financial performance and reputation

Key mitigating controls

- Supply excellence pillar of our SES operating model delivers increased focus on efficient, resilient and cost-effective supply
- Business continuity and disaster recovery plans in place and tested for critical locations
- Regular evaluation of key sites for a range of risk factors using externally benchmarked assessments
- Mitigation plans for sole source suppliers, sub-contractors and service providers are developed and deployed by divisions to include qualification of alternative sources of suppliers where appropriate
- Business interruption and property damage insurance

Assurance

- Externally provided business interruption risk surveys of operational sites
- Business continuity planning (BCP) testing and results
- Insurance requirements driven by the Group's/divisions' risk appetite is validated at least annually
- Mitigation plans reviewed at divisional procurement leadership team meetings and reported in the procurement scorecard

MARKETS

A significant proportion of our revenue comes from the US and European markets, with a notable proportion coming from governments. In addition to geographical markets, there is a risk we do not focus on attractive market sectors where we have, or could have, a sustainable position.

Risk owner
Roland Carter
Trend

Link to SES
**TECHNOLOGY
CUSTOMER**
**Included in viability
assessment:**
N/A
**Link to strategic
objectives**

Potential impact

- Failure to develop other markets and geographies impacts strategic progress and financial performance
- Significant disruption to government budgets results in fewer contracts being awarded to Smiths, impacting financial performance

Key mitigating controls

- A diversified portfolio of businesses mitigates exposure to any one country, sector or customer
- Growth strategy which places emphasis on expanding operations in higher-growth markets and regions which are currently underserved, including Asia
- Strategic process to capture continuing opportunities in current and adjacent markets

- Corporate affairs function which collaborates with colleagues across the Group to advise on developments
- More resilient services and consumable components built into some of our government-related business

Assurance

- Increased rate of growth provides assurance that actions are working
- Managing Director councils established in India and China
- Joint venture and partnership arrangement in China
- Digital Forge established

CUSTOMERS

Our markets are evolving at a fast pace, creating potential for customers to change their business models as they look to deliver products and services at higher quality, with better service and at lower cost.

Failure of the Group to keep pace with customer changes/requirements (innovation, go to market, strategies) could have a materially adverse impact on Group performance.

Risk owner
Julian Fagge
Trend

Link to SES
**CUSTOMER
PROGRAMME**
**Included in viability
assessment:**
N/A
**Link to strategic
objectives**

Potential impact

- Loss of market share and adverse impact on Group results
- Material adverse effect on profitable growth
- Erosion of our reputation as a leader in our markets

Key mitigating controls

- As part of the Group innovation framework and our approach to potential technology disruption, we include customer disruption as well as competitor and product
- New product innovation feedback through market research and direct feedback from existing and potential customers
- Developing business models is a core component of the Group-wide training agenda

Assurance

- Megatrend workshops and disruption risks reviewed annually
- Customer input gathered on a frequent basis
- Pilot programmes to test products, business models and partnerships
- Strategic review process; divisional deep dives

CONTRACTUAL OBLIGATIONS

We may fail to deliver the products and services we are obliged to deliver, or fail in our contractual execution due to delays or breaches by our suppliers or other counterparties.	Potential impact
Risk owner Trend	Mel Rowlands 
Link to SES	CUSTOMER SUPPLY PROGRAMME PRODUCTION
Included in viability assessment:	N/A
Link to strategic objectives	
Key mitigating controls	
<ul style="list-style-type: none"> Contracts managed and delivered by programme management teams that regularly review risks and take appropriate action 	
<ul style="list-style-type: none"> Review and approval process for significant and higher-risk contracts in place at Group and divisional levels Diversified nature of the Group mitigates exposure to any single contract Programmes in place across the Group which harmonise the contract review process Cross-divisional US Government working group determines and shares best practice on government contracting 	
Assurance	
<ul style="list-style-type: none"> Divisional legal teams embedded in the business, working cross-functionally throughout the contract lifecycle Review and approval process for contracts determined by adherence to the Delegation of Authority matrix Insurance programme tailored to reflect the risk appetite of the Group Uniform diligence and contracting process in place for agents and distributors 	

PEOPLE

People are our only truly sustainable source of competitive advantage and competition for key skills is intense, especially around science, technology, engineering and mathematics (STEM) disciplines. We may not be successful in attracting, retaining, developing, engaging and inspiring the right people with the right skills to achieve our growth ambitions.	Potential impact
Risk owner Trend	Sheena Mackay 
Link to SES	PEOPLE
Included in viability assessment:	N/A
Link to strategic objectives	
Key mitigating controls	
<ul style="list-style-type: none"> Investment to build a learning organisation with a focus on culture, reward and recognition Implementation of the right HR infrastructure Delivery of a range of learning and development opportunities at all levels of the organisation Talent and succession plan reviews Remuneration packages evaluated regularly against market trends Chief Executive assessment of the leadership team 	
<ul style="list-style-type: none"> Annual performance management reviews for the majority of employees using best practice processes such as 360-degree feedback surveys Formal career counselling for senior people in the business A clearly defined people integration plan for acquisitions People Plan oversight by the Board Diversity & Inclusion Plan and initiatives 	
Assurance	
<ul style="list-style-type: none"> Participation rates in the Smiths learning and development programmes measured. Capability and performance of alumni are tracked Benchmarking ratio of hires into senior roles from internal and external sources Formal and informal measures of culture, for example regular engagement surveys with follow up action planning Measurement of the effectiveness of the Executive education programme through post completion evaluation tests Post-acquisition review meetings 	

GOING CONCERN AND VIABILITY STATEMENT

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 Strategic Report on pages 04 to 72. The financial position of the Company, its cash-flows, liquidity position and borrowing facilities are described on pages 22 to 25. In addition, the notes to the accounts include the Company's objectives, policies and processes for managing its capital; its financial risk management objectives; details of its financial instruments and hedging activities; and its exposures to credit risk and liquidity risk.

At 31 July 2019 the net debt of the Group was £1,197m, a £304m increase from 31 July 2018. At the end of July the Group had available cash and short-term deposits of £315m. These liquid resources are immediately available with 93% invested with the Group's global banking partners. The Group's debt profile shows an average maturity of 5.2 years (from 5.5 years at 31 July 2018). There are no scheduled repayments of debt due until 2022.

The Group maintains a core US\$800m committed revolving credit facility from these banks which was undrawn at 31 July 2019. This committed facility matures in November 2023. This facility has certain financial covenants however these are not expected to prevent utilisation at the Group's discretion if required.

This financial position and debt maturity profile provides confidence that the Group has sufficient financial resources for the foreseeable future. As a consequence, the Directors believe that the Company is well placed to manage its business and its liabilities as they fall due. In coming to this conclusion, the Directors have taken account of the Group's risk management process described on pages 62 to 63, and have paid particular attention to the financial and pension funding risks and their mitigation (see page 23).

The Directors, having made appropriate enquiries, have a reasonable expectation that the Company and the Group have adequate resources to continue in operation for a period of at least twelve months from the date of this report. Thus they continue to adopt the going concern basis of accounting in preparing the financial statements of the Company and the Group.

VIABILITY STATEMENT

In accordance with the requirements of the 2016 UK Corporate Governance Code, the Directors have assessed the longer-term prospects of the Group, taking into account its current position and a range of internal and external factors, including the principal risks detailed on pages 64 to 70 (the 'viability assessment').

The Directors have determined that a three-year period to 31 July 2022 is an appropriate time frame for the viability assessment. The selected period is considered to be appropriate as, based on the historical performance of the Group, a three-year outlook represents an optimum balance of long-term projection and acceptable forecasting accuracy.

This time period also takes into account considerations such as the maturity of the Group's borrowing facilities and the cyclicity of the performance of the Group's underlying markets. In making this viability assessment, the Directors have considered the current financial position and prospects of the Group, including the current year business performance, the detailed Operating Plan for 2020 and the Strategic Plan. Against these financial projections, the Directors took into account the principal risks (as outlined on pages 64 to 70) to develop a set of plausible scenarios as set out overleaf with potentially high-impact outcomes, and where relevant included the loss of revenue arising from the separation of Smiths Medical.

Consideration was then given to the magnitude of the gross risks and their potential impact, directly or indirectly, on the Group's future performance and liquidity. The assessment included stress testing of the Group's financial capacity to absorb the impact of such adverse events, either individually or in combination, and what mitigating actions the Group could take to respond to them in order to protect its business. The Directors also considered the Group's ability to raise additional liquidity. In performing this assessment the Directors have taken comfort from the diversity of the Group's businesses across different markets, industries, geographies, products and customers.

Based on the robust assessment, the Directors confirm that they have a reasonable expectation the Group will remain viable for the period being assessed and will continue to operate and meet its liabilities as they fall due. The Directors have no reason to doubt that the Group will continue in business beyond the period under assessment.

 72 See scenarios modelled overleaf

SCENARIOS MODELLED**SCENARIOS****Scenario 1:**

A natural or other disaster destroys key manufacturing facilities resulting in severe disruption to approximately one-quarter of Smiths Medical's production.

Scenario 2:

A fault in a critical product within Smiths Medical causes the product range to be suspended by global regulatory authorities pending further investigation. Trade licences are subsequently revoked until the products are tested to be safe.

Scenario 3:

A corruption scandal leads to global regulatory penalties and damage to the Group's reputation. The corruption scandal also leads to heavy penalties against the Group in its main markets.

Scenario 4:

A major incident at a refinery is judged to be the result of a fault in one of John Crane's mechanical seals. John Crane is held liable for the costs of repair and restoration of the plant in addition to the consequential losses of plant closure.

Scenario 5:

A product cyber-attack at a major global hub airport located in North America. Subsequently civil, military and governmental licences are revoked.

Scenario 6:

Combination of scenarios 1 & 4.

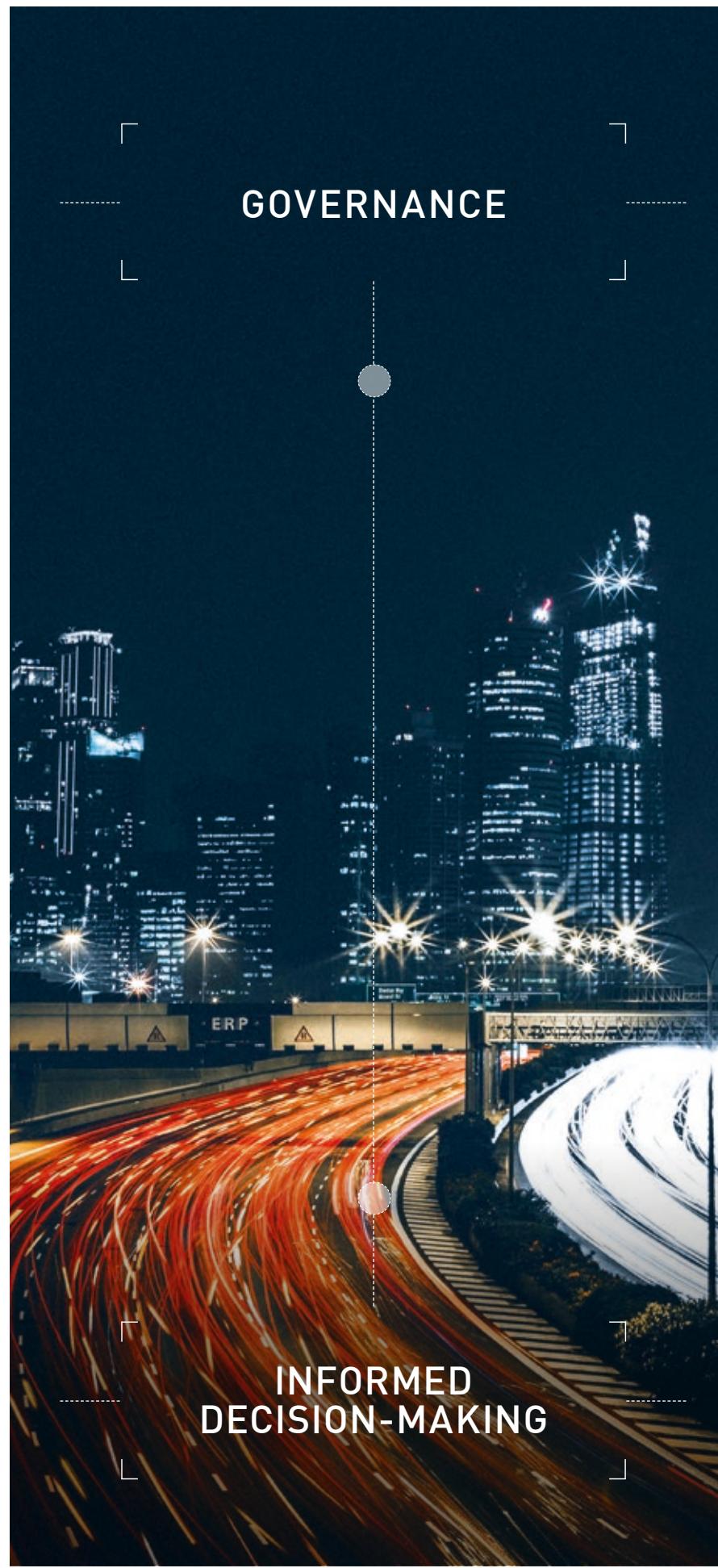
**LINK TO
PRINCIPAL RISKS****Integrated Supply Chain****Product Quality****Ethics and Compliance****Product Quality****Cyber Security****Integrated Supply
Chain & Product
Quality****Product Quality &
Cyber Security****Product Quality &
Cyber Security**

The Strategic Report was approved by the Board on 19 September 2019.

By order of the Board

Andy Reynolds Smith

CHIEF EXECUTIVE



CHAIRMAN'S INTRODUCTION



66

A STRONG GOVERNANCE FRAMEWORK IS CRITICAL IF WE ARE TO SUPPORT THE BUSINESS AND ENHANCE THE INTERESTS OF ALL OUR STAKEHOLDERS."

I am pleased to introduce our Corporate Governance Report for the year, in which we describe our governance arrangements, the operation of the Board and its Committees, and how the Board discharged its responsibilities.

Central to everything we do is the Group's purpose. Our culture, values, strategy and business model continue to be aligned to make the world safer, more efficient and better connected. If we continue to achieve this through our great people and relentless execution, our performance demonstrates we can produce stronger and more sustainable results.

Having a strong governance framework that supports the Group's long-term strategic development is critical if we are to support the business and enhance the interests of all our stakeholders for the future. The continued development of the Group's strategic opportunities has been our key area of focus during the year. Most notably this has included the decision to separate Smiths Medical. The Board's succession planning has also been key and more information can be found in the Nomination & Governance Committee Report.

This year has seen significant change with regard to corporate governance in the UK as the new UK Corporate Governance Code came into force. New legislation in respect of the governance arrangements of private companies, including major subsidiaries within listed companies, was also published. The audit market and the role of auditors is currently under review, with the UK Government offering broad support for the recommendations of Sir John Kingman's review. This included the establishment of a new regulator with responsibility for governance in the UK to replace the FRC.

The Board continually keeps its governance arrangements under review and, although the above changes have required us to review and enhance our arrangements, we have not had to make fundamental changes to the way we operate and oversee the business.

During the year the Board agreed the framework for how it wishes to engage with stakeholders. It is essential that this framework is dynamic and we are able to respond as our business and our stakeholders evolve, not to mention as it becomes better embedded, and we learn what works best for us as a Board and for our stakeholders.

I would like to thank all my colleagues who served on the Board during the year. I hope the following pages provide you with an insight into our work on your behalf.

Sir George Buckley
CHAIRMAN



The Board met in Minneapolis in July 2019 and visited Smiths Medical's Oakmount facility.

UK CORPORATE GOVERNANCE CODE

In FY2019 the Company has applied the main Principles and complied with the relevant Provisions of the 2016 UK Corporate Governance Code (the 2016 Code).

As mentioned in our Annual Report FY2018, we welcome the publication of the 2018 UK Corporate Governance Code (the 2018 Code) which applies to the Company for FY2020. The new Code focuses on culture and purpose, stakeholder engagement and succession planning. Although in this Annual Report we are still required to measure ourselves against the 2016 Code, we have been working to ensure we apply the updated Principles of the 2018 Code with effect from 1 August 2019.

This activity has included:

- Structuring this Corporate Governance Report in line with the Provisions of the 2018 Code: Leadership and purpose; Division of responsibilities; Composition, succession and evaluation; Audit, risk and internal control; and Remuneration
- Considering the Provisions of the 2018 Code while completing the annual review of the Matters Reserved for the Board and its Committees' Terms of Reference, and updating them accordingly
- Extending the remit of the Nomination & Governance Committee to cover oversight of the ongoing suitability of the Group's governance framework and diversity & inclusion performance
- Amending the name of the Audit & Risk Committee to reflect its oversight of audit, risk and internal control
- Publishing the responsibilities of the Chairman, Chief Executive and Senior Independent Director on our website
- Developing the framework for Directors to engage with our stakeholders

The Directors receive a Governance Report from the Company Secretary ahead of each Board meeting and, since the publication of the 2018 Code, they have been updated on progress towards compliance with the new requirements. Copies of the 2016 Code and the 2018 Code are available from the FRC's website at frc.org.uk.

The table on page 123 contains more information about how we have applied the 2016 Code in FY2019.

OUR BOARD

The Board is collectively responsible for the long-term success of Smiths and the delivery of sustainable shareholder value.

SIR GEORGE BUCKLEY



Chairman

Appointed: 1 August 2013

N R I on appointment

Sir George has had a long career in engineering and innovation, holding the role of Chairman and CEO of 3M, a US-based global technology company and Dow Jones 30 component, prior to joining Smiths. Earlier in his career Sir George was Chairman and CEO of Brunswick Corporation and Chief Technology Officer for appliances, motors and controls at Emerson Electric Company. Sir George has a PhD in Electrical Engineering and his extensive experience of large, multi-industry businesses operating in global markets supports his effective Chairmanship of the Board.

Other significant appointments

- Non-executive Chairman, Stanley Black & Decker, Inc.
- Non-executive Director, Hitachi, Ltd.

ANDY REYNOLDS SMITH



Chief Executive

Appointed: 25 September 2015

Before joining Smiths Andy spent over a decade at GKN plc, a complex global engineering group, where he held the role of Chief Executive of the Automotive division and was a member of the Board. His previous experience includes senior management roles at Ingersoll Rand, Siebe plc (now Schneider Electric) and Delphi Automotive Systems. Andy's former appointments as Chairman of the CBI Manufacturing Council and as a member of the Government Ministerial Advisory Group for Manufacturing enhance the in-depth industry knowledge he brings to the Board.

JOHN SHIPSEY



Chief Financial Officer

Appointed: 1 January 2018

John was Chief Financial Officer for Dyson, a diversified global technology company, prior to joining Smiths. He was part of the team leading Dyson's global growth, particularly in Asia. Prior to that, John spent 13 years at Diageo plc in a number of senior finance and strategy roles, including Finance Director for its Iberia region and Chief Financial Officer of Schieffelin & Somerset, a US joint venture between Diageo and LVMH. John is a Chartered Accountant and has valuable experience leading innovative companies with a global presence.

COMMITTEE

A Audit & Risk Committee member

N Nomination & Governance Committee member

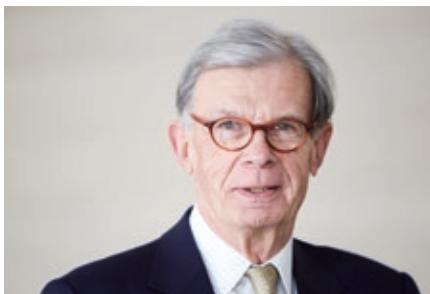
R Remuneration Committee member

BILL SEEGER**Senior Independent Director**
Appointed: 12 May 2014

Bill has had a long and successful career in finance in the engineering sector, gaining an in-depth knowledge of global markets. Bill's extensive experience in global engineering businesses supports the Board's robust decision-making. Bill was Group Finance Director at GKN plc, a global engineering group, until his retirement in 2014. At GKN he also held the roles of CEO of the Propulsion Systems Division, and CFO of the Aerospace Division. Prior to that, Bill spent 28 years at TRW, a US-based automotive and aerospace group, where he held various senior finance positions. Bill has a BA in economics and an MBA.

Other significant appointments

- Non-executive Director, Spectris plc
- Lecturer, UCLA Anderson School of Management

BRUNO ANGELICI**Non-executive Director**
Appointed: 1 July 2010

Bruno's career has included senior management roles in pharmaceutical and medical device companies. Bruno retired from AstraZeneca in 2010 as Executive Vice President, International, responsible for Europe, Asia Pacific, Latin America and MEA. Bruno's extensive experience brings a deeper understanding of the healthcare environment and industry to the Board. Bruno has an MBA from the Kellogg School of Management and a degree in law from Reims University.

Other significant appointments

- Non-executive Chairman, Vectura Group plc

OLIVIER BOHUON**Non-executive Director**
Appointed: 1 July 2018

Prior to joining Smiths Olivier was Chief Executive at Smith & Nephew plc, a multinational medical equipment manufacturing company. His significant executive experience at global pharmaceutical and MedTech companies, including as CEO at Pierre Fabre Group and President of Abbott Pharmaceuticals, enables different perspectives to be considered during Board discussions. Olivier is a member of the French Academy of Pharmacy and the French Academy of Technologies, and has extensive business and leadership experience. He also has an MBA and a doctorate in Pharmacy.

Other significant appointments

- Non-executive Chairman, LEO Pharma
- Non-executive Director, Takeda Pharmaceutical Company Limited
- Non-executive Director, Virbac SA

In order to operate effectively, the Board and its Committees must be comprised of a diverse balance of skills, experience, knowledge, tenure and independence.

DAME ANN DOWLING**Non-executive Director**

Appointed: 19 September 2018



Dame Ann has had a distinguished academic career and is currently a Deputy Vice Chancellor and an Emeritus Professor of Mechanical Engineering at the University of Cambridge, where she served as Head of Engineering for five years until 2014. She served as the President and Chairman of Trustees of the Royal Academy of Engineering from 2014 to 2019. Dame Ann's contribution to engineering research is internationally recognised, and her knowledge and background offer a different perspective to Board discussions. Dame Ann has a degree in mathematics and a PhD in engineering.

Other significant appointments

- Non-executive Director, BP plc

TANYA FRATTO**Non-executive Director**

Appointed: 1 July 2012



Tanya has valuable experience in product innovation and sales and marketing across a range of sectors. Until 2010 she was CEO of Diamond Innovations Inc., a manufacturer of products for the material removal industry. Prior to this, Tanya held various senior positions during a successful 20-year career with GE, a multinational conglomerate. Tanya has extensive knowledge of operating in the US, a key region for the Group, is a qualified electrical engineer and has a BSc in electrical engineering.

Other significant appointments

- Non-executive Director, Advanced Drainage Systems, Inc.
- Non-executive Director, Ashtead Group plc
- Non-executive Director, Mondi Group

MARK SELIGMAN**Non-executive Director**

Appointed: 16 May 2016



Mark is a former senior investment banker and has extensive experience in corporate finance and capital markets which supports Board discussions regarding the Group's portfolio management. He held various roles at Credit Suisse during his executive career, including Chairman of UK Investment Banking. Mark also brings non-executive experience to the Board, having served as senior independent director and audit committee chairman at FTSE100 companies. Mark is a Chartered Accountant, and has an MA in philosophy, politics and economics.

Other significant appointments

- Senior Independent Director, Kingfisher plc
- Senior Independent Director, The Royal Bank of Scotland Group plc
- Alternate member, Panel on Takeovers and Mergers for the Association for Financial Markets in Europe

COMMITTEE

A Audit & Risk Committee member

N Nomination & Governance Committee member

R Remuneration Committee member

NOEL TATA



Non-executive Director

Appointed: 1 January 2017



Noel is the Managing Director of Tata International Limited, a global trading and distribution company and a trading arm of the Tata Group, a privately-owned multinational holding company. He has had a long and successful career in global business with extensive experience of high growth economies, including Asia and Africa which are key markets for Smiths' growth strategy. Noel has a BA in economics.

Other significant appointments

With the exception of Kansai Nerolac Paints Ltd, each of the following companies form part of the Tata Group.

- Non-independent, Non-executive Chairman, Tata Investment Corporation
- Non-independent, Non-executive Chairman, Trent Ltd
- Non-independent, Non-executive Chairman, Voltas Ltd
- Non-independent, Non-executive Vice Chairman, Titan Company Ltd
- Non-executive Director, Kansai Nerolac Paints Ltd

PAM CHENG



Non-executive Director

Pam will join the Board on 1 March 2020 and will stand for election by shareholders at the 2020 AGM.



Pam is Executive Vice-President, Operations and Information Technology at AstraZeneca. She joined AstraZeneca in 2015, following 14 years in Global Manufacturing and Supply Chain roles at Merck/MSD. Prior to joining Merck, she held various engineering and project management positions at Universal Oil Products, Union Carbide Corporation and GAF Chemicals.

Pam's experience in the areas of manufacturing, supply chain and technology gained with large global businesses in strategically important regions for Smiths will further strengthen the Board's discussions on embedding world class operations. Pam holds Bachelor's and Master's degrees in chemical engineering and an MBA in marketing.

Other significant appointments

- Non-executive Director, Codexis. Inc.

JOHN MILLS



Company Secretary

Appointed: 1 June 2018

John has gained corporate governance and legal experience in a wide range of international businesses. He previously held senior roles in a variety of sectors, most recently at Anglo American plc, RSA Insurance Group plc, and Cadbury plc. He has an LLB and is a Fellow of the ICSA: Governance Institute and a qualified Solicitor.

OTHER DIRECTORS WHO SERVED DURING FY2019

Sir Kevin Tebbit KCB CMG

Sir Kevin retired from the Board and as Senior Independent Director at the conclusion of the 2018 AGM. Sir Kevin's biography can be found in our Annual Report FY2018.

ENGAGING WITH OUR STAKEHOLDERS

Our success in making a safer, more efficient and better connected world depends on effective engagement with all our stakeholders.

Our stakeholders include our shareholders, our people, our suppliers, our customers, regulators, our local communities and the wider society. Our Directors are committed to building and maintaining positive relationships with all of them.

Over the past year we have begun to formally track the Board's interaction with our stakeholders. It is necessary for the Directors to understand their interests and concerns in order for them to factor their views into decision-making.

Board engagement with our shareholders is described on page 82.

This table summarises Director interaction with other key stakeholders in FY2019. Board engagement will continue to develop, and we have disclosed some of our plans for FY2020.

OUR PEOPLE

We work to attract, retain, engage, develop and inspire the best people. Our people are critical to our success and the Board must engage with and understand their views.

Activity in FY2019

- Non-executive Director activity included:
 - attending the Global Leadership Conference and an executive strategy development programme, meeting senior leaders from across the Group
 - visiting divisional operations and regional offices to learn more about the business and talk to employees
 - supporting the Group's involvement with International Women in Engineering Day
- The Board met in Minneapolis and undertook a site visit of Smiths Medical's Oakmount facility. This allowed them to discuss matters such as R&D plans and the planned separation of Smiths Medical with employees
- The Board received reports from the Ethics and Compliance team on the launch of the new Code of Business Ethics and 'Speak Out' line metrics
- The employee My Say survey results were presented to the Board. Site level results are provided to Board members ahead of visits
- The Executive Directors celebrated Smiths Day with colleagues across the Group. Andy Reynolds Smith hosted two global town halls over the day
- The Chief Executive attended two Smiths European Forum meetings

Smiths Excellence Awards

The annual Smiths Excellence Awards recognise achievement by colleagues across the Group. The award categories are: Customer Excellence, People Excellence, Production Excellence, Technology Excellence, Programme Excellence, Supply Excellence, Health, Safety & Environment, Our Communities, Leadership Excellence, Inspiring Individual, and the Innovation Award. The highest honour is the award of the Smiths Cup.

The awards are hosted by our Chief Executive, and the Non-executive Directors were briefed on the event through regular updates. In FY2019 the number of entries doubled to c.600 from across the Group. At least one Non-executive Director will attend our Excellence Awards in FY2020, to continue to enhance workforce engagement and to gain more insight into the initiatives launched to support our stakeholders.



OUR CUSTOMERS	OUR COMMUNITIES	PLANS FOR FY2020
<p>We work closely with our customers, one of the pillars of our shared operating model, the Smiths Excellence System (SES), to deliver innovative products and value-adding support.</p> <p>Activity in FY2019</p> <ul style="list-style-type: none"> - Annual divisional operating reviews included customer profiles and information about how we manage large customer accounts - Regular divisional reports included customer survey results and reporting on the risks associated with losing large customers - The Audit & Risk Committee was updated on the implementation of the Code of Business Ethics which encourages customers to contact our 'Speak Out' reporting line if they identify any behaviour that's not in line with our Code 	<p>Our Directors must consider the impact of the Group's operations on communities and the environment. We build strong relationships and engage our people by getting involved in local communities.</p> <p>Activity in FY2019</p> <ul style="list-style-type: none"> - Health, Safety and Environment and Security reports are presented at each Board meeting. These include updates on: <ul style="list-style-type: none"> • progress towards environmental goals for greenhouse gas emissions, recycled waste, renewable energy use and water use; and • the work of the Executive Environmental Roundtable, a new group formed to help shape the Group's environmental priorities and provide guidance to the Executive Committee and the Board - Community initiatives were celebrated at the Smiths Excellence Awards which were reported to the Board 	<ul style="list-style-type: none"> - The Board has agreed that the Senior Independent Director will be responsible for ensuring the Board engages effectively with the workforce - Each of the Non-executive Directors has been allocated a geographic region where they will take the co-lead on workforce engagement - To supplement this and to better leverage the expertise and skills of the Directors, it was agreed that they should also engage with the workforce on a functional basis. For example Sir George Buckley and Dame Ann Dowling will meet with the Group's engineers, and Bill Seeger and Mark Seligman with members of the wider finance function - Non-executive Directors will independently visit at least one site in each division each year in order to further understand the culture in the business. They will report their observations back to the Board - The Board is scheduled to meet in the UK, USA and the United Arab Emirates over the year - The stakeholder engagement programme will be embedded in the Board cycle and will seek to include meeting with key customers and suppliers and increased use of data such as net promoter scores - All members of the Board will be invited to attend the SES Belted and Accelerate programmes, the Global Leadership Conference, our annual Global Supplier Conference and our Excellence Awards
<p>OUR SUPPLY CHAIN</p> <p>We build strong, strategic supplier relationships to deliver quality, efficiency and flexibility.</p> <p>Activity in FY2019</p> <ul style="list-style-type: none"> - An overview of feedback received at our annual Global Supplier Conference was provided to the Board - Divisional operating reviews contained information on supplier relationships - The Audit & Risk Committee was updated on the operation of the Supplier Code of Ethics  		

RELATIONS WITH OUR SHAREHOLDERS

A strong relationship with shareholders is essential for the success of any company.

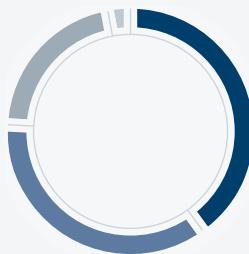
Institutional investors

The Board is kept informed of investor views through the distribution of analyst and broker briefings, and after meetings with major or prospective shareholders the Chief Executive circulates written updates to the other Directors to ensure that they are all aware of major shareholders' views.

- In FY2019, our Chief Executive, Chief Financial Officer and Investor Relations Director led analyst briefings, including the bi-annual presentations of the Group's financial results and the planned separation of Smiths Medical, and carried out extensive investor roadshows in the UK, USA and Europe. This ongoing engagement ensures two-way communication with shareholders on business performance and our strategy
- A new Remuneration Policy was approved by shareholders at the 2018 AGM. Ahead of this the Chairman, the Chair of the Remuneration Committee and the HR Director met with institutional investors to seek their views on the Group's proposed approach to executive remuneration
- Our Chairman and Non-executive Directors were available to meet with investors to discuss issues as and when they arose

In FY2019, senior management and the investor relations team had contact with over 125 investors and analysts.

INVESTOR AND ANALYST MEETINGS IN FY2019



■ United Kingdom	40%
■ US and Canada	36%
■ Rest of Europe	22%
■ Rest of World	2%

Investor relations timeline

SEPTEMBER 2018

Annual results and investor roadshow

DECEMBER 2018

Goldman Sachs Industrials Investor Relations Conference

JANUARY 2019

Paris Investor Relations roadshow

MARCH 2019

Interim results and investor roadshow

MAY 2019

Frankfurt Investor Relations roadshow

JUNE 2019

Stifel 2019 Cross Sector Insight Conference

JUNE 2019

JPM Capital Goods Conference

SEPTEMBER 2019

Annual results and investor roadshow

Other capital providers

The Chief Financial Officer and the Group Treasury Director meet and communicate proactively with committed lending banks and the rating agencies on a regular basis. Committed banks are invited to the results presentations. This enables them to keep informed of business strategy and to meet senior management. Board members are kept informed of the current credit views of debt investors and the rating agencies through regular commentary and financial metric reporting at Board meetings.

Our AGM

The Directors consider our AGM an important opportunity to engage with shareholders, who are invited to ask questions during the meeting, and have the opportunity to meet Directors before and after the formal proceedings. It is also an opportunity for shareholders to vote on certain aspects of Group business in person after hearing from the Chairman, Chief Executive and Chief Financial Officer.

All Directors attended the 2018 AGM and all resolutions were passed with at least 90% of votes in favour apart from the approval of the Remuneration Policy (81.61%) and the re-election of Noel Tata as a Director (82.97%). All resolutions are voted on separately and the final voting results are published after the meeting.

The 2019 AGM will be held on Wednesday 13 November. The Notice of AGM can be found in a separate document which is sent out at least 20 working days before the AGM and made available on our website. All Directors are expected to attend. Shareholders who are not able to attend the AGM in person are encouraged to vote by appointing a proxy and issuing voting instructions. This year, for the first time, the AGM will be webcast and can be viewed by registering on our website.

More information about the AGM and Equiniti, the Company's Share Registrar, can be found on the back page of this Annual Report.

Major shareholders' interests

At 31 July 2019, the Company had been notified under the Financial Conduct Authority's Disclosure Guidance & Transparency Rules, or had received disclosures pursuant to the Companies Act 2006, of the following holdings of voting rights in its shares:

Number of voting rights	% of total voting rights	Date of notification
BlackRock, Inc.	5.9%	31 May 2018
23.3m		
Ameriprise Financial, Inc.	5.3%	3 October 2018
20.8m		
Harris Associates L.P.	5.0%	22 July 2019
19.7m		
Dodge & Cox	4.9%	27 February 2019
19.6m		
Jupiter Asset Management	3.8%	22 September 2016
14.8m		

No further notifications were received between 1 August and 16 September 2019.

BOARD GOVERNANCE

GOVERNANCE MODEL				
BOARD				
CHAIRMAN	CHIEF EXECUTIVE	SENIOR INDEPENDENT DIRECTOR	NON-EXECUTIVE DIRECTORS	COMPANY SECRETARY
<p>Responsible for:</p> <ul style="list-style-type: none"> - Ensuring the Board's continued effectiveness - Shaping boardroom culture and encouraging individual Director engagement - Leading the Board and setting the Board agenda - Leading the annual Board evaluation 	<p>Responsible for:</p> <ul style="list-style-type: none"> - Developing and proposing strategy to the Board - Setting and communicating the culture, values and behaviours for the Group - Leading the Executive Committee - Managing relationships with our key stakeholders 	<p>Responsible for:</p> <ul style="list-style-type: none"> - Supporting the Chairman in the delivery of the Board's objectives - Being available to shareholders if they wish to raise any concerns - Acting as an intermediary between the other Directors if necessary - Overseeing workforce engagement 	<p>Responsible for:</p> <ul style="list-style-type: none"> - Providing constructive challenge and strategic guidance to Board discussions - Oversight of management and the business, including culture - Offering specialist advice - Assessing the effectiveness of systems of internal control and risk management 	<p>Responsible for:</p> <ul style="list-style-type: none"> - Advising the Board on governance matters - Supporting the Chairman in the efficient and effective functioning of the Board and its Committees - Ensuring the Board receives quality information in a timely manner
BOARD COMMITTEES				
NOMINATION & GOVERNANCE COMMITTEE	AUDIT & RISK COMMITTEE	REMUNERATION COMMITTEE		
<p>Reviews and makes recommendations to the Board on the structure, size and composition of the Board and its Committees, and leads the process for Director appointments and Director and senior management succession planning.</p> <p>Oversees the ongoing suitability of the Group's governance framework and diversity & inclusion performance.</p>	<p>Ensures the integrity of the Group's financial reporting and audit processes, and the maintenance of sound internal control and risk management systems.</p> <p>Manages the relationship with the external auditor, including making recommendations to the Board and shareholders in relation to the appointment and re-appointment of the external auditor.</p>	<p>Responsible for the Group's remuneration strategy and reviews and oversees the Group's Remuneration Policy for the Directors and senior management.</p> <p>Reviews any major changes in Group employee remuneration structures, including incentive arrangements that apply across the wider employee population.</p>	88	94
EXECUTIVE MANAGEMENT COMMITTEES				
EXECUTIVE COMMITTEE	INVESTMENT COMMITTEE	DISCLOSURE COMMITTEE		
<p>Assists the Chief Executive in discharging his responsibilities and collectively responsible for implementing strategy, ensuring consistent execution and embedding the culture and values.</p>	<p>Assesses high-value and high-risk proposals, capital expenditure, asset disposal and special revenue expenditure projects which require Chief Executive or Board approval.</p>	<p>Advises the Chief Executive and the Board on the identification of inside information, and the timing and method of its disclosure.</p>	100	

BOARD GOVERNANCE

Our Board is comprised of a majority of independent Directors whose diverse backgrounds and experience enable appropriate challenge at Board and Committee discussions. A biography for each Director can be found on pages 76 to 79.

The Board has approved a governance framework of systems and controls in order to effectively discharge its collective responsibilities. This framework supports our Directors' compliance with their duty to promote the success of the Company under section 172 of the Companies Act 2006 (the Act). Information about how this duty has been performed by our Directors is summarised below. The Board is responsible for creating sustainable value for our shareholders, but in order to ensure the long-term success of the Group the Directors also consider the interests of wider stakeholders.

During the year, in the light of the 2018 Code coming into force, the Board reviewed its governance framework and the delegation of specific authorities to its three principal Committees, the Nomination, Audit and Remuneration Committees. Subsequently the Board determined that the Nomination and Audit Committees should be renamed the Nomination & Governance and the Audit & Risk Committees respectively. The name changes more accurately reflect the remit of those Committees and the Terms of Reference for all Committees, which were reviewed during the year, can be found on our website.

During the year a Transaction Committee was established in order to provide support and oversight of the separation of Smiths Medical in between Board meetings. The members of the Transaction Committee, which is not a formal committee of the Board, are Bill Seeger (Senior Independent Director), Mark Seligman (Chair of the Audit & Risk Committee) and Bruno Angelici. The Committee is supported by the management team responsible for leading the separation process.

THE ROLE OF THE BOARD

The Board is ultimately accountable to our shareholders, and is responsible for ensuring that management actions are aligned with their interests. The Board supports this by setting the Group's purpose, culture, and our shared values of Passion, Integrity, Respect, Ownership and Customer Focus. The Board is responsible for approving the Group strategy, as recommended by the Chief Executive, and overseeing its implementation, while monitoring the internal controls, risk management and the viability of the Company.

The Chief Executive is responsible for the day-to-day management of the Company and for leading the Executive Committee. Our Executive Committee and brief biographies are shown on page 18. Full biographies can be viewed on our website. Executive management implement the Group's strategy and provide the Chief Executive, and the Board as a whole, with the information they need to make decisions that will determine the long-term success of the Group.

SECTION 172

A director of a company must act in the way they consider, in good faith, would most likely promote the success of the company for the benefit of its shareholders. In doing so the director must have regard to other matters including:

- likely consequences of any decisions in the long term;
- interests of the company's employees;
- the need to foster the company's business relationships with suppliers, customers and others;
- impact of the company's operations on the community and the environment;
- the company's reputation for high standards of business conduct; and
- the need to act fairly as between members of the company.

The Board's engagement with employees, suppliers and customers in FY2019 is explained in the stakeholder engagement model on pages 80-81.

The Directors receive regular reports on Health, Safety and Environment and Security to support their consideration of the impact of their decisions on our community and the environment. Further information can be found on the Board activities pages 86-87.

Ensuring high standards of business conduct is critical for the success of the Group. The Directors receive reports from the Ethics and Compliance team and our Non-Financial Information Statement (on page 61) identifies policies and guidelines governing our approach to anti-corruption, anti-bribery, social matters and human rights.

Consideration of the long-term impact of decisions is integral to the approval of strategy, and our strategic progress in FY2019 is disclosed with the Board activities over the year.

MATTERS RESERVED TO THE BOARD

There is a schedule of matters which are considered significant to Smiths and have therefore been reserved for the decision of the Board. This is due to their strategic, financial or reputational implications or consequences. The formal schedule can be found on our website and includes:

- Approval of Group purpose, strategy, values, business plans and budgets
- Oversight of Group culture
- Considering the views of stakeholders, including but not limited to shareholders, the workforce, customers, suppliers and the community
- Approval of half yearly results and the Annual Report and Accounts
- Ensuring maintenance of a sound and effective system of internal control and risk management
- Shareholder engagement and general meetings
- Acquisition or divestment of significant companies or businesses
- Approval of changes to the structure, size and composition of the Board

BOARD AND COMMITTEE MEETINGS

The Chairman sets the agenda and determines the style and tone of discussions at Board meetings. At each scheduled Board meeting the Chief Executive and Chief Financial Officer present separate progress reports, detailing business performance and progress against strategy. These are supplemented by monthly performance updates from the Chief Executive to the Board.

To ensure that the Board is kept up to date with management priorities and challenges, invitations to Board meetings are extended to divisional presidents, business managers and heads of functions. The attendance of senior executives also supports executive succession planning. External advisors are invited to attend as necessary. Director attendance at Board and Committee meetings in FY2019 is set out below.

In FY2019, Board meetings were held in the London and Minneapolis offices, and the annual two-day strategy offsite meeting took place in France.

Convening Board meetings in different locations allows the Directors to visit our operations and gain a deeper insight into the culture of our divisions, and to discuss the business with employees directly.

To ensure the continued effectiveness of the Board, the Chairman meets the Non-executive Directors without the Executive Directors present after each Board meeting. He also has separate meetings with the Senior Independent Director and the Remuneration Committee and Audit & Risk Committee Chairs. In order to consider the Chairman's performance, at least annually the Senior Independent Director consults with the other Non-executive Directors without the Chairman present.

DIRECTOR ATTENDANCE

	Board ¹		Nomination & Governance Committee		Audit & Risk Committee		Remuneration Committee	
	Attended	Eligible to attend	Attended	Eligible to attend	Attended	Eligible to attend	Attended	Eligible to attend
Chairman								
Sir George Buckley	6	6	3	3	-	-	4	4
Executive Directors								
Andy Reynolds Smith	6	6	-	-	-	-	-	-
John Shipsey	6	6	-	-	-	-	-	-
Non-executive Directors								
Bruno Angelici	6	6	3	3	4	4	4	4
Olivier Bohuon ²	5	6	2	3	3	4	3	4
Dame Ann Dowling ³	6	6	3	3	3	3	3	3
Tanya Fratto	6	6	3	3	4	4	4	4
Bill Seeger	6	6	3	3	4	4	4	4
Mark Seligman	6	6	3	3	4	4	4	4
Noel Tata	6	6	3	3	4	4	4	4
Former Directors								
Sir Kevin Tebbit ⁴	2	2	0	0	2	2	1	1

1 In addition to six scheduled Board meetings there were three ad-hoc meetings called at short notice. Tanya Fratto had a pre-existing commitment and was unable to attend one of those meetings.

2 Olivier Bohuon was unable to attend the March Board and Committee meetings due to a prior commitment arranged before he joined the Board.

3 Dame Ann Dowling joined the Board on 19 September 2018.

4 Sir Kevin Tebbit retired from the Board on 14 November 2018.

BOARD ACTIVITY IN FY2019

Board activity is focused on executing our strategy while ensuring our processes continue to deliver excellence.

STRATEGIC PROGRESS

Matters considered

- M&A oversight and the planned Smiths Medical separation
- A deep dive into the Group's overall strategy at a two-day Board meeting in France. The Group Strategy Director set the format of the meeting, in consultation with the divisions, and each of the Non-executive Directors had the opportunity to discuss the agenda with him in advance. Divisional management prepared their strategy, long-term vision, challenges and priorities for presentation to the Directors. A separate presentation was made on the opportunities available in Asia Pacific as a key strategic growth region for the Group
- A review of the Group's Corporate Relations strategy

Outcome

- Board endorsement of the updated strategic plan, including focus on operational execution and performance
- Board reaffirmation of the Group's purpose
- Discussion of the strategic risks that could impact performance, together with the strategies to mitigate them
- Board approval of the overall Group strategy, and individual divisional strategies
- Board support for the reorganisation of the Corporate Relations function to help drive the Group's vision and achieve world class competitiveness

M&A OVERSIGHT AND SMITHS MEDICAL SEPARATION

Matters considered

- The proposal to separate Smiths Medical
- Opportunities for the Group to enhance its leadership positions and maximise value for shareholders
- Regular updates from the Transaction Committee and the advisors on the Smiths Medical separation process and its associated work streams
- The strategy to deliver growth for Smiths Medical, beyond the completion of the separation
- The purpose and path to value creation for Smiths as a focused industrial technology company
- Updates on acquisition and divestiture activities at each scheduled Board meeting

Outcome

- Announcement of the Board's intention to pursue a separation of the Smiths Medical business in the first half of 2020
- Establishment of a Transaction Committee to provide Board level oversight and support for the separation of Smiths Medical
- Acquisition of United Flexible by Flex-Tek in February 2019
- Acquisition of the industrial division of Advanced Diamond Technologies by John Crane in April 2019
- Disposal of two non-core businesses by Smiths Medical during the year

OPERATIONAL ENGAGEMENT

Matters considered

- The Group FY2020 Operating Plan including operational excellence metrics and individual divisional operating plans
- The culture of innovation, the Group wide innovation framework and the Digital Forge
- The status of product and enterprise cyber risk within the Group and the current protection and controls in place
- Updates on the Smiths Excellence System (SES) from the Chief Executive, including statistics on colleague completion of the Smiths Lean Six Sigma Belted Programme, Lean Awareness training and Excellence training through the SES Academy

Outcome

- Board approval of the Group FY2020 Operating Plan
- Oversight and support of the Group wide innovation framework
- The Board requested external benchmarking on innovation and technology excellence
- Assurance work on product and enterprise cyber governance is now reported to the Board and/or the Audit & Risk Committee on a quarterly basis

FINANCIAL PERFORMANCE

Matters considered

- Group and divisional financial and operational performance
- The FY2018 annual results and FY2019 interim results
- The Group's FY2020 budget and future financing needs
- Capital allocation including dividends, pension contributions, and in respect of the Group's growth strategy
- The Group's tax and treasury strategies
- A presentation on the Group's pension strategy
- A financial presentation on the separation of the Smiths Medical business
- The impact of potential trade tariffs between China and the US

Outcome

- Approval of the FY2018 annual results and FY2019 interim results
- Approval of the Group's FY2020 budget
- Declaration of the FY2018 final and FY2019 interim dividend
- Approval of the Group's tax and treasury strategies



PEOPLE AND CULTURE

Matters considered

- The continued embedding of the Smiths Way values through the Chief Executive's updates to the Board. These included ways in which the second annual Smiths Day had been celebrated by colleagues and reports on Smiths Excellence Awards submissions
- The Group HR Director presented the People Plan to the Board, covering progress being made in culture, leadership, reward and training across the Group, and the diversity & inclusion strategy

- The Nomination & Governance Committee considered senior management succession plans and the quality of the talent pipeline
- Employee engagement through the employee My Say survey results
- Gender Pay Gap reporting in the UK

Outcome

- Approval of the Board's stakeholder engagement framework, including the approach to workforce engagement. For more information see pages 80-81

HEALTH, SAFETY AND THE ENVIRONMENT

Matters considered

- Updates on Health, Safety, Environment and Security from the Global Head of HSE at each scheduled Board meeting. These included:
 - Statistics on recordable incidents compared to previous years
 - Safety Leading Indicator scores for the divisions
 - Physical and travel security updates
 - Reports from an Executive Environmental Roundtable established to advise the Board and Executive Committee on environmental matters, including goals and targets, strategy, risk and employee involvement

Outcome

- Approval of short and medium-term targets for Health, Safety and Environment performance
- The planned introduction of a peer-to-peer safety plan in FY2020

LOOKING FORWARD TO FY2020

- The successful completion of the separation of the Smiths Medical business, ensuring the right outcome for stakeholders
- The continued detailed review of divisional and Group strategy in order to enhance its leadership positions
- The implementation of changes to support compliance with the UK Corporate Governance Code, including embedding and enhancing the Board's stakeholder engagement framework
- The continued monitoring of external geo-political events that may impact individual divisions or the Group as a whole
- Consideration of the Group's Diversity & Inclusion Plan



NOMINATION & GOVERNANCE COMMITTEE



SIR GEORGE BUCKLEY
CHAIR OF THE NOMINATION & GOVERNANCE COMMITTEE



THE DIVERSITY OF THE BOARD AND THE TALENT PIPELINE ARE CRITICAL FOR THE FUTURE SUCCESS OF THE BUSINESS.”

ROLE OF THE COMMITTEE

The Nomination & Governance Committee reviews and makes recommendations to the Board on the structure, size and composition of the Board and its Committees. In fulfilling this role, the Committee considers the balance of skills, knowledge, experience and the diversity of gender, social and ethnic backgrounds, while having regard to the need to ensure the effective functioning of the Board at all times. The Committee also considers Director and senior management succession planning.

In FY2019 the remit of the Committee was extended to cover oversight of the Group's governance framework and performance against the Diversity & Inclusion Plan. The name of the Committee has been updated accordingly to reflect its expanded role.

The members of the Committee and their meeting attendance during the year is set out on page 85. The Chief Executive is normally invited to attend Committee meetings and has attended each of the meetings in FY2019. Other members of senior management are invited to attend as necessary.

IN ORDER TO FULFIL ITS ROLE THE COMMITTEE

- Takes account of the Group's strategy, business performance, current and future leadership needs, challenges and opportunities, and makes recommendations to the Board on its composition and that of its Committees
- Holds at least one meeting a year to review senior management succession plans and the quality of the talent pipeline across the Group
- Conducts an annual review of the Board's governance framework and recommends any changes to the Board

PERFORMANCE EVALUATION

In FY2019, the performance of the Committee was considered as part of the internal Board evaluation process. A number of minor recommendations were made to enhance the Committee's operation, and overall it was confirmed that the Committee continues to operate effectively.

COMMITTEE ACTIVITIES IN FY2019

Succession planning

- Agreed the format of the Board skills and experience matrix to be maintained by the Company Secretary and, after consideration of this, the Committee recommended the appointment of Pam Cheng as a Non-executive Director with effect from 1 March 2020
- Considered the desirable skills and experience of future Non-executive Director appointments following the separation of Smiths Medical
- Focused on succession planning for the Chairman, Chief Executive and Chief Financial Officer, which included a written Executive Director succession planning document to ensure continuity at a time of significant change for the Group
- Reviewed senior management succession and the talent pipeline with the Group HR Director
- In FY2019, external search firm Buchanan Harvey & Co. was used to support Director appointments; the firm has no other connection to Smiths. Buchanan Harvey & Co. is a signatory to the Voluntary Code of Conduct for executive search firms

Governance

- Agreed the new framework for Director engagement with stakeholders
- Reviewed and recommended to the Board for approval role profiles for the Chairman, Chief Executive, Chief Financial Officer and Senior Independent Director
- Considered, and where appropriate approved, the external appointments of Directors
- Reflected on suggestions raised through the ongoing review of the Group's governance framework
- Considered the Board Committees' membership and in doing so the independence and performance of the individual Non-executive Directors

Board Diversity Policy

Smiths supports the principles of the Hampton-Alexander and Parker reports on gender and ethnic diversity and will work to achieve a diverse Board and, just as importantly, diverse management teams. Members of the Board and senior management should collectively possess a diverse range of skills, expertise, national birthplace, domain knowledge and ethnic and societal backgrounds. These are important ingredients for the effective operation of the Board and oversight of the Group. As a multinational Group with operations in more than 50 countries and over 95% of revenues originating outside the UK, diversity of thought and background is essential and will remain one of the key criteria by which candidates are selected for the Board and the pipeline for senior leadership positions.

In recognition of the value of diversity, the Board seeks to ensure that at least 50% of its members have a birthplace or

background outside the UK and that no less than 40% of the Board is comprised of female plus historically under-represented ethnic groups by 2020. The Board will always seek to appoint the best qualified candidate, but between two candidates of equal merit the Board will, in recognition of the policy, give preference to any gender or background disproportionately under-represented on the Board.

In order to help achieve these aspirations Smiths endeavours to only use the services of executive search firms who have signed up to the Voluntary Code of Conduct on gender diversity. Executive search firms will also be required to ensure non-UK nationals, women and candidates from historically under-represented ethnic groups are represented on the shortlist for all Board positions.

The Board Diversity Policy was approved by the Board in September 2018.

Board diversity performance

At the date of this report 60% of our Directors had a birthplace or background outside the UK, and 30% of our Directors meet the combined measure of gender and ethnic diversity. Pam Cheng will join the Board as a Non-executive Director on 1 March 2020, when birthplace or background will increase to 64% and gender and ethnic diversity will increase to 36%, ensuring good progress towards our 2020 target of 40%. Gender balance will increase to 27% female and 73% male.

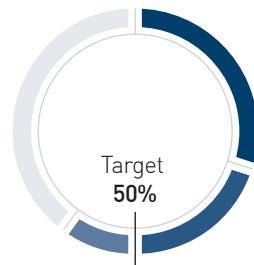
Diversity information for the Board, Executive Committee, senior managers and the Group as a whole can be found on page 51. The Committee will look to extend its work on diversity to senior leadership positions in the business and across the Group through oversight of the Smiths Diversity & Inclusion Plan, which is available on our website and is due to be considered by the Committee in FY2020.

Independence

The Board keeps the independence of the Non-executive Directors under continuous review. Following Bill Seeger's appointment as CFO on an interim basis during FY2017, the Board determined him to be independent in May 2018, but he did not re-join the Audit & Risk Committee until after the publication of the FY2018 annual results in September 2018. Sir Kevin Tebbit retired as Senior Independent Director at the 2018 AGM, having served on the Board for 12 years.

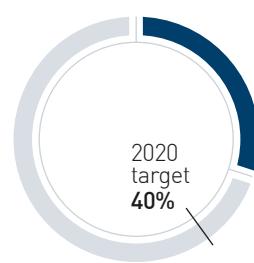
In July 2019, the Committee assessed the performance and independence of each of the Non-executive Directors, and concluded that each of them contributed effectively to the operation of the Board. In considering the Directors' independence, the Committee reviewed the guidance contained in the 2018 Code.

BIRTHPLACE OR BACKGROUND



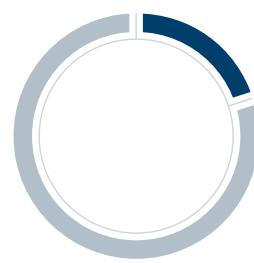
US	3
France	2
India	1
UK	4

GENDER AND ETHNICITY



Current	30%
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GENDER BALANCE



Female	2 (20%)
Male	8 (80%)

TENURE ON THE BOARD



1-2 years	3 (30%)
3-5 years	3 (30%)
Over 5 years	4 (40%)

Bruno Angelici was appointed as a Director on 1 July 2010 and, as he has served on the Board for more than nine years, a particularly rigorous review of his performance and independence was undertaken. The Board concluded that he continued to demonstrate the qualities of objectivity and independence, and contributed to constructive challenge and debate at meetings. It was therefore agreed that his independence had not been impacted by his tenure on the Board and that due to the considerable strategic changes facing the Group, in particular the separation of Smiths Medical, he should continue as an independent Non-executive Director to assist with the successful separation. It is anticipated that Bruno will stand down from the Board at a mutually agreed date when the separation is largely achieved. Tanya Fratto has served on the Board for seven years. As such, her continued objectivity and independence were also subject to rigorous review. It was agreed that she continues to be independent and objective.

Time commitment

All Directors must allocate sufficient time to their work in order to discharge their responsibilities effectively, particularly in a time of significant change for the Group. The expected time commitment of 25 days per annum is set out in the letter of appointment issued to Non-executive Directors when they join the Board. This includes time preparing for and attending Board and Committee meetings, attending the AGM and meeting with stakeholders as required, participating in the Board evaluation process and making time to familiarise themselves with business priorities and challenges. Additional time commitment is required during a Director's induction phase. As plans for the separation of Smiths Medical progress, it is likely that the time commitment expected from the Board will be more than usual.

Executive Directors are not permitted to take on more than one non-executive directorship in a FTSE 100 company, or other significant appointment. They are not permitted to take on the chairmanship of a FTSE 100 company.

The Directors' other significant commitments are detailed in their biographies on pages 76-79 and the Board considers these twice a year. In FY2019 the Board concluded that the Chairman and the Non-executive Directors devoted sufficient time to fulfil their commitments to Smiths. Particular consideration was given to Sir George Buckley and Noel Tata's other commitments.

Sir George has several other external appointments. During the year he stepped down from the Board of PepsiCo, Inc. Following due consideration, the other Directors confirmed that he continues to demonstrate commitment to his role as Chairman and as a member of the Board. Sir George attended and fully participated in every scheduled and ad-hoc Board and Committee meeting and is always available for consultation with management when required.

Noel is Managing Director of Tata International Limited, a trading arm of the Tata Group (a privately-owned multinational group of companies). In order to fulfil his executive responsibilities he is also director of various Tata Group companies. The Board believes that these appointments do not prevent him from committing sufficient time to his work as a Director, as evidenced by his full attendance and effective participation at all Board and Committee meetings held in the year. Noel brings valuable and distinct experience to Board discussions, as a current executive with contacts in higher growth countries which are a strategic focus for Smiths.

There was unanimous support from the Board to recommend to shareholders the re-election of Sir George Buckley and Noel Tata.

Director induction

All of our Directors participate in an induction programme on joining the Board to ensure that they are able to contribute effectively to discussion and decision-making. Each induction programme is tailored to provide the individual Director with the necessary knowledge and understanding of the Group, based on their personal experience and background. Normally a new Director will meet with the Chairman, the Company Secretary, Non-executive Directors and Executive Committee members, including the divisional presidents, and other senior executives. To provide an insight into the Group's strategy, culture and values, extensive information about the Group is made available to new Directors. This includes access to previous Board papers and minutes.

Dame Ann Dowling joined the Board at the start of FY2019 and her induction programme continued throughout the year. Dame Ann Dowling met the Ethics and Compliance and Government Relations teams in Washington and visited our Smiths Detection site in Hemel Hempstead, the John Crane office in Chicago and the Flex-Tek site in Nashville.

Information and training

The Board recognises the importance of ongoing training and our Directors are given the opportunity to update their skills and experience on a regular basis. Following his appointment as Senior Independent Director at the 2018 AGM, Bill Seeger received formal training on the role and responsibilities of the position. The training covered his duties relating to the Chairman, shareholders and the other Directors. Particular focus was given to the enhanced role he will have during the Smiths Medical separation, including being available to meet with shareholders to develop an understanding of their views and hear any concerns. Bill will also be a sounding board for the Chairman and the Chief Executive during this time of significant change for the Group.

In order for the Directors to remain aware of business priorities and external developments, the Board is provided with formal reports and updates from the divisions and external advisors. The Company Secretary prepared a Governance Report for each scheduled meeting in FY2019, covering topics such as UK Corporate Governance Reform. At the annual performance evaluation any individual development needs are discussed with Directors. The Directors are all obliged to complete online training on the Code of Business Ethics, information security and anti-bribery and corruption.

In order to operate effectively our Directors receive accurate, timely and high-quality information. This supports their ability to make sound decisions and provide appropriate advice and challenge. The Company Secretary and his team assist the Chairman and Chief Executive in ensuring effective information flows and that the Board is provided with all relevant information. There are procedures in place to ensure that information the Board receives is presented in an appropriate format and contains the level of detail required for Directors to fulfil their responsibilities effectively.

Conflicts of interest

Our Directors must avoid situations where they have a direct or indirect interest that conflicts, or may possibly conflict, with the best interests of Smiths. In accordance with the 2018 Code, the Board must now approve any new external appointment before a Director accepts such appointment, whether it amounts to a conflict or not. The Board has the authority to authorise conflicts and potential conflicts in accordance with our Articles of Association and the Act, and as set out in the Matters Reserved to the Board which are available online.

The Company Secretary maintains a Register of Conflicts which forms the record of actual and potential conflicts that exist, and the Board authorisation granted. The Board formally reviews the Register in September and March each year, and retains the power to vary or terminate any authorisation previously provided.

Advice and insurance

All of our Directors have access to the advice and services of the Company Secretary, and are able to seek independent professional advice at Smiths' expense to enable them to fulfil their obligations as members of the Board. In addition, the Directors and Officers of Smiths and its subsidiaries have the benefit of a Directors' and Officers' liability insurance policy.

During FY2019, and at the date of this report, qualifying third-party indemnity provisions (as defined by section 234 of the Act) have remained in force for the Directors of the Company and certain other employees in respect of their directorships of some subsidiary companies in relation to certain losses and liabilities which they may incur (or may have incurred) to third parties in the course of their professional duties for the Company, or a subsidiary.

Director re-election

Each year our Directors are subject to election or re-election by shareholders at the AGM. Non-executive Directors are appointed for a specified term of three years, subject to annual re-election at the AGM. Re-appointment for a second three-year term is not automatic, and any term for a Non-executive Director beyond six years is subject to a particularly rigorous review.

As noted above, our Chairman, on behalf of the Board, has confirmed that each Non-executive Director standing for re-election at this year's AGM continues to be an effective member of the Board, and has demonstrated the commitment required.

The rules regarding the appointment and replacement of Directors are determined by our Articles of Association and the Act. The Articles of Association can be found on our website and can only be amended by a special resolution of shareholders.

BOARD EVALUATION

An effective Board is essential to deliver the Group's objectives and long-term sustainable results for all stakeholders.

PRINCIPLES

Each year an evaluation of the Board, its Committees and each individual Director is conducted to monitor the effectiveness of each and to help identify any improvement opportunities. The Board evaluation is externally facilitated at least every three years.

FY2018 EVALUATION

The FY2018 evaluation of the Board was conducted by Independent Audit Limited, who were appointed following a competitive tender. Independent Audit has no other connection to the Group, and the objective was to build on the FY2017 process and enhance the Board's support for the delivery of the Group's growth strategy.

The evaluation was focused on Board and Committee dynamics, strategic development, people and culture, and risk. Independent Audit held interviews with the Board, certain members of the Executive Committee, senior managers and external advisors, and presented their final report to the September 2018 Board meeting.

While there is always different colour and preference in the opinions of Board colleagues, Independent Audit felt that the Board and its Committees were operating effectively and demonstrated many strengths. These included a high level of trust and respectful interaction between the Directors, well run Committees, effective assurance and clear reporting, active and constructive contribution to strategy formulation, and proper attention to the necessary Board processes. The findings are set out in more detail on this page, including areas where Independent Audit felt the Board could be improved.

The suggestions and observations made by Independent Audit were discussed by the Directors who then agreed an action plan to address them. The disclosures made in this section of the Annual Report have been agreed with Independent Audit.

STRATEGIC DEVELOPMENT

FY2018 findings

- The Board handles strategic debate well, devoting significant time to discussions
- The annual strategy Board meetings are well received by the Non-executive Directors and there is a clear alignment of views on the strategy the Group is pursuing

Actions in FY2019

- The Board received advice and regular updates from management and the Group's advisors on the planned separation of Smiths Medical and the associated work streams. All potential methods of separation were reviewed before a decision was made as to which to pursue
- The Board formed an ad hoc Transaction Committee to monitor the progress on the separation of Smiths Medical
- The Board reviewed progress against specific elements of the Group's strategy at meetings throughout the year. Each May the Board agree and modify, where necessary, the strategy for future years. The changes in strategy are typically evolutionary but decisive
- The Board continues to work on constantly improving the processes by which it sets and oversees Group strategy, maintaining a consistent quality of debate and ensuring all options are fully considered

PEOPLE, CULTURE AND BEHAVIOURS

FY2018 findings

- The Chief Executive has turned the vision into a clear strategy, and has developed a sense of the values which unify the Group
- The Board, and in particular the Non-executive Directors, recognise the need to focus sufficient time on culture, values and stakeholder engagement and there is an opportunity for the Board to gain more visibility of the Group's culture

Actions in FY2019

- The Board has agreed its approach to complying with the new UK Corporate Governance Code requirements in this area, and more detail is provided on pages 80-81. The Board's interaction with stakeholders is now formally tracked and, in the year, Non-executive Directors have, between them, visited at least one of the Group's operations in each division and used other opportunities to engage more fully with the workforce. These engagements will increase in future
- The Board has continued to receive reports on the employee My Say survey, ethics reporting, Group training programmes, HSE, Internal Audit performance and other cultural indicators which track employee engagement and behaviours. The amount of Board time devoted to people issues has increased

SUCCESSION PLANNING

FY2018 findings

- The Chairman leads well on succession planning and the current composition of the Board is strong with a good mix of skills and personalities. The Board is collegiate with a strong sense of "being in it together"
- The Non-executive Director recruitment process could be enhanced by expanding the number of current Directors involved in the process
- Succession planning for key positions the Group will have to fill in the medium-term would benefit from more structure

Actions in FY2019

- The process for recruiting additional Directors has been improved with even more Directors involved in interviewing candidates and regular updates to the Nomination & Governance Committee
- The Nomination & Governance Committee agreed the format of a Board skills and experience matrix to be maintained by the Company Secretary. This, together with a schedule of anticipated retirement dates, will assist with identifying those skills and experiences currently not represented on the Board
- Internal successor candidates have been identified for all Executive Committee positions with the exception of the Chief Executive and Chief Financial Officer. The Nomination & Governance Committee, on behalf of the Board, reviews the plans for the Chairman, the Executive Directors and Non-executive Directors and Executive Committee positions to ensure that succession arrangements are in place. For the Executive Directors and Executive Committee, these include appropriate contingency arrangements for emergencies or otherwise

BOARD INFORMATION

FY2018 findings

- Board information generally sets the Board up well for discussions and is appreciated for its structure and content
- The structure and consistency of divisional reporting, and how best to track execution of the agreed strategy in the divisions, could be improved

Actions in FY2019

- The provision of information to the Board is kept under constant review and improvements have been made this year both to the frequency of reporting and the information which the Board receives, with more of a customer and market focus than was previously the case, together with enhanced tracking of KPIs
- In addition to receiving a report from the Chief Executive at each Board meeting, a monthly report for the Board has been instigated which comments on financial performance, strategy and business development, people, leadership and culture issues

FY2019 EVALUATION

The FY2019 internal review focused on building upon the findings of the FY2018 external review and reviewing how the Board had handled key issues such as the decision to separate the Smiths Medical division.

The evaluation consisted of an externally facilitated questionnaire provided by Independent Audit which was completed by each of the Directors. The questionnaire sought to assess how well the Board handled the fundamental role it plays, its dynamics, and coverage of strategy and risks. Separate parts of the questionnaire covered each of the Board's Committees. The results were considered at the July 2019 Board meeting, and overall the Directors believe that the Board and its Committees continue to function effectively, but there were areas where they agreed process could be enhanced. These centred on continuing to embed and develop succession planning processes, the factors taken into consideration when making strategic decisions, and better communication with Non-executive Directors.

Strategic decisions involve the consideration of many of different factors and the Board wanted to ensure that these factors were all raised in a timely manner and in sufficient detail. Ways to ensure this happens on a consistent basis, and that the general flow of information and exchange of ideas between management and the Board improves, are currently under consideration. Succession planning was a recurring theme from the FY2018 external evaluation and will continue to be an area of focus next year. Shortlists for Board appointments are of good quality, but for management succession planning the Board wanted more insight into the talent pipeline within the Group. This has been addressed through increased oversight of the Group's talent management processes at the Nomination & Governance Committee.

FY2020

The FY2020 process will be conducted internally and will seek to build on these areas and any other matters the Board may raise during the year.

AUDIT & RISK COMMITTEE



MARK SELIGMAN
CHAIR OF THE AUDIT & RISK COMMITTEE



THE DELIVERY OF A HIGH-QUALITY AUDIT IS ESSENTIAL FOR ENSURING TRUST IN A COMPANY'S GOVERNANCE FRAMEWORK."

ROLE OF THE COMMITTEE

The principal role of the Committee is to assist the Board in fulfilling its oversight responsibilities in relation to financial reporting, financial controls and audit, risk and internal controls. The Committee also manages the relationship with the external auditor, including making recommendations to the Board and our shareholders in relation to the reappointment of the external auditor.

In addition, the Committee oversees the Group's Ethics and Compliance annual work programme and investigates any material ethics and compliance issues that may arise.

PERFORMANCE EVALUATION

The annual evaluation of the performance of the Committee was conducted as part of the overall annual evaluation of the performance of the Board. The findings relating to the Committee were discussed with the Committee. Overall, the Committee is considered to be performing well, and is rigorous and effective in discharging its responsibilities.

IN ORDER TO FULFIL ITS ROLE THE COMMITTEE

- Holds meetings scheduled to coincide with key dates within the financial reporting, audit and Enterprise Risk Management (ERM) cycles. The external auditor attends all meetings
- Receives presentations from divisional and functional heads to gain an understanding of the risks and culture present throughout the organisation
- Meets privately with internal and external audit after each Committee meeting
- Conducts an annual review of its performance and its Terms of Reference, and recommends any changes to the Board

I am pleased to present the Committee's report for FY2019. The Committee fulfils an important oversight role, monitoring the integrity of the Group's financial reporting and the effectiveness of its system of internal control and risk management framework.

A key stakeholder supporting this oversight is the external auditor. During the year, in addition to fulfilling its normal programme of work, the Committee focused on concluding the external audit tender described in last year's Annual Report. This resulted in KPMG being selected as the auditor for FY2020. I would like to thank PwC for their professionalism during this period.

The UK audit industry is the subject of considerable reform with a number of independent reviews being undertaken. The delivery of a high-quality audit is essential and so we welcome these reviews and the opportunity to participate in the debate. During the year, we submitted responses to the Competition and Markets Authority's Statutory Audit Services Market Study Update Paper and also the Call for Views for Sir Donald Brydon's review into the quality and effectiveness of audit. Any changes made to the industry will have a bearing on the operation of the Committee and our auditor, and so we continue to monitor the situation keenly.

During the year, the Committee also discharged its responsibility for oversight of the Group's financial and non-financial control environment and the associated risk management framework. More information can be found in this report and the Risk section on pages 62 and 63.

I'd like to thank my colleagues on the Committee for their contribution during the year and I look forward to continuing our work in FY2020.

Mark Seligman
CHAIR OF THE AUDIT & RISK COMMITTEE

COMMITTEE MEMBERSHIP AND MEETINGS

The Committee met four times during FY2019, with three meetings timed to align with the financial reporting and audit cycles of the Group, namely: the approval of the Annual Report and Accounts in September; the approval of the half yearly results in March; and the presentation of the pre-year-end 'early warnings' report from the external auditor, PwC, in July. A meeting was also held in November 2018 at which the Committee undertook, amongst other things, a review of the Group's insurance strategy.

All members of the Committee who served during the year are, in the view of the Board, independent Non-executive Directors and collectively have recent and relevant financial, accounting and sector experience gained from their respective experience. Committee member biographies and attendance at meetings during the year can be found on pages 76-79 and 85. In particular, the Board considers that Mark Seligman, who has a long history in corporate finance and experience of other listed company audit committees, as well as being a qualified accountant, has the recent and relevant financial experience required to Chair the Committee. At the invitation of the Chair of the Committee and in order to maintain effective communications, the Chairman, Chief Executive and Chief Financial Officer and the audit partners of PwC attended all meetings. Other regular attendees included the heads of the finance, internal audit and Ethics & Compliance functions. Divisional senior management were also invited to attend as appropriate. At the conclusion of meetings, PwC and the Director of Internal Audit were each given the opportunity to discuss matters with the Committee without executive management being present.

The heads of internal audit and Ethics & Compliance, together with PwC have direct access to the Committee should they wish to raise any concerns outside formal Committee meetings. The Chair of the Committee reports formally to the Board on the Committee's activities after each Committee meeting.

FINANCIAL AND NARRATIVE REPORTING

The Committee is responsible for reviewing the half yearly results announcements and the Annual Report and Accounts before recommending them to the Board for approval. During the year, the Group has had internal control and risk management arrangements in place to support the financial reporting process and provide reasonable assurance that the financial statements are prepared in accordance with applicable standards. These arrangements include seeking divisional confirmation that their reported information gives a true and fair view of the results for the period, and ensuring that record keeping allows an accurate and fair reflection of transactions.

For the period under review, the Committee has considered information presented on significant matters of judgement, accounting estimates, and the interpretation of reporting standards in the adoption of policies. It has discussed with PwC its audit reports and noted the key accounting matters and significant judgements highlighted in respect of the financial statements. The Committee has examined key points of disclosure and presentation to ensure the adequacy, clarity and completeness of the Annual Report and Accounts for FY2019 and the half yearly results announcement. It has also reviewed various materials to support the statements on risk management and internal control; going concern; and the assessment of the Group's long-term viability – see pages 71 and 72 for more details.

In addition, the Committee assessed the fairness, balance and understandability of the Annual Report, and in doing so considered:

- the accuracy, integrity and consistency of the messages conveyed in the report;
- the appropriateness of the level of detail in the narrative reporting;
- the correlation between the judgements and issues and the disclosures and estimation of uncertainties; and
- the explanations of the differences between statutory and headline reported results.

Following its review, the Committee agreed that the Annual Report is representative of the year and presents a fair, balanced and understandable overview, providing the necessary information for shareholders to assess the Group's position, performance, business model and strategy.

SIGNIFICANT JUDGEMENTS AND ISSUES

An important responsibility of the Committee is to review and agree the most significant management judgements and issues which impact the financial statements. The key areas of judgement in the year are set out below. After receiving reports on the significant issues and areas of judgement and after discussion with PwC, the Committee agreed that the judgements made were appropriate and are correctly reflected in the Annual Report. More detailed information on the Group's Accounting Policies can be found on pages 139 to 146.

Revenue recognition	Acquisitions and divestments	Taxation
The Committee reviewed the impact of the adoption of IFRS 15 'Revenue from Contracts with Customers' including the interpretation judgements made in drafting the Group's revenue recognition policies. The Committee also supported simplified presentation of divisional revenue segmentation. See note 1 of the financial statements.	The Committee reviewed the treatment and presentation of a number of transactions including the United Flexible acquisition, an adjustment following completion of the post-acquisition review of Seebach GmbH and the disposal of Smiths Medical's sterile water bottling business. The treatment of Smiths Medical as a discontinued operation held for distribution was also discussed and agreed. The Committee also considered the treatment of acquisition integration costs for Morpho Detection and United Flexible, and disposal and separation costs between headline and non-headline.	The assets and liabilities recognised in income and deferred tax, as well as the treatment of losses in the UK, were assessed. Particular focus was given to the recognition of UK deferred tax assets; deferred tax assets relating to the John Crane, Inc. asbestos provision; and the Titeflex Corporation CSST provision. Following the separation of Smiths Medical the future Smiths UK Group is anticipated to be in a structural loss-making position from a tax perspective. Therefore UK deferred tax assets will be derecognised at the end of F20Y19 save to the extent that accounting rules require them to be recognised. See note 6 of the financial statements.
Impairment	Provisions for liabilities and charges	Post-retirement benefits
The intangible assets and the assumptions used to justify their carrying values, including 'value in use' were reviewed. As specifically noted in the Annual Report FY2018, the Smiths Interconnect and Flex-Tek divisions are now considered single cash generating units (CGUs) for impairment testing purposes. The applicable discount rate used for impairment testing purposes was considered particularly where headroom had reduced in the year. This headroom decline was driven by a more conservative impairment model whereby certain forecast cash-flows were removed from future years. The carrying value of capitalised development expenditure was reviewed and the treatment was considered reasonable due to the planned timing of new product launches and projected future cash-flows.	The Committee continued to monitor expert assessments on the Group's exposure to the John Crane, Inc. asbestos litigation and to the Titeflex Corporation CSST claims. In particular, the Committee considered the treatment of potential liabilities and the changes to the assumptions made in calculating the provisions, including the time period for the Titeflex Corporation CSST provision and the continued appropriateness of the ten-year time period for John Crane, Inc. asbestos litigation. In the case of the John Crane, Inc. asbestos litigation, the Committee also agreed with the judgement that, whilst large numbers of claims are made against John Crane, Inc. and other defendants every year, trials are extremely rare, such that a sufficiently reliable estimate cannot be made to cover the full period over which it is expected that costs will be incurred. In both these cases, it was determined that the assumptions fairly reflect the position. See note 22 of the financial statements.	The Committee reviewed and agreed the methods, assumptions and benchmarks used by the actuaries to calculate the position of the UK and US schemes at 31 July 2019, which have continued to show a net accounting surplus position. The Committee agreed the treatment and the corresponding disclosures on these matters. See note 8 of the financial statements.
Working capital	Presentation of headline profits and underlying growth	
Judgements within working capital, including the level of inventory and provisions and overdue receivables were reviewed. Following adoption of IFRS 9: Financial Instruments and the associated necessary accounting policy the Committee also reviewed the impact of introducing an expected credit loss model on the Group's receivables provisioning. See the Accounting Policies section of the financial statements.	The Committee considered the policy, presentation and judgements in relation to the Group's performance, in particular the separation of headline and non-headline items and consideration of which items related to the Group's ongoing trading activity or those which should be recorded as non-headline. Due to its scale and the extent of the disclosures required, the presentation of Smiths Medical as a discontinued operation held for distribution was a particular focus. Other items included the amortisation of intangible assets and the impact of integration activity on acquired entities and material one-off items relating to pensions and other legacy provisions. In addition, the Committee also considered those judgements in connection with items to be reflected or adjusted in underlying performance. See note 3 to the financial statements.	

EXTERNAL AUDIT

The Committee places great importance on the quality, effectiveness and independence of the external audit process. PwC or a predecessor firm have been the Company's external auditor since 1997. Andrew Kemp, the current audit partner, has led the engagement for five years. In respect of the period, the Committee approved and monitored PwC's execution of the audit plan. The Committee also considered PwC's report on its review of the FY2019 interim results announcement and its 'early warnings' report on the FY2019 audit. It also discussed any significant issues identified, PwC's final report on the FY2019 audit including the key accounting and audit judgements taken by management and management's responses to any audit findings.

The Committee confirms that the Company has complied with the provisions of the Statutory Audit Services Order 2014 relating to the UK audit market for large companies throughout the year under review and as at the date of this report.

Independence and effectiveness

The Committee is responsible for the implementation and monitoring of the Group's policies on external audit, which are designed to maintain the objectivity and safeguard the independence of the external auditor. These policies are reviewed annually. They cover the engagement of the external auditor for non-audit services and the appointment by the Group of former employees of the external auditor. The policies correspond with the European Commission's recommendations on the auditor's independence and with the Revised Ethical Standard issued by the Financial Reporting Council in the UK.

Notwithstanding developing practice being adopted by audit firms not to provide non-audit services to audit clients, the Committee recognises that certain non-audit services can be completed more efficiently by, and be purchased more cost-effectively from, the incumbent auditor

due to the audit firm's existing knowledge of the Group and its systems. Under the policy approved by the Committee, it has delegated its responsibility for authorising the purchase of non-audit services from the external auditor to the Chair of the Committee and/or the Chief Financial Officer within specific limits.

Details of the fees paid to PwC for the year ended 31 July 2019 can be found in note 2 to the financial statements on page 151. Non-audit fees as a percentage of audit fees totalled 4% (FY2018: 5%). The Group would not expect in the ordinary course of business for non-audit fees to exceed 20% of the average of the previous three years' total Group audit fees unless exceptional circumstances existed. The Committee confirms that the non-audit work performed by PwC during the year was properly assessed and authorised in accordance with the Group Policy.

In addition to monitoring compliance with Group policies, the Committee's review of PwC's independence included examining written confirmation from PwC that they remained independent and objective within the context of applicable

professional standards, and considering the performance and tenure of the audit engagement partner, who is required to rotate every five years in line with ethical standards.

Audit effectiveness is assessed continually using a number of measures including: reviewing the quality and scope of the proposed audit plan and progress against the plan; responsiveness to changes in our businesses; and monitoring the independence and transparency of the audit. The Committee also reviewed the performance of PwC and the effectiveness of the audit process by conducting a survey of the Board, senior management and divisional finance teams. The survey included questions on independence and objectivity, audit strategy and planning, conduct and communication, audit findings and feedback, and expertise and resourcing. The results were positive and the Committee concluded that PwC and its audit process were effective, and that audit teams continued to provide effective and objective challenge.

AUDIT TENDER

As set out in the Annual Report FY2018 the Committee concluded a tender for the external audit in November 2018. Following evaluation of each firm participating in the tender against agreed evaluation criteria, the Committee recommended its first and second choice firms to the Board for appointment. In making its recommendation the Committee agreed that KPMG was likely to deliver a high-quality audit aligned to the Smiths business model and specific risks, facilitated by the greater use of technology. The Committee further noted KPMG's significant commitment to improve audit effectiveness following regulatory criticism, and was assured that the audit would therefore be carried out to the highest possible standard with appropriate levels of challenge and scepticism. The recommendation was free from third party influence and

no restrictive clauses were imposed on the Committee or the Board. The Board endorsed the Committee's recommendation and a resolution recommending KPMG's appointment will be proposed at the 2019 AGM. During the year the Committee has overseen the activity necessary to transition the audit to KPMG, including establishing independence by exiting pre-existing non-audit services engagements. This allowed KPMG to shadow PwC's audit of the FY2019 results to support an orderly handover. The Committee also discussed the findings of the FRC's 2019 Audit Quality Inspection Report in respect of KPMG with the proposed audit partner, Mike Maloney, and agreed that there was no reason why KPMG's appointment should not be recommended to shareholders.

The Committee also noted the findings in the FRC's 2019 Audit Quality Inspection Report. PwC was provided with an opportunity to describe the activities being undertaken to address the findings.

RISK MANAGEMENT AND INTERNAL CONTROL

The Board is responsible for ensuring that there are sound risk management and internal control systems in place. The Executive Committee is responsible for designing the risk management and internal control systems and ensuring they are effectively deployed throughout the Group. The internal control system is a framework to manage risks and monitor compliance with procedures. It is designed to meet the Group's particular needs and the risks to which it is exposed. However, it can provide only reasonable, not absolute, assurance against material loss to the Group or material misstatement in the financial statements. More detail can be found on pages 62 and 63.

In FY2019, the Committee, on behalf of the Board and with the assistance of the Internal Audit function, monitored, reviewed and assessed the effectiveness of the Group's risk management and internal control systems in the context of the Group's strategy, business model and risk appetite. The Committee also 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. A description of the principal risks facing the Group and how these were reviewed to assess the Group's viability can be found on pages 62 to 70 and 71 and 72.

In fulfilling its responsibilities, the Committee received reports to enable an evaluation of the control environment and risk assurance framework and processes. No significant failings or weaknesses were identified. It also received reports from each of the divisions on the risk management process and an analysis of their own risk registers. This enabled the Committee to understand the risks and

opportunities and assurance processes throughout the business and the potential impact on the Group.

The Committee also undertakes deep-dive reviews on a rolling basis of the Group's principal risks. During FY2019, deep-dives were carried out on: not operating in the right markets (with a focus on Asia); supply chain – manufacturing concentration; and supply chain – sole source. The two supply chain risks were subsequently merged to form the new principal risk of 'integrated supply chain'. Separately the full Board considered the people, technology and cyber security principal risks.

INTERNAL AUDIT

Internal Audit is independent of the business, and as such has no responsibility for operational business management. This ensures the integrity and objectivity of its annual Audit Plan, which is approved by the Committee. The authority of the Internal Audit function is derived from the Committee.

The Director of Internal Audit is accountable to the Board through the Chairman of the Committee, although administratively the Director of Internal Audit reports to the Chief Financial Officer. In order to carry out the responsibilities, as set out in a charter approved by the Committee, the Internal Audit function has:

- full and unrestricted access to all records, property and personnel;
- independent access to the Chairman and members of the Committee;
- the right to request meetings with the Committee; and
- the authority and obligation to report significant findings or other concerns to the Committee.

During the period the Committee received progress reports on the execution of the FY2019 Internal Audit Plan and discussed recommendations made by the Internal Auditor. The Committee also considered the remit of Internal Audit, its budget and resources and the nature and extent of any outsourcing to specialist co-source providers. It also approved the FY2020 Internal Audit Plan, including the proposed audit scope, approach, coverage and allocation of resources.

The Committee oversees the performance of the Internal Audit function through the Director of Internal Audit's attendance at Committee meetings and a review of agreed KPIs which are reported to the Committee. In addition, an anonymous survey completed by the Board, management and the external auditor was conducted into the function's effectiveness. As described in the Annual Report FY2018, the Committee also oversaw the implementation of enhancements identified by an independent third party engaged to conduct an effectiveness review of the Internal Audit function. Overall, Internal Audit is deemed to be effective and is seen as a valued assurance function throughout the Group. It is appropriately resourced and conforms with industry standards in its approach.

ETHICS AND COMPLIANCE

During the year, the Committee reviewed the Ethics and Compliance work programme, and provided oversight of performance in line with, and investigations into, allegations of non-compliance with the Code of Business Ethics. This included any matters raised through the Group's ethics reporting procedures. During the period, the Committee provided oversight for investigations in respect of three unrelated matters, none of which resulted in material loss to the Group or a detrimental impact on our customers or suppliers. No matters were raised that required the Committee's direct intervention. Accordingly, the Committee considered that the Group's processes and arrangements for employees to report concerns, including anonymously, about any improprieties and any subsequent investigation as necessary, were both appropriate and effective. The Committee receives regular reports on the ratio of anonymous v.s attributed ethics reports. This metric is used to monitor trust in the Group's non-retaliation policy.

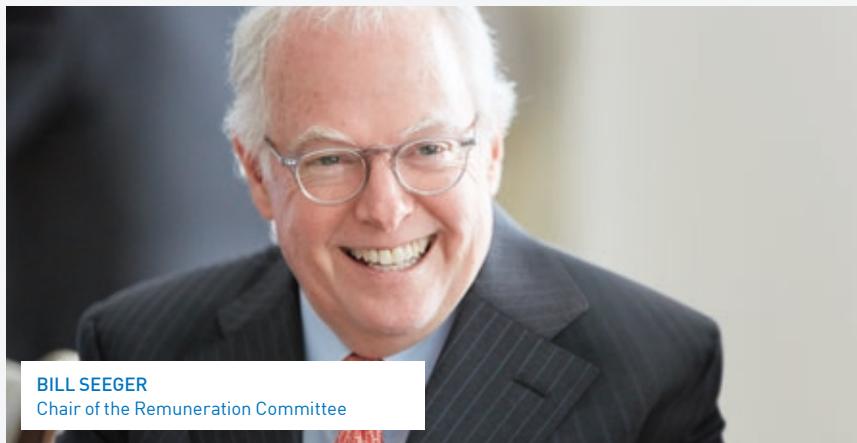
Recognising that culture plays a significant role in determining the strength of ethics and compliance performance, the Committee received a report on the Group's framework designed to help monitor culture down to a site level. In particular the framework focuses on monitoring the value of respect. The approach seeks to evaluate the results of various data sets which, when aggregated, may demonstrate low levels of respect. This may then indicate those sites which are at a higher risk of experiencing a serious ethical failure. The Group is then able to target its ethics audits at those sites which are potentially higher risk.

The Committee was also apprised of the results of a third-party audit over the effectiveness of certain Group policies and processes supporting ethics and compliance. The review covered the Group's approach to antitrust compliance and to labour standards. The report concluded that there has been significant progress in strengthening the overall compliance framework and processes around these policy areas from its previous audit conducted in 2016.

ASSESSMENT OF INTERNAL CONTROL AND RISK MANAGEMENT ARRANGEMENTS

In light of its work, the Committee was satisfied that the Group's processes governing financial reporting and controls; its culture; ethical standards; and its relationships with stakeholders continued to be effective. The Committee was also satisfied with the appropriateness and adequacy of the Group's risk management arrangements, internal control framework and three lines of defence model.

REMUNERATION COMMITTEE



BILL SEEGER
Chair of the Remuneration Committee



OUR OBJECTIVES ARE TO CREATE CLEAR ALIGNMENT BETWEEN REMUNERATION AND SUSTAINABLE, LONG-TERM STAKEHOLDER INTERESTS. WE TAKE ACCOUNT OF SHAREHOLDER VIEWS AND ENSURE THAT PERFORMANCE SUPPORTS THE DELIVERY OF BUSINESS STRATEGY THROUGH TARGETING OUR KEY PERFORMANCE INDICATORS (KPIs).”

KEY CONTENTS

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Single Figure Table	p113

ROLE OF THE COMMITTEE

The Committee is responsible for the Group's overall remuneration strategy and oversees the Group's remuneration policy for Directors and senior management. The Committee seeks to achieve a strategy that attracts, motivates and retains executive management of the quality required to run the Group successfully and that promotes the long-term success of Smiths, while reflecting the views of all stakeholders.

The Committee also approves the service contracts of all Executive Directors and reviews any major changes in Group employee remuneration structures, including the incentive arrangements that apply across the wider population.

IN ORDER TO FULFIL ITS ROLE THE COMMITTEE

- Meets at least three times a year
- Annually reviews the ongoing appropriateness and relevance of the remuneration policy
- Reviews business plans and performance to assess their potential impact on existing and future incentive arrangements
- Considers environmental, social and governance (ESG) risks when determining remuneration policy
- Reviews remuneration of wider workforce and related policies to ensure internal alignment of reward
- Utilises external expert advisers to understand remuneration trends in the market
- Conducts an annual review of the Committee's performance and Terms of Reference
- Prepares a remuneration report annually for inclusion in the Annual Report

I am pleased to present the remuneration report for the year to 31 July 2019.

In the early part of the year we completed our review of how best to align our remuneration policy to the Smiths strategy.

We took the opportunity to introduce a number of changes to the policy, designed to reinforce the alignment between executive remuneration and stakeholder interests and to ensure that performance measures remained closely linked to business strategy. In making these changes we took account of feedback from major investors and shareholder bodies.

The revised Policy was approved by 82% of shareholders at the AGM held on 14 November 2018.

Subsequent to the AGM a number of institutional shareholders and proxy advisers announced new executive remuneration guidelines. We have therefore amended our practice, where applicable, to take account of certain of these new guidelines and other feedback we received from shareholders. As part of this we reviewed and updated our policy relating to withholding and recovery of incentive payments in appropriate circumstances. We are also committing to full consideration of these new guidelines, following consultation with major shareholders, prior to the next Policy review.

There have been no circumstances arising during the year where the Committee felt the need to apply discretion.

Looking forward, we will need to give careful consideration to how the planned separation of Smiths Medical would affect the unvested share plan awards and the incentive plan performance measures.

Bill Seeger
CHAIR OF THE
REMUNERATION COMMITTEE

EXECUTIVE REMUNERATION AT A GLANCE

ACTIVITIES OF THE COMMITTEE IN FY2019

POLICY REVIEW:

- Agreed changes to the remuneration policy which was subsequently approved by shareholders in November 2018
- Considered new shareholder guidelines published in late 2018 and the impact of these on our approach to implementation of the policy

FIXED PAY:

- Approved salary proposals for the Executive Directors and other Executive Committee members and reviewed fees for the Chairman
- Reviewed and agreed pensions policy for new Executive Directors

PERFORMANCE RELATED PAY:

- Considered and approved annual incentive plan payouts and set targets for the new financial year
- Determined vesting levels for LTIP award vesting in 2018 and agreed performance measures for new LTIP awards

THE KEY PRINCIPLES OF OUR POLICY

COMPETITIVE REWARD PACKAGE TO ATTRACT, MOTIVATE AND RETAIN THE BEST TALENT

PERFORMANCE MEASURES ALIGNED TO BUSINESS STRATEGY AND BALANCED BETWEEN LONG-TERM AND SHORT-TERM PERFORMANCE

ABILITY TO APPLY APPROPRIATE DISCRETION, WITHHOLD PAYMENTS AND RECOVER SUMS ALREADY PAID

ELEMENTS OF EXECUTIVE DIRECTORS' PAY

Target performance



Fixed	42%
Performance related	58%
Short term	64%
Long term	36%
Base salary	32%
Benefits and pension	10%
Annual bonus – Cash	23%
Annual bonus – Shares	11%
LTIP	24%

Maximum performance



Fixed	21%
Performance related	79%
Short term	41%
Long term	59%
Base salary	16%
Benefits and pension	5%
Annual bonus – Cash	20%
Annual bonus – Shares	10%
LTIP	49%

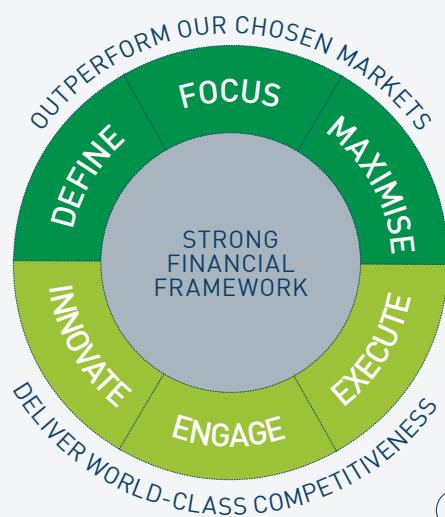
Note: Figures are based on Chief Executive's remuneration package for FY2019

PERFORMANCE OUTCOME AND LINKAGE TO STRATEGY

THE THREE KEY STRATEGIC OBJECTIVES FOR THE BUSINESS ARE:

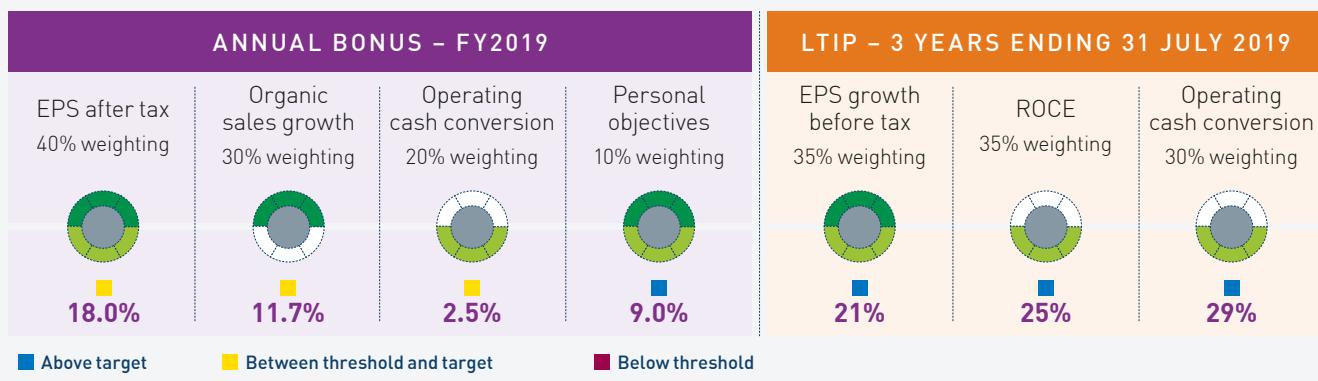


- OUTPERFORM OUR CHOSEN MARKETS
- DELIVER WORLD-CLASS COMPETITIVENESS
- STRONG FINANCIAL FRAMEWORK



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PERFORMANCE MEASURES DRIVING REMUNERATION



SINGLE TOTAL FIGURE OF REMUNERATION FOR EXECUTIVE DIRECTORS IN FY2019 (£'000)



IMPLEMENTATION OF REMUNERATION POLICY IN FY2019

The table below summarises how the remuneration policy has been implemented in FY2019 and highlights any changes from previous reports.

Basic pay	Benefits	Pension	Annual bonus	LTIP
Base salary Fixed remuneration which reflects required skills and expertise to deliver the Group's objectives. Increases to Executive Director salaries in FY2019 were below or in line with the average increase for UK employees of 2.9%.	Annual bonus <ul style="list-style-type: none"> - Maximum bonus opportunity remains unchanged at 180% of base salary for Chief Executive - Maximum bonus opportunity remains unchanged at 150% of base salary for Chief Financial Officer - FY2019 outcome of 41.2% of maximum - 33% of annual bonus deferred into shares for three years - Withholding and recovery provisions apply 	Long-term incentive plan <ul style="list-style-type: none"> - Maximum award opportunity remains unchanged at 400% of base salary - FY2019 award of 300% of base salary for Chief Executive (equivalent to fixed number of 179,627 shares) - FY2019 award of 250% of base salary for Chief Financial Officer (equivalent to fixed number of 95,837 shares) - 75% vesting level for three year performance period ending 31 July 2019 - Two year post-vesting holding period applies for all awards from FY2019 - Withholding and recovery provisions apply 		

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SUMMARY OF EXECUTIVE DIRECTORS' REMUNERATION FY2019

	Chief Executive	Chief Financial Officer		
	FY2019	FY2018		
Base salary	820	800	525	402
Benefits	54	64	12	9
Retirement allowance	205	200	131	100
Annual bonus – cash	405	408	216	177
Annual bonus – deferred shares	203	204	108	88
Long-term incentives	2,097	1,165	–	–
Performance share award	346	414	–	–
Total	4,130	3,255	992	776

¹ Prorated

REMUNERATION POLICY REPORT

This section of the report sets out our remuneration policy for Directors, which shareholders approved at the AGM held on 14 November 2018 and which is effective for a period of up to three years from this date. Subsequent to the AGM a number of investors and investor advisers introduced new guidelines for executive remuneration. The policy report below sets out where account of these new guidelines has already been taken and where the policy will be reviewed prior to the next shareholder approval of the policy. The remuneration policy can be viewed in the Corporate Governance section of the Company's website.

REMUNERATION POLICY FOR THE EXECUTIVE DIRECTORS

Operation	Opportunity	Performance measures	Response to shareholder feedback and subsequent policy guideline updates
Base salary			
To attract, motivate and retain Executive Directors with the required skills and expertise to deliver the Group's objectives.			
Salaries are reviewed (but not necessarily adjusted) annually and benchmarked against comparable roles at companies of similar market capitalisation, revenues and complexity. The review also takes into account individual performance and experience, the relative performance of the Company and the remuneration policy operated across the Group as a whole. The salary increase date (if applicable) has been changed to 1 October as part of a Group-wide consolidation.	Base salaries are adjusted according to the outcome of the annual review and will be disclosed in the Annual Report on Remuneration. Salary increases for the Executive Directors will normally be in line with those awarded to Smiths wider employee population. Where increases are awarded in excess of this, for example if there is a material change in the responsibility, size or complexity of the role, or a significant change in the market competitiveness of salary, the Committee will provide the rationale in the relevant year's Annual Report on Remuneration.	Not applicable	None required
Benefits			
To provide market-competitive benefits to Executive Directors.			
Benefits comprise car benefit, life assurance and private healthcare insurance, and other such benefits as the Committee may from time to time determine are appropriate. These include, but are not limited to, relocation allowances, as well as any other future benefits made available either to all employees globally or all employees in the region in which the Executive Director is employed.	Benefits vary by role and individual circumstances. Benefits in respect of the year under review are disclosed in the Annual Report on Remuneration. It is not anticipated that the costs of benefits provided will increase significantly in the financial years over which this policy will apply, although the Committee retains discretion to approve a higher cost in exceptional circumstances (e.g. to facilitate recruitment, relocation, expatriation, etc.) or in circumstances where factors outside the Group's control have changed materially (e.g. market increases in insurance costs).	Not applicable	None required

Operation	Opportunity	Performance measures	Response to shareholder feedback and subsequent policy guideline updates
Pensions			
Enables Executive Directors to save for their retirement in a cost-efficient manner.			
Executives may choose either to participate in the Company's defined contribution pension plan or to receive a pension allowance in lieu thereof (and thus arrange their own pension provision). Pension allowances are reviewed periodically to ensure market competitiveness. Base salary is the only element of remuneration that is taken into account when determining pension contributions or allowances.	Pension contributions (or cash allowances in lieu thereof) are set at a level that the Committee considers appropriate having regard to prevailing market practice at other FTSE 100 companies of similar market capitalisation, revenues and complexity. Pension arrangements for current Executive Directors are set out in the Annual Report on Remuneration. The maximum level of pension contribution (or allowance in lieu thereof) for new Executive Directors will be in line with the contribution level for the wider workforce in the relevant country.	Not applicable	New maximum level of contribution introduced for any new Executive Directors, in line with general workforce. The employment contracts of the two Executive Directors provide for a cash allowance of 25% of base salary in lieu of pension provision. Both Executive Directors have agreed, for FY2020, to freeze the monetary value of the allowance at the FY2019 level, reducing the level of benefit to 24.4% of base salary for FY2020.
Annual bonus			
Incentivises short-term priorities in line with the Group's business strategy.			
Annual bonus payments are determined based upon performance against measures and targets set by the Committee at the start of each financial year. After the end of the financial year, to the extent that the performance criteria have been met, up to 67% of the earned annual bonus is paid in cash. The balance is deferred into shares and released after a further period of three years, without further performance or other conditions. Dividends accrue and are payable in cash at the end of the deferral period. The Committee may use its discretion to adjust payout of the annual bonus to Executive Directors, within the range of the minimum to maximum opportunity, including reducing it down to zero. Such discretion will only be used where the Committee believes that performance against the prescribed targets does not accurately reflect the Company's underlying performance. Cash payments will be subject to clawback and deferred share bonuses awarded will be subject to malus for a period of three years from the end of the relevant performance year, in case of misconduct or material misstatement in the published results of the Group.	The maximum annual bonus opportunity for Executive Directors is up to 180% of salary. The annual bonus opportunities for the year under review and the coming year are disclosed in the Annual Report on Remuneration. Under the financial element of the annual bonus, threshold performance must be exceeded before any annual bonus becomes payable. The percentage payout then increases according to the level of achievement against targets. Payment of 25% of maximum opportunity occurs on achievement of threshold performance and 60% of maximum opportunity on achievement of on-target performance.	Based on a combination of financial and non-financial performance measures linked to short-term objectives. Financial performance will account for no less than 70% of the bonus opportunity and may include, but is not limited to, profit, organic sales growth and cash measures.	Performance against annual bonus targets will now be reported in the report relating to the fiscal year (previously performance was reported the following year). A review of how dividends accrued on deferred bonus awards are payable (shares or cash) will be undertaken as part of the next Policy review. Withholding and recovery provisions have been reviewed and updated to provide a consistent policy across all share plans.

Operation	Opportunity	Performance measures	Response to shareholder feedback and subsequent policy guideline updates
Long-Term Incentive Plan (LTIP)			
Incentivises long-term value creation for shareholders, sustainable growth and effective management of the balance sheet.			
<p>Awards of conditional shares are granted annually and vest after a performance period of at least three years, subject to the achievement of performance targets set by the Committee at the start of each cycle. For awards made in FY2019 onwards, vested shares will be subject to a two year post vesting holding period. Details of such holding period will be disclosed in the Annual Report on Remuneration for the year in which the relevant award is made.</p> <p>To the extent that the performance targets are not met over the performance period, awards will lapse. No retesting of awards under any performance condition is permitted.</p> <p>Dividends accrue and are paid in cash at the end of the vesting period, on shares that vest.</p> <p>The Committee may use its discretion to adjust payout of the LTIP to Executive Directors, within the limits of the Plan rules. Such discretion will only be used where the Committee believes that performance against the prescribed targets does not accurately reflect the Company's underlying performance.</p> <p>Awards will be subject to malus over the vesting period and clawback from the vesting date for a period of five years from the date of grant, in case of misconduct or material misstatement in the published results of the Group.</p>	<p>The maximum LTIP award opportunity for Executive Directors is up to 400% of salary.</p> <p>For awards made from FY2019 onwards, the award will be a fixed number of shares. In FY2019 this fixed number of shares was equivalent to 300% of salary for the Chief Executive and 250% of salary for the Chief Financial Officer. In future years for which this policy applies it is intended that the Executive Directors will each be awarded the same fixed number of shares as in FY2019. In the event that the Company share price increases by more than 33% during the three year policy period, the fixed number of shares awarded will be restricted so that the value of the award is no more than 33% greater than the value of the FY2019 award at the date of grant. This will ensure that the maximum LTIP award opportunity is not exceeded.</p> <p>LTIP award sizes for the year under review and the coming year are disclosed in the Annual Report on Remuneration.</p> <p>At threshold performance against each measure, up to 25% of the award subject to that measure vests, increasing on a straight-line basis to 100% for achieving stretch targets.</p>	<p>Based on measures of performance that are aligned with the Group's strategy.</p> <p>To ensure continued alignment with the Company's strategic priorities, the Committee may, at its discretion, vary the measures and their weightings from time to time (but will consult shareholders before making significant changes to the performance measures).</p>	<p>A review of how dividends accrued on LTIP awards are payable (shares or cash) will be undertaken as part of the next Policy review.</p> <p>Withholding and recovery provisions have been reviewed and updated to provide a consistent policy across all share plans.</p>

Operation	Performance measures	Response to shareholder feedback and subsequent policy guideline updates
Sharesave		
Encourages ownership of shares in the Company and alignment with shareholder interests.		
All UK employees (including Executive Directors) may save up to a maximum monthly savings limit (as determined by UK legislation, or other such lower limit as the Committee may determine at its discretion) for three or five years. At the end of the savings period, participants may use their savings to exercise options to acquire shares, which may be granted at a discount of up to 20% to the market price on grant.	Not applicable	None required
Shareholding guidelines		
Encourages ownership of shares in the Company and alignment with shareholder interests.		
Executive Directors must build a minimum shareholding of 250% (for the Chief Executive) or 200% (for other Executive Directors) of base salary within five years of appointment to the Board. 50% of any net vested share awards (after sales to meet tax liabilities) must be retained until the minimum shareholding requirements are met. Shareholding guidelines also exist below Executive Director level.	Not applicable	Position on post-employment shareholding guidelines to be kept under review over the life of this Policy.

EXISTING GRANTS OR ENTITLEMENTS

It is the Company's intention to honour all pre-existing commitments at the date of this report and to honour all future obligations entered into, consistent with the approved Remuneration Policy in force at that time. In the case of internal promotion to the Board, the Committee intends to honour any pre-existing commitments made prior to becoming a member of the Board, including where these differ from the approved Remuneration Policy.

PERFORMANCE MEASURE SELECTION AND APPROACH TO TARGET SETTING

Annual bonus measures are selected to reflect the Company's short-term financial and non-financial priorities. At its discretion, the Committee may vary these measures at the start of each financial year to maintain close alignment between executive incentives and the annual operating plan.

The measures used in the Long-Term Incentive Plan are selected to reflect Smiths' strategy and to reinforce the key drivers of value creation and growth highlighted elsewhere in this Annual Report: earnings per share, cash conversion, organic sales growth and delivering sustainable return on capital.

Annual bonus and LTIP targets are reviewed annually, and take into account the Company's strategic plan, analyst forecasts for Smiths and its sector comparators and external expectations for Smiths' key markets. The Committee sets targets that it considers to be challenging but attainable and aligned to the Company's business objectives over the short term, as reflected in the annual operating plan, and longer term, consistent with the strategic plan. On top of aligning incentives with strategy, targets are designed to ensure that participants are aligned with the interests of shareholders.

The linkage of the performance measures to business strategy is set out in the At A Glance section on page 102.

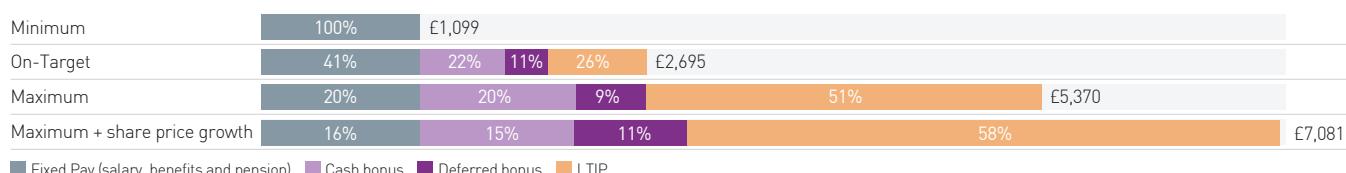
ALIGNMENT OF POLICY BETWEEN EXECUTIVE DIRECTORS AND OTHER EMPLOYEES

The reward policy for other senior employees is broadly consistent with that for Executive Directors, and the Company does not currently operate any incentive plans in which only Executive Directors participate. The Committee reviews each year the all-employee pay and incentive trends and takes these into account in setting Executive Director remuneration levels. The principles of remuneration packages being market related, performance sensitive and driven by business needs are applied at all levels and geographies in the Group and the performance measures used in incentive plans apply generally across all levels of the business.

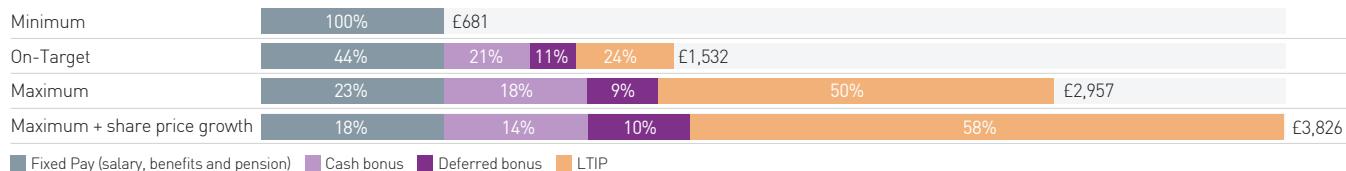
PAY SCENARIOS

The graphs below provide estimates of the potential future reward opportunity for the Chief Executive and the Chief Financial Officer, and the potential mix between the different elements of remuneration under four different performance scenarios; 'Minimum', 'On-Target' and 'Maximum' and 'Maximum + Share Price growth' (which assumes a 50% increase in share price over the LTIP vesting period and bonus deferral period).

ANDY REYNOLDS SMITH (£000)



JOHN SHIPSEY (£000)



Potential opportunities illustrated above are based on the Policy, applied to the annualised base salaries in force from 1 October 2019. It should be noted that any awards granted under the LTIP in a year do not normally vest until at least the third anniversary of the date of grant. This illustration is intended to provide further information to shareholders on the relationship between executive pay and performance. Please note, however, that actual pay delivered will further be influenced by factors such as share price appreciation or depreciation and the value of dividends paid. The following assumptions have been made in compiling the above charts:

	Minimum	On-Target	Maximum
Base salary		Annual base salary	
Pension		Company pension allowance	
Other benefits		Taxable value of annual benefits provided	
Cash bonus	0% of salary	72% (CEO), 60% (CFO) of salary	120% (CEO), 100% (CFO) of salary
Deferred bonus	0% of salary	36% (CEO), 30% (CFO) of salary	60% (CEO), 50% (CFO) of salary
LTIP	0% of salary	82% (CEO), 68% (CFO) of salary	327% (CEO), 272% (CFO) of salary

REMUNERATION POLICY FOR THE CHAIRMAN AND NON-EXECUTIVE DIRECTORS

Operation	Opportunity	Performance measures
Annual fee		
To attract, motivate and retain Non-executive Directors with the required skills and expertise.		
Fees may be paid in cash or a combination of cash and shares and are reviewed annually (but not necessarily increased) to ensure they compare appropriately to fees payable at companies of similar size and complexity to Smiths.	Fees are adjusted according to the outcome of the annual reviews.	Not applicable
Additional fees are paid to the Chairs of the Nomination & Governance, Audit & Risk, and Remuneration Committees and to the Senior Independent Director to reflect the additional time commitment of these roles. Additional fees may also be paid to members of the Nomination & Governance, Audit & Risk, and Remuneration Committees.		
The additional fee paid to the Chairman of the Board is determined by the Committee, absent the Chairman, while the fees for all Non-executive Directors are agreed by the Executive Directors.		
Other		
The Chairman and Non-executive Directors are not eligible for benefits or any pension provision, nor are they eligible for bonuses or participation in share schemes. To reflect the greater time commitments expected of the Non-executive Directors when attending overseas Board meetings, an additional fee is paid to them for each such meeting, and they are reimbursed for actual expenses incurred (transportation, hotels etc.). Modest retirement gifts may be provided for Non-executive Directors in appropriate circumstances.		

APPROACH TO REMUNERATION ON RECRUITMENT AND LEAVING

EXECUTIVE DIRECTORS

The Committee approves the remuneration of each Executive Director on their appointment. In setting the remuneration during the recruitment of external appointments, the Committee will apply the following policy:

Pay element	Policy on recruitment
Salary	Salary on recruitment is determined based on the same principles as the annual salary review, as outlined in the policy table.
Pension	As described in the policy table.
Benefits	As described in the policy table.
Annual Bonus	As described in the policy table and typically pro-rated for the proportion of year served. Maximum annual award opportunity: 180% of salary with mandatory deferral of 33% into shares.
LTIP	May be considered for an award under the LTIP on similar terms to other executives. Maximum annual award opportunity: 400% of salary.
Other	The Committee may make an award in recognition of incentive arrangements forfeited on leaving a previous employer. Any such award will take account of relevant factors including the fair value of awards forfeited, any performance conditions attached, the likelihood of those conditions being met and the proportion of the vesting period remaining. For the purposes of making such awards, but for no other reason, the Committee may avail itself of Listing Rule 9.4.2R. The Committee may also make payments to cover reasonable expenses in recruitment and relocation, and any other miscellaneous expenses including but not limited to housing, tax and immigration support.

In cases of appointing a new Executive Director by way of internal promotion, the policy will be consistent with that for external appointees, as detailed above. Any commitments made prior to an individual's promotion will continue to be honoured even if they would not otherwise be consistent with the policy prevailing when the commitment is fulfilled, although the Company may, where appropriate, seek to revise an individual's existing service contract on promotion to ensure it aligns with other Executive Directors and prevailing market best practice.

Disclosure on the remuneration structure of any new Executive Director (external or internal), including details of any exceptional payments, will be disclosed in the RNS notification made at the time of appointment and in the Annual Report on Remuneration for the year in which the recruitment occurred.

Respecting diversity is woven into everything we do. We ensure that equal opportunities are practiced when interviewing, recruiting and promoting employees with decisions made based on skills and expertise first and foremost.

NON-EXECUTIVE DIRECTORS

In recruiting a new Non-executive Director, the Committee will use the policy as set out in the table on page 109.

EXECUTIVE DIRECTORS' SERVICE CONTRACTS

The Company's policy is that Executive Directors are normally employed on terms which include a one-year rolling period of notice from the Company and six months' notice from the individual. The contract includes provision for the payment of a predetermined sum in the event of termination of employment in certain circumstances (but excluding circumstances where the Company is entitled to dismiss without compensation). In addition to payment of basic salary, pension allowance and benefits in respect of the unexpired portion of the one-year notice period, the predetermined sum would include annual bonus and share awards only in respect of the period they have served, payable following the end of the relevant performance period and subject to the normal performance conditions.

Andy Reynolds Smith is employed under a service contract with the Company dated 6 July 2015 and effective from 25 September 2015. John Shipsey is employed under a service contract with the Company dated and effective from 18 October 2017. He became an Executive Director on 1 January 2018.

The service contracts for both Executive Directors may be terminated by 12 months' notice given by the Company or six months' notice given by the Director. The Company may elect to terminate the contract by making a payment in lieu of notice equal to the Director's base salary and benefits (including pension allowance) in respect of any unserved period of notice. The service contracts contain specific provisions enabling a reduction in any phased payments in lieu of notice, in the event that the Director finds alternative employment during the notice period. The service contracts are available for viewing at the Company's Registered Office.

CHAIRMAN'S AND NON-EXECUTIVE DIRECTORS' LETTERS OF APPOINTMENT

The Chairman and the Non-executive Directors serve the Company under letters of appointment and do not have contracts of service or contracts for services. Except where appointed at a general meeting, Directors stand for election by shareholders at the first AGM following appointment. The Board has resolved that all Directors who are willing to continue in office will stand for re-election by the shareholders each year at the AGM. Either party can terminate the appointment on one month's written notice and no compensation is payable in the event of an appointment being terminated early. The letters of appointment or other applicable agreements are available for viewing at the Company's Registered Office.

Non-executive Director	Date of appointment
Sir George Buckley	1 August 2013
Bruno Angelici	1 July 2010
Oliver Bohoum	1 July 2018
Dame Ann Dowling	19 September 2018
Tanya Fratto	1 July 2012
Bill Seeger	12 May 2014
Mark Seligman	16 May 2016
Noel Tata	1 January 2017
Sir Kevin Tebbit (until 14 November 2018)	14 June 2006

LEAVING AND CHANGE-OF-CONTROL PROVISIONS

For those individuals regarded as 'bad leavers' (e.g. voluntary resignation or dismissal for cause), annual bonus awards are forfeited, and outstanding awards under the LTIP automatically lapse. Deferred bonus awards are forfeited on dismissal for cause.

A 'good leaver' will typically remain eligible for a pro-rated annual bonus award to be paid after the end of the financial year and deferred bonus awards will be paid out at the normal vesting date. LTIP awards will typically vest at the normal vesting date to the extent that the associated performance conditions are met, but will normally be pro-rated on the basis of actual service within the performance period. In cases of death or disability, individuals are automatically deemed to be good leavers under the plan rules of the LTIP. All other good leavers will be defined at the discretion of the Committee on a case-by-case basis.

In the event of a change of control, LTIP awards will vest to the extent that each of the performance conditions is met based on the Committee's assessment of performance over the performance period to the date of change of control. For internal performance measures, the Committee may exercise its judgement in determining the outcome based on its assessment of whether or not the performance conditions would have been met to a greater or lesser extent at the end of the full performance period. Awards will also normally be pro-rated to reflect the time that has elapsed between the grant of the award and the date of change of control.

The Committee retains discretion to vary these provisions on a case-by-case basis.

In connection with the termination of an Executive Director's contract, the Company may make a payment on account of accrued but untaken leave and may pay outplacement and legal fees for support provided to the individual.

EXTERNAL APPOINTMENTS

Subject to the overriding requirements of the Company, the Committee allows Executive Directors to accept one external appointment where it considers that such appointment will contribute to the Director's breadth of knowledge and experience. Directors are permitted to retain fees associated with such appointments. Non-executive Directors must obtain the approval of the Board before accepting any additional appointments once they have joined the Board.

CONSIDERATION OF EMPLOYMENT CONDITIONS

The Committee always takes into account pay and employment conditions elsewhere in the Company. We do not consult directly with employees regarding Executive Director pay. However, the Committee is regularly, and at least annually, provided with information on pay trends and ratios of the wider employee population across the Group.

CONSIDERATION OF SHAREHOLDER VIEWS

The Committee has taken account of the views expressed by shareholders, both from feedback from the 2018 Policy review and from regular meetings with major shareholders. A number of changes have been implemented in FY2019 and the Committee will keep the Policy and its approach to implementation under review in the context of evolving market practice and investor expectations.

ANNUAL REPORT ON REMUNERATION

This section of the remuneration report details how our Policy was implemented in the year ended 31 July 2019.

COMMITTEE MEMBERS AND MEETING ATTENDANCE IN FY2019

The membership of the Committee and their meeting attendance during the year is set out on page 85 of this report. Bill Seeger had served on a remuneration committee for at least 12 months prior to his appointment as Remuneration Committee Chair.

Sir George Buckley is absent when his own remuneration as Chairman of the Company is under consideration. The Chief Executive attends meetings of the Committee by invitation but he is not involved in the determination of his own remuneration, or present during consideration of any changes to it.

ADVISERS TO THE COMMITTEE

During the year, the Committee received material assistance and advice from the Chief Executive, the Group HR Director, the Executive Reward Director, Mercer | Kepler (the Committee's appointed independent remuneration adviser) and Freshfields Bruckhaus Deringer LLP. The Company Secretary is secretary to the Committee.

The Company paid a total annual fee of £66,850 to Mercer | Kepler in relation to remuneration advice to the Committee during the year. Fees were determined on the basis of time and expenses.

During FY2019, Mercer | Kepler provided the Committee with benchmarking analysis of Executive and Non-executive Directors' pay, information on market trends, drafting support for this and last year's Directors' Remuneration Report, and other relevant assistance on determining Directors' remuneration. Mercer | Kepler is a founding member of the Remuneration Consultants Group and a signatory to its Code of Conduct. Kepler's parent company, Mercer, provides unrelated services to the Group in the areas of all-employee reward and retirement benefits. However, the Committee is satisfied that the advice provided by Mercer | Kepler is objective and independent and that they do not have connections with the Group that may impair their independence.

Mercer | Kepler was re-appointed by the Committee via competitive tender in 2013. A new competitive tender for the role of independent remuneration adviser is planned in autumn 2019.

Freshfields Bruckhaus Deringer LLP was appointed by the Company to advise the Group on various legal matters during the year.

SUMMARY OF SHAREHOLDER BINDING VOTE ON DIRECTORS' REMUNERATION POLICY (FY2019)

The voting outcome in November 2018 for the Directors' Remuneration Policy was as follows:

Votes for	% of votes cast for	Votes against	% of votes cast against	Total votes cast	Votes withheld (abstentions)
230,167,925	81.61%	51,868,709	18.39%	282,036,634	24,949,627

SUMMARY OF SHAREHOLDER ADVISORY VOTE ON DIRECTORS' REMUNERATION REPORT (FY2019)

The voting outcome in November 2018 for the Directors' Remuneration Report was as follows:

Votes for	% of votes cast for	Votes against	% of votes cast against	Total votes cast	Votes withheld (abstentions)
259,479,657	93.93%	16,764,455	6.07%	276,244,112	30,742,150

DIRECTORS' SINGLE FIGURE OF ANNUAL REMUNERATION (AUDITABLE)

Executive Directors

	Salary/fees		Benefits ⁹		Payments in lieu of pension contribution		Total fixed		Annual bonus ¹¹		Long-term incentives ¹²		Performance share award ¹³		Total performance related		Total	
	FY2019 £000	FY2018 £000	FY2019 £000	FY2018 £000	FY2019 £000	FY2018 £000	FY2019 £000	FY2018 £000	FY2019 £000	FY2018 £000	FY2019 £000	FY2018 £000	FY2019 £000	FY2018 £000	FY2019 £000	FY2018 £000	FY2019 £000	FY2018 £000
	Andy Reynolds Smith ¹	820	800	54	60	205	200	1,079	1,060	608	612	2,097	1,165	346	414	3,051	2,191	4,130
John Shipsey ^{1,2}	525	402	12	9	131	100	668	511	324	265	—	—	—	—	324	265	992	776
Bill Seeger ³	—	498	—	112	—	—	—	610	—	—	—	—	—	—	—	—	—	610

Chairman and Non-executive Directors

	Salary/fees		Benefits ¹⁰																Total
	FY2019 £000	FY2018 £000	FY2019 £000	FY2018 £000															FY2019 £000
Sir George Buckley ⁴	443	433	46	65	—	—	—	—	—	—	—	—	—	—	—	—	—	489	498
Bruno Angelici	74	76	14	9	—	—	—	—	—	—	—	—	—	—	—	—	—	88	85
Olivier Bohouon	74	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	74	6
Dame Ann Dowling	60	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	60	—
Tanya Fratto	90	84	49	57	—	—	—	—	—	—	—	—	—	—	—	—	—	139	141
Anne Quinn ⁵	—	96	—	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	111
Bill Seeger ⁶	124	48	89	26	—	—	—	—	—	—	—	—	—	—	—	—	—	213	74
Mark Seligman ⁷	94	96	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	94	96
Noel Tata	94	92	49	27	—	—	—	—	—	—	—	—	—	—	—	—	—	143	119
Sir Kevin Tebbit ⁸	33	96	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	38	96

1 It is estimated that 9.2% of the FY2019 Long Term Incentives amount for Andy Reynolds Smith is attributable to share price appreciation (FY2018 27.4%). No Long Term Incentives vested for John Shipsey in respect of FY2019 or FY2018. No discretion has been applied to the amounts attributable to share price appreciation.

2 John Shipsey commenced employment on 18 October 2017 and was appointed as a Director and Chief Financial Officer from 1 January 2018.

3 Bill Seeger served as Chief Financial Officer on an interim basis from 19 May 2017 to 31 December 2017 for which he received a fixed fee, having served as a Non-executive Director and chairing the Audit & Risk Committee prior to that date. He did not receive any further fees from Smiths during this period. He resumed his non-executive role from 1 January 2018. Throughout 2017 Bill Seeger was a Non-executive Director of Spectris plc and during the period he served as Chief Financial Officer for Smiths in FY2018 he retained his Non-executive Director fees from Spectris of £37,500.

4 Sir George Buckley's fee comprised his Non-executive Director's fee; an additional fee for being Chairman and his additional fee for chairing the Nomination & Governance Committee.

5 Anne Quinn's fees comprised her Non-executive Director's fee and her additional fee for chairing the Remuneration Committee until 1 July 2018 and benefits include a retirement gift to recognise her contribution to the Board.

6 Bill Seeger's fees for FY2019 comprised his Non-executive Director's fee, his additional fee for chairing the Remuneration Committee from 1 July 2018 and his additional fee as Senior Independent Director since 14 November 2018.

7 Mark Seligman's fees comprised his Non-executive Director's fee and his additional fee for chairing the Audit & Risk Committee.

8 Sir Kevin Tebbit's fees comprised his Non-executive Director's fee and his additional fee as Senior Independent Director until 14 November 2018 and benefits include a retirement gift to recognise his contribution to the Board.

9 Benefits for Executive Directors include car/chauffeur benefits, life assurance, disability insurance and private healthcare insurance. For comparison purposes these figures have been restated for FY2018 to provide greater disclosure of the car/chauffeur benefit, which previously had not been included in the FY2018 figures.

10 Benefits for the Chairman and Non-executive Directors relates to reimbursed travel-related expenses (including flight costs), which is grossed-up for the UK income tax and National Insurance contributions paid by the Company on their behalf.

11 Andy Reynolds Smith has deferred 33% of his bonuses earned since FY2016 into Smiths shares. John Shipsey deferred 33% of his FY2018 bonus earned into Smiths shares. The total bonus paid during the year, including deferral, is captured under 'annual bonus' above. The deferral is for a three-year period and is not subject to any further performance or other conditions.

12 The Long Term Incentive value for FY2018 for Andy Reynolds Smith has been restated to show the actual amount (rather than the estimated amount in last year's report) and to include a dividend accrual payment of £94,585 which was paid on vesting. The total remuneration is also restated accordingly. The estimated Long Term Incentive value for FY2019 is calculated using the vesting percentage of 75% and the average share price over the 3 months to 31 July 2019 of 1,536.46p; it also a dividend accrual payment of £164,364 payable on vesting.

13 Andy Reynolds Smith was awarded 79,806 Performance Shares in 2015 which vested in October 2018. The value shown for FY2018 is the value on the vesting date of 9 October 2018 and also includes the value of 2,472 dividend equivalent shares (restated from estimated figure in FY2018 report). He was also awarded 26,602 Performance shares which vest in 2019 (the performance criteria for these shares is the same as set out in the FY2017 LTIP Outcome section on page 115). The estimated value shown for FY2019 is calculated using the vesting percentage of 75% and the average share price over the 3 months to 31 July 2019 of 1,536.46p. The FY2019 figure also includes an amount of £39,041 in respect of the value of 2,541 dividend equivalent shares.

INCENTIVE OUTCOMES FOR FY2019 (AUDITABLE)

FY2019 annual bonus outcome for Andy Reynolds Smith and John Shipsey:

The table below summarises the structure of the FY2019 annual bonus, our performance and the resulting annual bonus payout for each of the Executive Directors.

Director	Measure	Weighting	Maximum Opportunity (% of salary)	Earned bonus		
				(% of max. bonus)	(% salary)	£000
Andy Reynolds Smith	EPS after tax	40%	72%	18.0%	32.4%	265
	Op. Cash Conversion	20%	36%	2.5%	4.5%	37
	Organic Sales Growth	30%	54%	11.7%	21.1%	173
	Personal Objectives	10%	18%	9.0%	16.2%	133
Total		100%	180%	41.2%	74.2%	608
John Shipsey	EPS after tax	40%	60%	18.0%	27.0%	141
	Op. Cash Conversion	20%	30%	2.5%	3.8%	20
	Organic Sales growth	30%	45%	11.7%	17.6%	92
	Personal Objectives	10%	15%	9.0%	13.5%	71
Total		100%	150%	41.2%	61.9%	324

The table below summarises the financial targets and the Company's actual performance (including relevant Medical performance and re-expressed at budget exchange rates) against these for the FY2019 annual bonus.

Measure	Performance targets and actual performance			
	Threshold 25% payout	Target 60% payout	Maximum 100% payout	Actual
EPS after tax ¹	89.6p	96.4p	102.3p	93.5p
Operating Cash Conversion ²	H1 74%	84%	94%	74%
	FY 90%	100%	105%	82%
Organic Sales Growth ³	2%	3%	5%	2.4%

¹ An adjustment to the EPS target was agreed by the Remuneration Committee to reflect the effect of business divestments, in line with normal practice. This had the effect of reducing the EPS target from 97.3p to 96.4p. Minor adjustments to the EPS performance achievement in respect of unbudgeted tax impact were agreed by the Remuneration Committee, in line with normal practice. This had the effect of increasing the reported EPS figure at budget exchange rates from 92.5p to 93.5p.

² 50% of the maximum opportunity is available for each of H1 and FY.

³ The 2.4% organic sales growth is based on revenue (including Medical) of £3,372m retranslated at budget exchange rates (£103m) and the removal of impact of FY2019 acquisitions (£54m).

PERSONAL OBJECTIVES (AUDITABLE)

Challenging personal objectives were set for each Executive Director to reinforce the Company's operating and strategic priorities. The weighting applied to personal objectives has been reduced from 30% in previous years to 10% in FY2019.

Overall, Andy Reynolds Smith's performance against his personal objectives for FY2019 was rated at 90%. This reflects the continued delivery of growth for the Group and improvement of the acquisitions pipeline; strong progress in developing Smiths Group vision and future strategy together with the development of a strategic plan to deliver organic growth; positive results in development of the digital forge in support of divisional projects; and significant progress in developing organisational capability and succession planning at leadership level.

Overall, John Shipsey's performance against his personal objectives for FY2019 was rated at 90%. This reflects successful achievement of the development and execution of an agreed revitalised tax strategy; implementation of a process for improving capital allocation in relation to organic and inorganic investments, including qualitative and quantitative criteria to improve targeting of right opportunities; introduction of a next-generation working model for the Group and delivery of a cost-effective result; excellent progress in delivering a strategic solution for the Medical division which realises value for shareholders; and steady progress in development of the Finance function including upgrading talent, improvement of the operating model and execution of technology to demonstrate improvement in cash metrics.

INCENTIVE OUTCOMES FOR FY2018 (AUDITABLE)

The table below summarises the financial targets and the Company's actual performance, expressed at budgeted exchange rates, against these for the FY2018 annual bonus, which was reported in last year's remuneration report.

Measure	Weighting	Threshold (25% payment)	Target (60% payment)	Maximum (100% payment)	Actual	Earned bonus (% of max bonus)
EPS after tax ¹	50%	93.3p	98.2p	103.1p	94.1p	15.5%
Operating cash conversion ²	Q1	3%	84%		91%	3.0%
	Q2	3%	117%		106%	0.0%
	Q3	3%	103%		89%	0.0%
	Q4	3%	120%		108%	0.0%
	H1	4%	102%	107%	97%	0.0%
	H2	4%	112%	117%	97%	0.0%

1 The Committee applied discretion to take account of US tax rate changes which provided a beneficial impact on profit during the year. This resulted in a reduction in the actual level of EPS of 98.3p (at budget exchange rates) to an effective level of 94.1p, leading to a reduction in the bonus payment (bonus for Chief Executive was reduced from £828,000 to £612,000 and for CFO from £355,000 to £265,000).

2 Payment was dependent on exceeding target cash conversion for each relevant quarter (each quarter delivering 15% of total). Achievement for each half year performance between threshold (25% payout) and maximum (100% payout) delivered a further payout of up to 20% of total for each half year. The payout was only achieved in Q1 resulting in payout of 15% of the maximum amount under this measure.

Performance against FY2018 personal objectives for each of the Executive Directors was reported in last year's report. When these are added to the above earned bonus percentages, the resulting bonus payments are as reported in last year's remuneration report (Chief Executive 42.5% of maximum bonus, 76.5% of salary, £612,000 and CFO 44.0% of maximum bonus, 66.0% of salary, £265,000).

FY2017 LTIP OUTCOME (AUDITABLE)

Awards granted under the LTIP in October 2016 were subject to the following performance conditions:

Measure	Weighting	Performance period	Vesting schedule		Actual performance	
			Performance	% vesting	Outturn	% vesting
Group EPS growth before tax	35%	1 August 2016 to 31 July 2019	< 3% p.a.	0%	7.2% p.a.	21%
			3% p.a.	8.75%		
			≥ 12% p.a.	35.0%		
Straight-line vesting between these points						
Average ROCE	35%	1 August 2016 to 31 July 2019	< 15% p.a.	0%	16.8% p.a.	25%
			15% p.a.	8.75%		
			≥ 18% p.a.	35.0%		
Straight-line vesting between these points						
Average operating cash conversion	30%	1 August 2016 to 31 July 2019	< 85%	0%	99.5% p.a.	29%
			85%	7.5%		
			≥ 100%	30.0%		
Straight-line vesting between these points						
Total						75%

FY2017 LTIP OUTCOME FOR EXECUTIVE DIRECTORS (AUDITABLE)

	Interests held	Vesting %	Interests vesting	Date of vesting	Market price ¹	Value £000 ²
Andy Reynolds Smith	167,741	75%	125,805	Oct 2019	£15,3646	1,933

John Shipsey and Bill Seeger did not participate in the FY2017 LTIP.

1 Based on the average share price over the three months to 31 July 2019 of 1,536.46p.

2 In addition an accrued dividend payment of £164,364 is payable at vesting date

FY2017 LTIP OUTCOME FOR PAST DIRECTORS (AUDITABLE)

	Interests held	Vesting %	Interests vesting	Date of vesting	Market price ¹	Value £000 ²
Chris O'Shea ³	37,886	75%	28,414	Oct 2019	£15,3646	£437

1 Based on the average share price over the three months to 31 July 2019 of 1,536.46p.

2 In addition an accrued dividend payment of £37,123 is payable at vesting date.

3 Chris O'Shea was formerly the Chief Financial Officer and an Executive Director of the Company. He ceased to be an employee on 18 November 2017 and his original share award of 90,927 shares was pro-rated as per his termination agreement.

SCHEME INTERESTS AWARDED IN FY2019 (AUDITABLE)

FY2019 LTIP

During the year ended 31 July 2019, the Executive Directors were awarded a fixed number of conditional share awards under the LTIP details of which are summarised in the table below. These awards were equivalent to 300% of base salary for Chief Executive and 250% for Chief Financial Officer.

Executive	Form of award	Date of grant	Number of shares awarded	Face value			Date of vesting
				Award price ¹	£000	% of salary	
Andy Reynolds Smith	Conditional shares	31 Oct 2018	179,627	£13.695	2,460	300%	Oct 2021
John Shipsey	Conditional shares	31 Oct 2018	95,837	£13.695	1,312	250%	Oct 2021

1 The closing price on 30 October 2018.

The performance conditions attached to these FY2019 LTIP awards are as follows:

Measure	Weighting	Performance period	Vesting schedule	
			Performance	% vesting
Group EPS growth after tax	25%	1 August 2018 to 31 July 2021	< 4% p.a.	0%
			4% p.a.	6.25%
			≥ 11% p.a.	25.0%
Straight-line vesting between these points				
Average ROCE	20%	1 August 2018 to 31 July 2021	< 15% p.a.	0%
			15% p.a.	5.0%
			≥ 18% p.a.	20.0%
Straight-line vesting between these points				
Average operating cash conversion	25%	1 August 2018 to 31 July 2021	< 90%	0%
			90%	6.25%
			≥ 105%	25.0%
Straight-line vesting between these points				
Organic sales growth	30%	1 August 2018 to 31 July 2021	< 3%	0%
			3%	7.5%
			≥ 6%	30.0%
Straight-line vesting between these points				

FY2019 Deferred bonus award

During the year ended 31 July 2019, Andy Reynolds Smith and John Shipsey were awarded conditional shares as deferred bonus awards in relation to the FY2018 annual bonus outcome, details of which are summarised in the table below. There are no further performance conditions or other conditions for these awards.

Executive	Form of award	Date of grant	Number of shares awarded	Face value		Date of vesting
				Award price ¹	£000	
Andy Reynolds Smith	Conditional shares	31 Oct 2018	14,746	£13.695	202	Oct 2021
John Shipsey	Conditional shares	31 Oct 2018	6,393	£13.695	88	Oct 2021

1 The closing price on 30 October 2018.

SAYE

Andy Reynolds Smith became a participant in the Smiths Group Sharesave Scheme in the year ending 31 July 2016. 2,078 share options under this scheme vested on 1 August 2019 at the option price of 866p. As he had chosen to participate at the maximum level he did not participate in the scheme in the years ending 31 July 2017 and 31 July 2018. A further 1,515 share options were granted in May 2019, effective from August 2019, at the option price of 1188p (a discount of 20% to the market price) with a face value of £18,000 and a vesting date of August 2022.

John Shipsey became a participant in the Smiths Group Sharesave Scheme in the year ending 31 July 2019. He has 1,515 share options under the scheme granted in May 2019, effective from August 2019, at the option price of 1188p (a discount of 20% to the market price) with a face value of £18,000 and a vesting date of August 2022.

BUYOUT AWARDS

Andy Reynolds Smith was made certain buyout awards to replicate the structure and fair value of incentives forfeited as a consequence of joining Smiths Group.

He received an award of 86,893 restricted shares, the grant value of which was captured in the 2016 single figure. 30,412 shares vested on the 30 June 2016 and the remaining 56,481 restricted shares vested on 30 June 2017 (at a share price of 1,597p). Andy Reynolds Smith also received awards of 79,806, 26,602 and 26,602 conditional shares which vest, subject to performance conditions, in October 2018, 2019 and 2020 respectively. The estimated value of the award vesting in October 2019 is included in this year's single figure of remuneration table for Andy Reynolds Smith (see note 13 on page 113). To the extent the final award vests, its value will be reflected in the FY2020 single figure of remuneration.

PERCENTAGE CHANGE IN REMUNERATION FROM FY2018 TO FY2019

	Salary/Fees	Benefits	Bonus
Chief Executive remuneration	2.5%	(10)%	(1)%
Chief Financial Officer remuneration	2.9%	0%	(4)%
Non-executive Director remuneration	2.5%	33%	0%
Average of all employees	2.9%	2.9%	12%

'All employees' is defined as all UK Group employees, 483 employees at all grades.

CHIEF EXECUTIVE PAY RATIOS

These ratios set out the comparison between the Chief Executive's remuneration and that for employees in the UK workforce.

Year	Method	Pay element	25th percentile ratio	Median pay ratio	75th percentile ratio
FY2019	B	Total pay	133:1	97:1	65:1
FY2018	B	Total pay	107:1	77:1	52:1
FY2019	B	Fixed pay	36:1	26:1	18:1
FY2018	B	Fixed pay	36:1	26:1	18:1

Pay data for the Chief Executive is taken from the total single figure of remuneration table on page 113. The pay data for employees in the UK workforce is based on the data used for gender pay reporting as the equivalent figures to the single figure table are not available at the time of producing this report. The gender pay reporting basis comprises payments received during FY2019 (FY2019 base salary and benefits, FY2018 incentive payments) and it is assumed that the value of employee benefits is 7.0% of base salary. The workforce remuneration figures are those paid to UK employees whose pay is at the 25th, median and 75th percentile of pay for the Group's UK employees. Figures are shown on both the prescribed basis using total pay and also using fixed pay excluding incentives, which provides a useful ongoing comparison as it is a less volatile basis. The increase in the ratios on a total pay basis is as a result of the increase in the Chief Executive's long-term incentive payments in FY2019 compared to FY2018. The ratios on a fixed pay basis are consistent for FY2019 and FY2018. The Committee will monitor the ratios on an annual basis.

RELATIVE IMPORTANCE OF SPEND ON PAY

The table below shows shareholder distributions (i.e. dividends and share buybacks) and total employee pay expenditure for the financial years ended 31 July 2018 and 31 July 2019, and the percentage change.

	FY2019 £m	FY2018 £m	Change
Shareholder distributions	178	172	3.5%
Employee costs	1,050	989	6.2%

PAYMENTS TO PAST DIRECTORS (AUDITABLE)

Other than the FY2017 LTIP award for Chris O'Shea vesting in October 2019, disclosed on page 115, and the gifts to retiring Non-executive Directors disclosed on page 113, there were no payments to past Directors attributable to FY2019.

PAYMENTS FOR LOSS OF OFFICE (AUDITABLE)

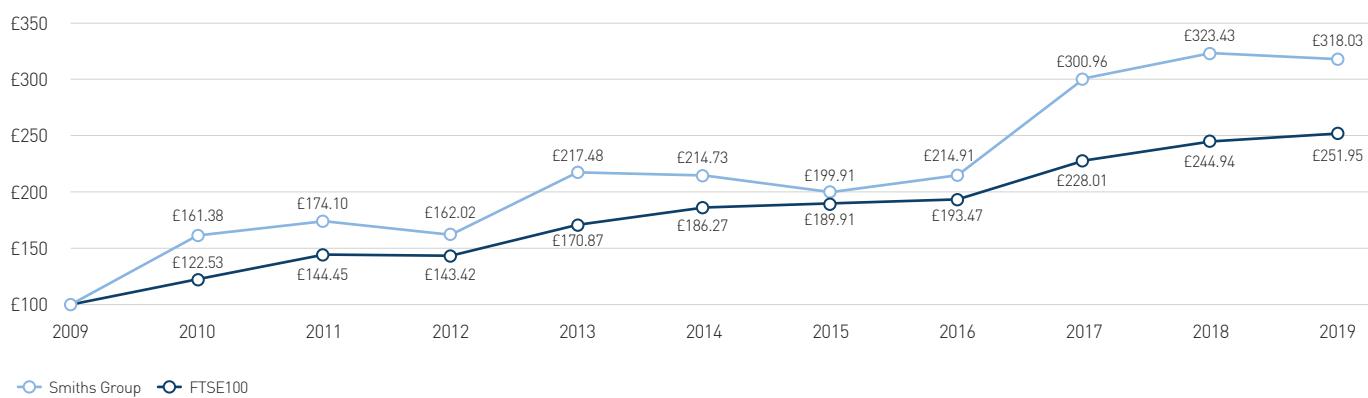
There were no payments made for loss of office during the year.

TSR PERFORMANCE

The following graph shows the Company's total shareholder return (TSR) performance over the past ten years compared to the FTSE 100 Index. The FTSE 100 Index, of which the Company has been a member throughout the period, has been selected to reflect the TSR performance of other leading UK-listed companies. The values of hypothetical £100 investments in the FTSE 100 Index and Smiths Group plc shares at 31 July 2019 were £251.90 and £318.13 respectively.

Total Shareholder Return

Value of £100 invested on 31 July 2009



CHIEF EXECUTIVE'S REMUNERATION FOR THE LAST TEN YEARS

	FY2010 P Bowman	FY2011 P Bowman	FY2012 P Bowman	FY2013 P Bowman	FY2014 P Bowman	FY2015 P Bowman	FY2016 P Bowman	FY2016 A Reynolds Smith	FY2017 A Reynolds Smith	FY2018 A Reynolds Smith	FY2019 A Reynolds Smith
Total remuneration £000	3,399	4,776	5,026	3,864	3,912	4,195	1,602	2,964	2,320	3,251	4,130
Annual bonus outcome (% max)	95%	64%	79%	39%	43%	80%	88%	89%	96%	42%	41%
CIP outcome (% max)	n/a	100%	100%	100%	100%	100%	100%	n/a	n/a	n/a	n/a
2007 Performance Share Plan outcome (% max)	46%	33%	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
LTIP outcome (% max)					18%	17%	18%	n/a	n/a	32%	75%

STATEMENT OF IMPLEMENTATION OF REMUNERATION POLICY IN FY2020

Base salary

Salaries are reviewed (but not necessarily increased) annually and benchmarked against comparable roles at other FTSE 100 companies of similar market capitalisation, revenues and complexity. The salary review date has been moved from 1 August to 1 October in 2019 as part of a Group-wide exercise.

Having considered a number of important factors including individuals' performance and experience, the relative performance of the Company and the Remuneration Policy within the Company, the Committee has determined to increase the salary of the Chief Executive to £843,780 and of the Chief Financial Officer to £540,225. This represents an annual review of 2.5%, which is in line with the average increase for UK employees, plus an adjustment of 0.4% in respect of the later review date. This results in the following annualised salaries for Executive Directors:

	FY2019	FY2020
Andy Reynolds Smith	£820,000	£839,817
John Shipsey	£525,000	£537,688

Pension and benefits

The employment contracts of the two Executive Directors provide for a cash allowance of 25% of base salary in lieu of pension provision. Both Executive Directors have agreed, for FY2020, to freeze the monetary value of the allowance at the FY2019 level, reducing the level of benefit to 24.4% of base salary for FY2020.

Annual bonus

For FY2020, Andy Reynolds Smith will continue to have a maximum bonus opportunity of 180% of salary and John Shipsey 150%. 33% of any bonus earned will be deferred into shares for three years. Specific targets are not disclosed at this time due to the commercially sensitive nature of these objectives, but they will be disclosed at such a time as the Committee deems them to no longer affect the commerciality of the Company.

Long-Term Incentive Plan (LTIP)

The LTIP is a conventional share plan under which an award over a capped number of shares will vest if demanding performance conditions are met. LTIP awards of conditional shares are granted to selected senior executives (including the Executive Directors) with face values of up to 400% of salary. Under the LTIP, for the FY2020 award, a fixed number of shares will be granted at the same level as in FY2019. This would be equivalent to 327% of salary for the Chief Executive and 272% of salary for the Chief Financial Officer, based on the average share price for the three months to 31 July 2019 (1536.46p).

The LTIP awards granted to Andy Reynolds Smith and John Shipsey in FY2020 will vest on the achievement of the following performance conditions:

Performance measure	Weighting	Threshold performance target	Maximum performance target (full vesting of element)
Three-year EPS growth after tax	25%	4% p.a.	11% p.a.
Three-year average return on capital employed	20%	15%	18% p.a.
Three-year average annual operating cash conversion	25%	90%	105%
Three-year average organic sales growth	30%	3%	6% p.a.

The Committee believes that the proposed structure provides an appropriate balance between earnings growth, returns, cash and sales growth. The Committee recognises that this balance of Group performance measures remains very important for many of our largest shareholders. The scorecard will be reviewed at the start of each future LTIP cycle to ensure it continues to reflect the Group's strategic priorities.

For performance between 'threshold' and 'maximum', awards vest on a straight-line sliding scale.

NON-EXECUTIVE DIRECTOR FEES

Non-executive Director fees paid during FY2019 are shown below:

	FY2019
Non-executive Director base fee	£69,500
Additional fee payable to the Chairman of the Board	£353,675
Additional fee payable to the Senior Independent Director	£20,000
Additional fees for Audit & Risk, Nomination & Governance and Remuneration Committee Chairs	£20,000
Attendance allowance for meetings outside the Non-executive Director's home continent	£4,000 per meeting

SHARE OWNERSHIP REQUIREMENT (AUDITABLE)

Executive Directors are required, over time, to build up a shareholding with a value equal to at least 250% of base salary for the Chief Executive and 200% for the Chief Financial Officer. Executive Directors are required to retain at least 50% of any net vested share awards (after sales to meet tax liabilities) until those guidelines are achieved. Shares under deferred bonus awards and LTIP awards which have vested but are subject to a further holding period (net of assumed income tax) count towards the requirement. Awards that are still subject to performance conditions do not count towards the requirement.

There is no shareholding policy for Non-executive Directors.

DIRECTORS' SHAREHOLDINGS (AUDITABLE)

The table below shows the shareholding of each Director and for Executive Directors the shareholding against their respective shareholding requirement as at 31 July 2019.

	Shareholding requirement (% FY2019 salary)	Shares owned outright	Shares subject to performance	Vested shares in holding period	Shares arising from bonus deferral	Save As You Earn (SAYE)	Current shareholding (% FY2019 salary)	Shareholding requirement met ¹
Andy Reynolds Smith	250%	201,922	553,126	0	67,910	3,593	479%	Yes
John Shipsey	200%	25,048	177,306	0	6,393	1,515	89%	No
Sir George Buckley		16,461						
Bruno Angelici		2,000						
Olivier Bohuon		2,972						
Dame Ann Dowling		5,813						
Tanya Fratto		1,500						
Bill Seeger		10,000						
Mark Seligman		5,000						
Noel Tata		2,000						

¹ Shares owned outright (including vested shares in holding period), and the net of income tax value of shares arising from bonus deferral are taken into account for the shareholding requirement. Executive Directors have five years from the date of appointment to meet the required personal shareholding; John Shipsey therefore has until 31 December 2022 to meet the requirement.

In accordance with a binding commitment entered into on 19 July 2017, pursuant to which the Chairman purchases ordinary shares on a quarterly basis using a fixed proportion (20%) of the after-tax fees he receives from the Company, Sir George Buckley acquired 763 ordinary shares on 1 August 2019. There have been no other changes in the interests of the Directors and their connected persons between 31 July 2019 and the date of this report except that 2,078 of the SAYE share options reported above for Andy Reynolds Smith matured on 1 August 2019 (as detailed on p116) and are now shares owned outright.

DIRECTORS' SHARE OPTIONS AND LONG-TERM SHARE PLANS (AUDITABLE)

Director and Plans	Options and awards held on 31 July 2019 Number	Options and awards held on 31 July 2018 Number	Performance test	Exercise price	Grant date	Vesting date*	Expiry date**Date vested	Number	Exercise price	Option and award data		Awards vested FY2019 Market price at date of grant	Market price at date of vesting	
	Number	Number								Number	Number			
Andy Reynolds Smith														
Performance Share Award	0	79,806	A	n/a	26/11/15	Oct 2018	9/10/18	28,073	n/a	1033p	1473p	(inc. 2,472 dividend equivalent)		
	26,602	26,602	B	n/a	26/11/15	Oct 2019								
	26,602	26,602	B	n/a	26/11/15	Oct 2020								
LTIP 2015	0	226,524	A	n/a	26/11/15	Oct 2018	9/10/18	72,668	n/a	1033p	1473p			
	167,741	167,741	B	n/a	8/11/16	Oct 2019								
	153,354	153,354	B	n/a	27/10/17	Oct 2020								
	179,627	0	C	n/a	31/10/18	Oct 2021								
Deferred bonus award	24,546	24,546	–	n/a	8/11/16	8/11/19								
	28,618	28,618	–	n/a	27/10/17	27/10/20								
	14,746	0	–	n/a	31/10/18	31/10/21								
SAYE	2,078	2,078	–	866p	11/05/16	01/08/19	01/02/20							
	1,515	0	–	1188p	10/05/19	01/08/22	01/02/23							

John Shipsey

LTIP 2015	81,469	81,469	B	n/a	27/10/17	Oct 2020
	95,837	0	C	n/a	31/10/18	Oct 2021
Deferred bonus award	6,393	0	–	n/a	31/10/18	31/10/21
SAYE	1,515	0	–	1188p	10/05/19	01/08/22

Key

- Performance Share Award Under the terms of his contract of employment on joining the Company, Andy Reynolds Smith was granted a buy-out conditional award over 133,010 shares of which the first tranche of up to 60% (subject to the performance tests applicable to awards granted under LTIP 2015 in 2015) vested in October 2018; up to 20% are expected to vest in October 2019 (subject to performance tests applicable to awards granted under long-term incentive plans in 2016); and up to 20% are expected to vest in October 2020 (subject to the performance tests applicable to awards granted under long-term incentive plans in 2017). The terms of the award provide that additional shares are awarded on vesting to a value equivalent to the notional dividends that would have been earned on the number of shares that vest.
- LTIP 2015 The Smiths Group Long-Term Incentive Plan 2015.
- SAYE The Smiths Group Sharesave Scheme.
- + The vesting dates shown above in respect of awards made under the LTIP are subject to the relevant performance test(s) being passed.
- ++ The expiry dates shown above apply in normal circumstances.

Performance tests

- A LTIP awards in 2015 – 30% subject to revenue growth; 30% subject to EPS element; 20% subject to cash conversion; 20% subject to return on capital employed
- B LTIP awards in 2016 and 2017 – 35% subject to EPS element; 35% subject to ROCE; 30% subject to cash conversion.
- C LTIP awards in 2018 – 25% subject to EPS element; 20% subject to ROCE; 25% subject to cash conversion; 30% subject to organic sales growth.
- There are no performance criteria for the Deferred Bonus Shares awards or SAYE.

Notes

- The high and low market prices of the ordinary shares during the period 1 August 2018 to 31 July 2019 were 1676.5p and 1256.74p respectively. The mid-market closing price on 31 July 2018 was 1614p and on 31 July 2019 was 1642p.
- The mid-market closing price of a Smiths Group share on the date of the awards made to Directors in the FY2019 financial year was 1369.5p (31 October 2018).
- The options over the 2,078 maturing shares granted to and held by the Chief Executive at 31 July 2019 were granted at an exercise price below the market price of a Smiths Group share on 8 April 2016 (1082p). The options over 1,515 shares and 1,515 new shares granted to and held by the Chief Executive and Chief Financial Officer respectively under SAYE at 31 July 2019 were granted at exercise prices below the market price of a Smiths Group share on 9 April 2019 (1,485p). Shares are granted in May but the savings period commences in August.
- None of the options or awards listed above was subject to any payment on grant.
- No other Directors held any options over the Company's shares during the period 1 August 2018 to 31 July 2019.
- No options or awards have been granted to or exercised by Directors or have lapsed during the period 1 August to 16 September 2019, other than for Andy Reynolds Smith for whom 2,078 SAYE share options matured on 1 August 2019 as reported on page 116.
- At 31 July 2019, the trustee of the Employee Share Trust held 53,058 shares (none of the Directors had an interest in these shares at 31 July 2019). The market value of the shares held by the trustee on 31 July 2019 was £871,212 and dividends of approximately £23,797 were waived in the year in respect of the shares held by the trustee during the year.
- Special provisions permit early exercise of options and vesting of awards in the event of retirement, redundancy, and death.

SHARE SCHEME DILUTION LIMITS

The Company complies with the guidelines laid down by the Investment Association. These restrict the issue of new shares under all the Company's share schemes in any ten year period to 10% of the issued ordinary share capital and under the Company's discretionary schemes to 5% in any ten year period. As at 31 July 2019, the headroom available under these limits was 8.56% and 4.03%, respectively.

PERFORMANCE EVALUATION

The annual evaluation of the performance of the Committee was conducted as part of the overall annual evaluation of the performance of the Board facilitated by Independent Audit. The findings relating to the Committee were discussed with the Committee Chair. Overall, the Committee is viewed as effective and performing well and is rigorous in discharging its responsibilities.

The Directors' remuneration report has been approved by the Board and signed on its behalf by:

Bill Seeger
CHAIR OF THE REMUNERATION COMMITTEE
19 September 2019

DIRECTORS' REPORT

The Strategic Report is a requirement of the Companies Act 2006 (the 'Act') and can be found on pages 04 to 72. The Company has chosen, in accordance with section 414 C(11) of the Act, to include certain matters in its Strategic Report that would otherwise be disclosed in this Directors' Report. The Strategic Report and the Directors' Report together are the management report for the purposes of Rule 4.1.8R of the Disclosure Guidance and Transparency Rules. Other information that is relevant to the Directors' Report, and is incorporated by reference, can be found as follows:

Disclosure	Location
Likely future developments	Strategic Report pages 10-46
Directors' dividend recommendation	Strategic Report page 24
Research and development activities	Strategic Report pages 28-46
Employment of disabled persons	Resources and Relationships page 51
Employee involvement	Resources and Relationships pages 48-52
Political donations and expenditure	Resources and Relationships page 53
Greenhouse gas emissions	Resources and Relationships page 58
Corporate governance statement	Corporate Governance Report pages 74-124
Directors during FY2019	Corporate Governance Report pages 76-79
Director appointment and replacement	Corporate Governance Report page 91
Amendment of Articles of Association	Corporate Governance Report page 91
Indemnities	Corporate Governance Report page 91
Change of control	Remuneration Report page 111 and Borrowings and net debt note page 173
Directors' responsibility statement	Statement of Directors' responsibilities page 124
Disclosure of information to auditor	Statement of Directors' responsibilities page 124
Financial instruments	Financial risk management note pages 173-179
Share capital disclosures	Share capital note page 187
Powers of the Directors	Share capital note page 187
Post-balance sheet events	Post-balance sheet event note page 207
Overseas branches	Subsidiary undertakings note page 216

LISTING RULES DISCLOSURE

Information required by the Financial Conduct Authority's Listing Rules can be found as set out below. There are no further disclosures required in accordance with Listing Rule 9.8.

Listing Rule	Disclosure	Location
9.8.4(1)	Capitalised interest	Discontinued operations note page 189
9.8.4(12)(13)	Dividend waivers	Dividend note page 187
9.8.6(1)	Directors' interests	Remuneration Report page 120
9.8.6(2)	Major shareholders' interests	Corporate Governance Report page 82
9.8.6(3)(a)(b)	Going concern and viability statements	Strategic Report pages 71-72
9.8.6(4)(a)	Purchase of own shares	Share capital note page 187
9.8.6(5)(6)	UK Corporate Governance Code compliance	Corporate Governance Report page 75 and table below
9.8.6(7)	Unexpired term of service contract	Remuneration Report page 110

2016 UK CORPORATE GOVERNANCE CODE COMPLIANCE

Principle	Disclosure	Location
Leadership	The Board and the Board governance structure	Pages 76-79 and 83-85
Effectiveness	Activities of the Board and its Committees and Board evaluation	Pages 86-87 and 92-93
Accountability	The Audit & Risk Committee Report describes the role of the Board in this area. The Strategic Report contains detail on the principal risks to the business.	Pages 94-99 Pages 62-70
Remuneration	The Remuneration Committee report, Remuneration Policy and Remuneration Report	Pages 100-122
Relations with shareholders	Relations with our shareholders	Page 82

By order of the Board

John Mills

COMPANY SECRETARY

19 September 2019

STATEMENT OF DIRECTORS' RESPONSIBILITIES

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 accounts for each financial year. Under company law the Directors must not approve the accounts unless they are satisfied that they give a true and fair view of the state of affairs of the Group and the Company and of the profit or loss of the Group for that period. In preparing these accounts, the Directors are required to:

- select suitable accounting policies and then apply them consistently;
- make judgements and accounting estimates that are reasonable and prudent;
- state whether applicable IFRSs as adopted by the European Union have been followed for the Group financial statements and United Kingdom Accounting Standards, comprising FRS 101, have been followed for the Company financial statements, subject to any material departures disclosed and explained in the financial statements; and
- prepare the accounts on the going concern basis unless it is inappropriate to presume that the Group and the Company will continue in business.

The Directors are responsible for keeping adequate accounting records that are sufficient to show and explain the Group's and the Company's transactions and disclose with reasonable accuracy at any time the financial position of the Group and the Company and enable them to ensure that the accounts and the Directors' Remuneration Report comply with the Companies Act 2006 and, as regards the Group financial statements, Article 4 of the IAS Regulation. They are also responsible for safeguarding the assets of the Group and the Company and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

The Directors are responsible for the maintenance and integrity of the Company's website. Legislation in the United Kingdom governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

DIRECTORS' RESPONSIBILITY STATEMENT

The Directors consider that 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.

Each of the Directors (who are listed on pages 76 to 79) confirms that to the best of his or her knowledge:

- the Group's financial statements have been prepared in accordance with IFRS as adopted by the European Union and give a true and fair view of the Group's assets, liabilities and financial position as at 31 July 2019 and of its profit for the financial year then ended;
- the Group Directors' Report and Strategic Report include a fair review of the development and performance of the business and the position and performance of the Group, together with a description of the principal risks and uncertainties that the Group faces;
- the Company financial statements, which have been prepared in accordance with United Kingdom Generally Accepted Accounting Practice (United Kingdom Accounting Standards, comprising FRS 101 "Reduced Disclosure Framework", and applicable law), give a true and fair view of the assets, liabilities, financial position and profit of the Company; and
- as at the date of this report there is no relevant audit information of which the Company's auditor is unaware. Each Director has taken all the steps he or she should have taken as a Director in order to make himself or herself aware of any relevant audit information and to establish that the Company's auditors are aware of that information.

Signed on behalf of the Board of Directors:

Andy Reynolds Smith

CHIEF EXECUTIVE

19 September 2019

John Shipsey

CHIEF FINANCIAL OFFICER



INDEPENDENT AUDITORS' REPORT TO THE MEMBERS OF SMITHS GROUP PLC

Report on the audit of the financial statements

OPINION

In our opinion:

- Smiths Group plc's Group financial statements and Company financial statements (the "financial statements") give a true and fair view of the state of the Group's and of the Company's affairs as at 31 July 2019 and of the Group's profit and cash-flows for the year then ended;
- the Group financial statements have been properly prepared in accordance with International Financial Reporting Standards (IFRSs) as adopted by the European Union;
- the Company financial statements have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice (United Kingdom Accounting Standards, comprising FRS 101 "Reduced Disclosure Framework", and applicable law); 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.

We have audited the financial statements, included within the Annual Report, which comprise: the consolidated balance sheet and Company balance sheet as at 31 July 2019; the consolidated income statement and consolidated statement of comprehensive income for the year then ended; the consolidated cash-flow statement for the year then ended; the consolidated statement of changes in equity and the Company statement of changes in equity for the year then ended; the accounting policies and the notes to the financial statements.

Our opinion is consistent with our reporting to the Audit & Risk Committee.

BASIS FOR OPINION

We conducted our audit in accordance with International Standards on Auditing (UK) ("ISAs (UK)") and applicable law. Our responsibilities under ISAs (UK) are further described in the Auditors' responsibilities for the audit of the financial statements section of our report. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Independence

We remained independent of the Group in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, which includes the FRC's Ethical Standard, as applicable to listed public interest entities, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

To the best of our knowledge and belief, we declare that non-audit services prohibited by the FRC's Ethical Standard were not provided to the Group or the Company.

Other than those disclosed in note 2 to the financial statements, we have provided no non-audit services to the Group or the Company in the period from 1 August 2018 to 31 July 2019.

Our audit approach

Overview



MATERIALITY

- Overall Group materiality: £15m (2018: £20m), based on approximately 3.5% of headline operating profit from continuing operations.
- Overall Company materiality: £13m (2018: £18m), based on approximately 0.5% of total assets, capped at a level below overall Group materiality.

AUDIT SCOPE

- We conducted full scope audits at 21 reporting units across 11 countries.
- In addition, we performed the audit of specific balances and transactions at 12 reporting units across the United States, Canada, Japan and the Middle East.
- During the year, the Group engagement team visited multiple material reporting units in North America and Europe and attended the year end clearance meetings for each division.

KEY AUDIT MATTERS

- Revenue recognition (occurrence & cut-off) together with accounting for complex programmes and contract accounting in the Smiths Detection and Smiths Interconnect Divisions (Group).
- Product litigation provisions for asbestos in John Crane, Inc. and flexible gas piping product in Titeflex Corporation, a subsidiary of the Flex-Tek Division (Group).
- Taxation provisions and the recognition of deferred tax assets (Group).
- Goodwill and intangible asset impairment assessments (Group).
- Recoverability and appropriateness of capitalisation of development costs (Group).
- Presentation of discontinued operations (Group).
- Acquisition of United Flexible, Inc. (Group).

THE SCOPE OF OUR AUDIT

As part of designing our audit, we determined materiality and assessed the risks of material misstatement in the financial statements.

Capability of the audit in detecting irregularities, including fraud

Based on our understanding of the Group and industry, we identified that the principal risks of non-compliance with laws and regulations related to breaches of environmental and product quality regulations, data protection regulations including General Data Protection Regulation (GDPR) and unethical and prohibited business practices (see pages 62 to 70 of the Annual Report), and we considered the extent to which non-compliance might have a material effect on the financial statements. We also considered those laws and regulations that have a direct impact on the preparation of the financial statements such as the Companies Act 2006 and the listing rules of the Financial Conduct Authority (FCA). We evaluated management's incentives and opportunities for fraudulent manipulation of the financial statements (including the risk of override of controls), and determined that the principal risks were related to posting journal entries to increase revenue, manipulation of when revenue is recognised and management bias in accounting estimates or the identification of performance obligations. The Group engagement team shared this risk assessment with the component auditors so that they could include appropriate audit procedures in response to such risks in their work. Audit procedures performed by the Group engagement team and/or component auditors included:

- Discussions with management, internal audit and the Group's legal counsel, including consideration of known or suspected instances of non-compliance with laws and regulation and fraud;
- Assessment of matters reported on the Group's whistleblowing helpline and the results of management's investigation of such matters;
- Challenging assumptions and judgements made by management in determining significant accounting estimates, in particular in relation to impairment of goodwill and intangible assets, acquisition accounting and product litigation (see related key audit matters below);
- Identifying and testing journal entries, in particular any journal entries posted with unusual account combinations; and
- Identifying revenue recognised close to the year end and verifying that the relevant performance obligations were satisfied (see related key audit matter below).

There are inherent limitations in the audit procedures described above and the further removed non-compliance with laws and regulations is from the events and transactions reflected in the financial statements, the less likely we would become aware of it. Also, the risk of not detecting a material misstatement due to fraud is higher than the risk of not detecting one resulting from error, as fraud may involve deliberate concealment by, for example, forgery or intentional misrepresentations, or through collusion.

KEY AUDIT MATTERS

Key audit matters are those matters that, in the auditors' professional judgement, were of most significance in the audit of the financial statements of the current period and include the most significant assessed risks of material misstatement (whether or not due to fraud) identified by the auditors, 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. These matters, and any comments we make on the results of our procedures thereon, were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters. This is not a complete list of all risks identified by our audit.

Key audit matter**Revenue recognition (occurrence & cut-off), together with accounting for complex programmes and contract accounting in Smiths Detection and Smiths Interconnect Divisions (Group)**

We focused on revenue recognition for all divisions in the Group to check that revenue has been appropriately recognised upon fulfilment of contractual obligations.

In the Smiths Detection and Smiths Interconnect divisions we focused on the accounting for complex programmes and contract accounting. The recognition of revenue is largely dependent on the terms of the underlying contract with the customer, including the nature of separate performance obligations within the contract, achieving milestones within those contracts and the mechanisms in the contract by which control of goods and services are transferred to the customer.

These contracts are usually long term in nature, sometimes spanning a number of reporting periods. This means that the final profitability of a contract, which will be based upon forecast revenues and costs to complete, can be uncertain during the earlier phases. Judgement must therefore be applied in order to estimate the profit margins applied to recognise the revenue that is allocated to performance obligations.

Changes in conditions and circumstances over time can result in variations to the original contract terms or to the overall profitability of the contract. This can include cost overruns which require further negotiation and settlements resulting in the need for additional provisions.

Refer also to the Significant Judgement and Issues section on page 96 and Accounting Policies section on pages 140 to 141.

How our audit addressed the key audit matter

For all the divisions we assessed whether the Group's revenue recognition policies complied with IFRSs as adopted by the EU, including IFRS 15: Revenue from contracts with customers, which the Group adopted in the year. Specifically, we considered whether all performance obligations in contracts had been appropriately identified and revenue recognised when they had been satisfied.

Where revenue was recognised at a point in time for the sale of goods we verified that this occurred when control over the goods transferred to the customer or the accounting period in which services were rendered by testing a sample of revenue items to contract and shipping documents, with a specific focus on major programmes where revenue was recorded close to the year end.

Where appropriate, we evaluated the relevant IT systems and tested the operating effectiveness of the internal controls over the recording of revenue in the correct period.

We also tested journal entries posted to revenue accounts to identify any unusual or irregular items, and the reconciliations between the systems used by the Group.

In the case of the Smiths Detection and Smiths Interconnect divisions, for a sample of contracts, we read the relevant customer agreements and tested the accounting for separate deliverables and performance obligations.

This testing included evaluating whether performance obligations had been satisfied, assessing the impact of any ongoing disputes, and assessing the reasonableness of the management's estimates of costs to complete the contract by comparing them to actual historical costs incurred on comparable contracts.

We did not identify any material exceptions from the audit work performed and we found estimates to be in line with our expectations.

Product litigation provisions for asbestos in John Crane, Inc. and flexible gas piping product in Titeflex Corporation, a subsidiary of the Flex-Tek Division (Group)

John Crane, Inc., a US-based subsidiary of the Group, is currently one of many co-defendants in litigation relating to products previously manufactured which contained asbestos. A provision of £237m has been made for the future defence costs which the Group is expected to incur and the expected costs of future adverse judgements against John Crane, Inc.

Titeflex Corporation, another US-based subsidiary of the Group, has received a number of claims from insurance companies seeking recompense on a subrogated basis for the effects of damage allegedly caused by lightning strikes in relation to its flexible gas piping product. It has also received a number of product liability claims regarding this product, some in the form of purported class actions. A provision of £74m has been made for the costs which the Group is expected to incur in respect of these claims.

We focused on these areas because there is significant judgement involved in the assumptions used to estimate the provisions, in particular those relating to the US litigation environment such as the future level of claims and the cost of defence. As a result the provision may be subject to potentially material revisions from time to time.

Refer also to the Significant Judgements and Issues section on page 96, Accounting Policies on pages 139 to 140 and note 22.

In John Crane, Inc. we used our own internal experts to challenge management's assumptions underlying the adverse judgment and defence cost provisions. This included an examination of the model maintained by management's valuation expert and evaluation of the work of that expert, by considering the appropriateness of the methodology used, the reasonableness of assumptions (including the use of a rolling 10 year horizon) and considering alternative outcomes, particularly the sensitivity calculations performed. In addition we tested the mathematical accuracy of the underlying calculations and agreed input data to source documents.

We tested management's underlying assumptions supporting its Titeflex provision. This included an evaluation of the valuation model, by testing the mathematical accuracy of the underlying calculations and the input data such as the average amount of settlements, the number of future settlements and the period over which expenditure can be reasonably estimated by benchmarking them to historical claims.

We also discussed these matters with the Group's internal legal counsel, obtained letters from external counsel and evaluated the appropriateness of the disclosures made in the Group financial statements.

We did not identify any material exceptions from our audit work. We also read the disclosures and found them to be consistent with the information we have obtained during the course of our audit.

Key audit matter	How our audit addressed the key audit matter
Taxation provisions and the recognition of deferred tax assets (Group)	<p>The Group has recognised £128m (£115m from the continuing business and £13m relating to the business held for distribution) of deferred tax assets, which involves judgement by management as to the likelihood of the realisation of these deferred tax assets. The expectation that the benefit of these assets will be realised is dependent on a number of factors, including appropriate taxable temporary timing differences, and whether there will be sufficient taxable profits in future periods to support recognition.</p> <p>The Group has recognised provisions against uncertain tax positions, the valuation of which is an inherently judgemental area. The Group has a wide geographic footprint and is subject to tax laws in a number of jurisdictions.</p> <p>Refer also to the Significant Judgements and Issues section on page 96, Accounting Policies section on page 140 and note 6.</p>
Goodwill and intangible asset impairment assessments (Group)	<p>We considered management's assessment as to whether there will be sufficient taxable profits in future periods to support the recognition of deferred tax assets by evaluating management's calculation of future cash-flow forecasts and the process by which they were drawn up, including testing the underlying calculations and comparing forecasts to historical performance. In doing this, we considered whether management's assumptions of the taxable profits for the continuing Group were appropriate.</p> <p>We used our tax specialists to assess management's methodology underlying the provisions for uncertain tax positions. We discussed with management the known uncertain tax positions and read communications from taxation authorities to identify areas of potential challenge.</p> <p>We did not identify any material exceptions from our audit work.</p> <p>The Group holds significant amounts of goodwill and intangible assets on the balance sheet, as detailed in note 10 to the financial statements. The risk is that these balances are materially overstated. Goodwill (£1,246m for the continuing business and £595m held for distribution) must be tested for impairment on at least an annual basis. The determination of recoverable amount, being the higher of value-in-use and fair value less costs to sell, requires judgement in both identifying and then valuing the relevant cash generating units (CGUs).</p> <p>The impairment assessment for these assets involves subjective judgements about future business performance, with key assumptions including cash-flows, the long-term growth rates and discount rates.</p> <p>The level at which goodwill impairment reviews have been performed has been reassessed in the year to reflect further integration within the divisions. This has resulted in goodwill being tested for impairment at the divisional level for each CGU across every division.</p> <p>Refer also to the Significant Judgements and Issues section on page 96, Accounting Policies section on pages 139 and 140 and notes 10 and 11.</p> <p>We reviewed management's internal reporting to determine the level at which the return on acquired goodwill is monitored by management and therefore determined that it is appropriate for goodwill to be tested for impairment at the divisional level.</p> <p>We obtained management's goodwill impairment model and tested the reasonableness of key assumptions, including revenue, profit and cash-flow growth rates, terminal growth rates and the selection of discount rates. We agreed the underlying cash-flow projections to management approved budgets and forecasts and assessed how these projections are compiled.</p> <p>Deploying our valuations experts, we assessed the terminal growth rate and the discount rate applied to each CGU compared with third party information, past performance, the Group's cost of capital and relevant risk factors. We performed our own risk assessment by considering historical performance and management's forecasting accuracy by applying any current year budget shortfalls to future forecasts to highlight the CGUs with either lower headroom or which are more sensitive to changes in key assumptions.</p> <p>We performed our own independent sensitivity analysis to understand the impact of reasonably possible changes in management's assumptions on the available headroom. We challenged the significant assumptions, specifically relating to revenue and profit growth in light of the individual CGU's past performance to assess whether the forecasts are achievable.</p> <p>As a result of our work, we determined that it was appropriate not to recognise an impairment charge in the year. We have assessed management's disclosures in light of the impairment testing performed and we considered the disclosures made to be reasonable. Management determined that no additional sensitivity disclosures should be provided and we found that this judgement was supported by reasonable assumptions that would require significant downside changes before any additional impairment was necessary.</p>

Key audit matter**Recoverability and appropriateness of capitalisation of development costs (Group)**

The Group holds £172m of capitalised development costs (£127m within assets held for distribution and £45m of capitalised development costs in the continuing business).

There is judgement whether the project is technically feasible and the likelihood that the intangible asset will generate future economic benefits. There is also judgement on what costs associated with the project should be capitalised rather than expensed as incurred.

Management prepares impairment models annually for in-development intangible assets to verify that the amount capitalised is recoverable. Judgement is required to ascertain the appropriate cash-flow forecasts, especially where products have no trading history, cost to complete the development and the appropriate discount rate.

Refer also to the Significant Judgements and Issues section on page 96, Accounting Policies section on page 140 and note 10.

How our audit addressed the key audit matter

We assessed the business cases supporting commercial viability and where applicable discussed the technical feasibility with the product development team. Where relevant we also obtained and reviewed the third party testing. We tested the development costs capitalised in the year to supporting documentation and verified that the costs were directly attributable to the project and necessary to create, produce and prepare the asset capable of operating in a manner intended by management and therefore were appropriate to capitalise rather than expense as incurred.

We obtained management's models supporting the recoverable value of capitalised development expenditure and evaluated the underlying forecast cash-flows based on the growth rates experienced by the market and comparable products. We performed independent sensitivity analyses to consider if a reasonably possible change in assumptions could result in an impairment.

As a result of our work, we concur with management's view that the costs capitalised at 31 July 2019 are appropriate and recoverable.

Presentation of discontinued operations (Group)

In July 2019, the Board of Directors approved plans to pursue a demerger of the Smiths Medical business and separately list the business in the United Kingdom.

At 31 July 2019, the demerger was not completed and, accordingly, the business was presented as held for distribution and as a discontinued operation at and for the year ended 31 July 2019.

The classification of the business as a discontinued operation has a significant impact on the financial statements, including additional disclosure and the requirement to present the results in the current and prior period separate from the continuing business and as profit from discontinued operations.

Judgement was also required in determining whether Smiths Medical met the criteria for classification as a discontinued operation, particularly if it is highly probable shareholders will approve the demerger.

Refer also to the Significant Judgements and Issues section on page 96, Accounting Policies section on page 141 and note 27.

Acquisition of United Flexible, Inc. (Group)

The Group completed its acquisition of United Flexible, Inc on 19 February 2019, resulting in the recognition of £146m of acquired intangibles and £124m of goodwill.

Judgement was required in identifying and valuing these acquired intangibles and goodwill and determining the valuation of the other assets and liabilities acquired. In addition, the disclosure requirements in respect of acquisitions are extensive.

Refer also to the Significant Judgements and Issues section on page 96, Accounting Policies on pages 139 to 140 and note 26.

We have examined minutes of board meetings, and communications with the Group's investors. We also examined the management's plans detailing how it plans to demerge the business to verify that it is highly probable that shareholder approval will be obtained and that distribution will occur within the next 12 months.

We considered the contribution of the Smiths Medical business to the Group and concur with management that it constitutes a single major line of operations.

As a result of our work, we concur with the conclusion to present the Smiths Medical business as held for distribution and as a discontinued operation.

We also assessed the adequacy of the disclosures in the notes to the consolidated financial statements. We considered that the disclosures are appropriate.

We obtained and read the United Flexible, Inc. Equity Purchase Agreement (EPA) to gain an understanding of the key terms of the acquisition. In testing this acquisition, we considered whether the identified intangible assets were appropriate by reference to the EPA, due diligence reports and other supporting documentation.

Deploying our valuation experts, we worked with management and management's third party expert to assess the methodology employed for calculating the fair values of the assets and liabilities and the appropriateness of the key assumptions used, including discount rates.

We also checked that the material fair value adjustments to the net assets were consistent with the accounting standard requirements.

We read the disclosures in the financial statements to satisfy ourselves that they are in line with the requirements of the relevant accounting standards.

As a result of our work we determined that the acquisition accounting and related disclosures were appropriate.

We determined that there were no key audit matters applicable to the Company to communicate in our report.

HOW WE TAILORED THE AUDIT SCOPE

We tailored the scope of our audit to ensure that we performed enough work to be able to give an opinion on the financial statements as a whole, taking into account the structure of the Group and the Company, the accounting processes and controls, and the industry in which they operate.

The Group is organised into five divisions: John Crane, Smiths Medical, Smiths Detection, Smiths Interconnect and Flex-Tek and is a consolidation of over 250 units. In establishing the overall approach to the Group audit, we determined the type of work that needed to be performed at the reporting units by us, as the Group Engagement team, or component auditors within PwC UK and from other PwC network firms operating under our instruction. Where the work was performed by component auditors, we determined the level of involvement we needed to have in the audit work at those reporting units to be able to conclude whether sufficient appropriate audit evidence had been obtained as a basis for our opinion on the financial statements as a whole.

The Group's operating reporting units vary significantly in size and we identified 21 reporting units that, in our view, required an audit of their complete financial information, due to their size or risk characteristics. Specific audit procedures over certain balances and transactions were performed at a further 12 reporting units, to give appropriate coverage of material balances at both divisional and Group levels. Of these, two reporting units have been determined to be financially significant based on their contribution to the Group's revenue and headline operating profit from continuing operations. In addition, specific audit procedures over certain balances and transactions were performed over reporting units where consolidation adjustments are made.

We conducted work in 11 countries and the Group engagement team visited reporting sites in North America and Europe, and participated in each of the divisional audit clearance meetings. Together, the reporting units subject to audit procedures accounted for 70% (FY2018: 69%) of the Group's revenues from continuing operations and 56% (FY2018: 50%) of the Group's headline operating profit from continuing operations. We have represented the proportion of the Group's revenue and headline operating profit from continuing operations in FY2018 that was subject to audit procedures on a consistent basis with the current year. We reported in FY2018 that units subject to audit procedures accounted for 74% of the Group's revenue and 79% of the Group's operating profit.

Further specific audit procedures over IT controls, central functions such as treasury and areas of judgement, including the accounting for acquisitions and disposals, taxation, goodwill, post-retirement benefits and material litigation, were performed at the local headquarters of each of the divisions and at the Group's Head Office.

MATERIALITY

The scope of our audit was influenced by our application of materiality. We set certain quantitative thresholds for materiality. These, together with qualitative considerations, helped us to determine the scope of our audit and the nature, timing and extent of our audit procedures on the individual financial statement line items and disclosures and in evaluating the effect of misstatements, both individually and in aggregate on the financial statements as a whole.

Based on our professional judgement, we determined materiality for the financial statements as a whole as follows:

	Group financial statements	Company financial statements
Overall materiality	£15m (FY2018: £20m).	£13m (FY2018: £18m).
How we determined it	Based on approximately 3.5% of headline operating profit from continuing operations.	Based on approximately 0.5% of total assets, capped at a level below overall Group materiality.
Rationale for benchmark applied	We applied this benchmark because, in our view, this is the metric against which the performance of the Group is most commonly measured. We have not taken profit from discontinued operations into account when determining our materiality as Smiths Medical will not contribute to the Group's profits following the demerger.	Consistent with last year, we applied this benchmark because, in our view, the Company is a holding company and the parent company of the Group, which is not a profit-oriented entity.

For each component in the scope of our Group audit, we allocated a materiality that is less than our overall Group materiality. The range of materiality allocated across components was between £1m and £13m. Certain components were audited to a local statutory audit materiality that was also less than our overall Group materiality.

We agreed with the Audit & Risk Committee that we would report to them misstatements identified during our audit above £1m (Group audit) (2018: £1m) and £1m (Company audit) (2018: £1m) as well as misstatements below those amounts that, in our view, warranted reporting for qualitative reasons.

GOING CONCERN

In accordance with ISAs (UK) we report as follows:

Reporting obligation

We are required to report if we have anything material to add or draw attention to in respect of the Directors' statement in the financial statements about whether the Directors considered it appropriate to adopt the going concern basis of accounting in preparing the financial statements and the Directors' identification of any material uncertainties to the Group's and the Company's ability to continue as a going concern over a period of at least 12 months from the date of approval of the financial statements.

We are required to report if the Directors' statement relating to Going Concern in accordance with Listing Rule 9.8.6R(3) is materially inconsistent with our knowledge obtained in the audit.

Outcome

We have nothing material to add or to draw attention to. However, because not all future events or conditions can be predicted, this statement is not a guarantee as to the Group's and Company's ability to continue as a going concern. For example, the terms on which the United Kingdom may withdraw from the European Union are not clear, and it is difficult to evaluate all of the potential implications on the Group's trade, customers, suppliers and the wider economy.

We have nothing to report.

REPORTING ON OTHER INFORMATION

The other information comprises all of the information in the Annual Report other than the financial statements and our auditors' report thereon. The Directors are responsible for the other information. Our opinion on the financial statements does not cover the other information and, accordingly, we do not express an audit opinion or, except to the extent otherwise explicitly stated in this report, any form of assurance thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. If we identify an apparent material inconsistency or material misstatement, we are required to perform procedures to conclude whether there is a material misstatement of the financial statements or a material misstatement of the other information. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report based on these responsibilities.

With respect to the Strategic Report and Directors' Report, we also considered whether the disclosures required by the UK Companies Act 2006 have been included.

Based on the responsibilities described above and our work undertaken in the course of the audit, the Companies Act 2006 (CA06), ISAs (UK) and the Listing Rules of the Financial Conduct Authority (FCA) require us also to report certain opinions and matters as described below (required by ISAs (UK) unless otherwise stated).

Strategic Report and Directors' Report

In our opinion, based on the work undertaken in the course of the audit, the information given in the Strategic Report and Directors' Report for the year ended 31 July 2019 is consistent with the financial statements and has been prepared in accordance with applicable legal requirements. (CA06)

In light of the knowledge and understanding of the Group and Company and their environment obtained in the course of the audit, we did not identify any material misstatements in the Strategic Report and Directors' Report. (CA06)

The Directors' assessment of the prospects of the Group and of the principal risks that would threaten the solvency or liquidity of the Group

We have nothing material to add or draw attention to regarding:

- The Directors' confirmation on page 98 of the Annual Report 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 or liquidity.
- The disclosures in the Annual Report that describe those risks and explain how they are being managed or mitigated.
- The Directors' explanation on pages 71 to 72 of the Annual Report as to how they have assessed the prospects of the Group, over what period they have done so and why they consider that period to be appropriate, and their statement as to whether they have a reasonable expectation that the 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.

We have nothing to report having performed a review of the Directors' statement that they have carried out a robust assessment of the principal risks facing the Group and statement in relation to the longer-term viability of the Group. Our review was substantially less in scope than an audit and only consisted of making inquiries and considering the Directors' process supporting their statements; checking that the statements are in alignment with the relevant provisions of the UK Corporate Governance Code (the "Code"); and considering whether the statements are consistent with the knowledge and understanding of the Group and Company and their environment obtained in the course of the audit. (Listing Rules)

Other Code Provisions

We have nothing to report in respect of our responsibility to report when:

- The statement given by the Directors, on page 95, that they consider the Annual Report taken as a whole to be fair, balanced and understandable, and provides the information necessary for the members to assess the Group's and Company's position and performance, business model and strategy is materially inconsistent with our knowledge of the group and company obtained in the course of performing our audit.
- The section of the Annual Report on pages 94 to 99 describing the work of the Audit & Risk Committee does not appropriately address matters communicated by us to the Audit & Risk Committee.
- The Directors' statement relating to the Company's compliance with the Code does not properly disclose a departure from a relevant provision of the Code specified, under the Listing Rules, for review by the auditors.

Directors' Remuneration

In our opinion, the part of the Directors' Remuneration Report to be audited has been properly prepared in accordance with the Companies Act 2006. (CA06)

RESPONSIBILITIES FOR THE FINANCIAL STATEMENTS AND THE AUDIT

Responsibilities of the Directors for the financial statements

As explained more fully in the Statement of Directors' Responsibilities set out on page 124, the Directors are responsible for the preparation of the financial statements in accordance with the applicable framework and for being satisfied that they give a true and fair view. The Directors are also responsible 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.

In preparing the financial statements, the Directors are responsible for assessing the Group's and the 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 the Directors either intend to liquidate the Group or the Company or to cease operations, or have no realistic alternative but to do so.

Auditors' responsibilities for the audit of the financial statements

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 error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

A further description of our responsibilities for the audit of the financial statements is located on the FRC's website at: www.frc.org.uk/auditorsresponsibilities. This description forms part of our auditors' report.

Use of this report

This report, including the opinions, has been prepared for and only for the Company's members as a body in accordance with Chapter 3 of Part 16 of the Companies Act 2006 and for no other purpose. We do not, in giving these opinions, accept or assume responsibility for any other purpose or to any other person to whom this report is shown or into whose hands it may come save where expressly agreed by our prior consent in writing.

OTHER REQUIRED REPORTING

Companies Act 2006 exception reporting

Under the Companies Act 2006 we are required to report to you if, in our opinion:

- we have not received all the information and explanations we require for our audit; or
- adequate accounting records have not been kept by the Company, or returns adequate for our audit have not been received from branches not visited by us; or
- certain disclosures of Directors' remuneration specified by law are not made; or
- the Company financial statements and the part of the Directors' Remuneration Report to be audited are not in agreement with the accounting records and returns.

We have no exceptions to report arising from this responsibility.

Appointment

Following the recommendation of the Audit Committee, we were appointed by the members on 19 November 1996 to audit the financial statements for the year ended 31 July 1997 and subsequent financial periods. The period of total uninterrupted engagement is 23 years, covering the years ended 31 July 1997 to 31 July 2019.

Andrew Kemp (Senior Statutory Auditor)

for and on behalf of PricewaterhouseCoopers LLP

Chartered Accountants and Statutory Auditors

London

19 September 2019

CONSOLIDATED INCOME STATEMENT

	Notes	Year ended 31 July 2019			Year ended 31 July 2018 - restated*		
		Headline £m	Non-headline (note 3) £m	Total £m	Headline £m	Non-headline (note 3) £m	Total £m
CONTINUING OPERATIONS							
Revenue	1	2,498		2,498	2,328		2,328
Cost of sales		(1,429)		(1,429)	(1,327)		(1,327)
Gross profit		1,069		1,069	1,001		1,001
Sales and distribution costs		(267)		(267)	(258)		(258)
Administrative expenses		(375)	(101)	(476)	(355)	(53)	(408)
Profit on business disposal	28				7		7
OPERATING PROFIT	2	427	(101)	326	388	(46)	342
Interest receivable		11		11	10		10
Interest payable		(62)		(62)	(65)		(65)
Other financing gains/(losses)		18		18	(7)		(7)
Other finance income – retirement benefits	8	11		11	7		7
Finance costs	4	(51)	29	(22)	(55)		(55)
Continuing operations – profit before taxation		376	(72)	304	333	(46)	287
Taxation	6	(103)	(59)	(162)	(87)	(81)	(168)
Continuing operations – profit for the year		273	(131)	142	246	(127)	119
Discontinued operations							
Profit from discontinued operations	27	112	(27)	85	115	45	160
PROFIT FOR THE YEAR		385	(158)	227	361	(82)	279
Profit for the year attributable to:							
Smiths Group shareholders – continuing operations		271	(131)	140	244	(127)	117
Smiths Group shareholders – discontinued operations		112	(27)	85	115	45	160
Non-controlling interests in respect of continuing operations		2		2	2		2
		385	(158)	227	361	(82)	279
EARNINGS PER SHARE							
Basic	5				56.8p		70.0p
Basic – continuing					35.4p		29.6p
Diluted					56.5p		69.1p
Diluted – continuing					35.1p		29.2p

* Results for the year ended 31 July 2018 have been restated to reflect the reclassification of the Smiths Medical business as a discontinued operation.

References in the consolidated income statement, consolidated statement of comprehensive income, consolidated balance sheet, consolidated statement of changes in equity and consolidated cash-flow statement relate to notes on pages 139 to 192, which form an integral part of the consolidated accounts.

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

	Notes	Year ended 31 July 2019 £m	Year ended 31 July 2018 £m
PROFIT FOR THE YEAR		227	279
Other comprehensive income:			
Actuarial (losses)/gains on retirement benefits	8	(76)	104
Taxation recognised on actuarial movements	6	13	(18)
Other comprehensive income and expenditure which will not be reclassified to the consolidated income statement		(63)	86
Other comprehensive income which will be reclassified and reclassifications:			
Exchange gains		191	6
Cumulative exchange gains recycled on business disposals			(5)
Fair value gains/(losses) and reclassification adjustments:			
– deferred on available for sale financial assets		2	1
– deferred in the period on cash-flow and net investment hedges		(77)	(6)
– reclassified to income statement on cash-flow and net investment hedges		(4)	(6)
Total other comprehensive income		49	76
Total comprehensive income		276	355
Attributable to:			
Smiths Group shareholders		272	353
Non-controlling interests		4	2
		276	355
Total comprehensive income attributable to Smiths Group shareholders arising from:			
Continuing operations		148	191
Discontinued operations		124	162
		272	353

CONSOLIDATED BALANCE SHEET

	Notes	31 July 2019 £m	31 July 2018 £m
NON-CURRENT ASSETS			
Intangible assets	10	1,684	2,061
Property, plant and equipment	12	232	320
Financial assets – other investments	16	19	18
Retirement benefit assets	8	469	526
Deferred tax assets	6	115	180
Trade and other receivables	14	52	57
Financial derivatives	19	47	50
		2,618	3,212
CURRENT ASSETS			
Inventories	13	417	466
Current tax receivable	6	11	38
Trade and other receivables	14	764	733
Cash and cash equivalents	17	289	717
Financial derivatives	19	3	7
Assets held for distribution to owners	27	1,216	
		2,700	1,961
TOTAL ASSETS		5,318	5,173
CURRENT LIABILITIES			
Financial liabilities			
– borrowings	17	(9)	(203)
– financial derivatives	19	(5)	(4)
Provisions for liabilities and charges	22	(66)	(76)
Trade and other payables	15	(569)	(606)
Current tax payable	6	(56)	(72)
Liabilities held for distribution to owners	27	(213)	
		(918)	(961)
NON-CURRENT LIABILITIES			
Financial liabilities			
– borrowings	17	(1,500)	(1,407)
– financial derivatives	19	(1)	(6)
Provisions for liabilities and charges	22	(285)	(262)
Retirement benefit obligations	8	(152)	(145)
Corporation tax payable	6	(6)	
Deferred tax liabilities	6	(45)	(77)
Trade and other payables	15	(30)	(27)
		(2,019)	(1,924)
TOTAL LIABILITIES		(2,937)	(2,885)
NET ASSETS		2,381	2,288
SHAREHOLDERS' EQUITY			
Share capital	23	148	148
Share premium account		360	358
Capital redemption reserve	25	6	6
Revaluation reserve	25	1	1
Merger reserve	25	235	235
Retained earnings		1,993	1,826
Hedge reserve	25	(383)	(302)
Total shareholders' equity		2,360	2,272
Non-controlling interest equity		21	16
TOTAL EQUITY		2,381	2,288

The accounts on pages 134 to 192 were approved by the Board of Directors on 19 September 2019 and were signed on its behalf by:

ANDY REYNOLDS SMITH
CHIEF EXECUTIVE

JOHN SHIPSEY
CHIEF FINANCIAL OFFICER

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

	Notes	Share capital and share premium £m	Other reserves £m	Retained earnings £m	Hedge reserve £m	Equity shareholders' funds £m	Non- controlling Interest £m	Total equity £m
At 31 July 2018		506	242	1,826	(302)	2,272	16	2,288
Profit for the year				225		225	2	227
Other comprehensive income:								
Actuarial losses on retirement benefits and related tax				(63)		(63)		(63)
Exchange gains				189		189	2	191
Fair value gains/(losses) and related tax				2	(81)	(79)		(79)
TOTAL COMPREHENSIVE INCOME FOR THE YEAR				353	(81)	272	4	276
Transactions relating to ownership interests:								
Exercises of share options	23	2				2		2
Purchase of own shares	25			(19)		(19)		(19)
Dividends:								
– equity shareholders	24			(178)		(178)		(178)
– non-controlling interest							(1)	(1)
Receipt of capital from non-controlling interest							2	2
Share-based payment	9			11		11		11
At 31 July 2019		508	242	1,993	(383)	2,360	21	2,381

	Notes	Share capital and share premium £m	Other reserves £m	Retained earnings £m	Hedge reserve £m	Equity shareholders' funds £m	Non- controlling Interest £m	Total equity £m
At 31 July 2017		503	242	1,634	(290)	2,089	15	2,104
Profit for the year				277		277	2	279
Other comprehensive income:								
Actuarial gains on retirement benefits and related tax				86		86		86
Exchange gains				1		1		1
Fair value gains/(losses) and related tax				1	(12)	(11)		(11)
TOTAL COMPREHENSIVE INCOME FOR THE YEAR				365	(12)	353	2	355
Transactions relating to ownership interests:								
Exercises of share options	23	3				3		3
Purchase of own shares	25			(15)		(15)		(15)
Dividends:								
– equity shareholders	24			(172)		(172)		(172)
– non-controlling interest							(1)	(1)
Share-based payment	9			14		14		14
At 31 July 2018		506	242	1,826	(302)	2,272	16	2,288

CONSOLIDATED CASH-FLOW STATEMENT

	Notes	Year ended 31 July 2019 £m	Year ended 31 July 2018 £m
Net cash inflow from operating activities	29	346	405
Cash-flows from investing activities			
Expenditure on capitalised development		(27)	(26)
Expenditure on other intangible assets	10	(12)	(12)
Purchases of property, plant and equipment	12	(79)	(68)
Disposals of property, plant and equipment		4	4
Capital returned by/(investment in) financial assets	16	2	(1)
Acquisition of businesses	26	(277)	(71)
Disposal of businesses – continuing operations	28		29
Disposal of businesses – discontinued operations		30	
Tax paid on disposal of businesses - discontinued operations		(8)	
Net cash-flow used in investing activities		(367)	(145)
Cash-flows from financing activities			
Proceeds from exercise of share options	23	2	3
Purchase of own shares	25	(19)	(15)
Settlement of cash settled share awards		(2)	(1)
Dividends paid to equity shareholders	24	(178)	(172)
Cash inflow from matured derivative financial instruments			4
Repayment of borrowings	17	(194)	(135)
Net cash-flow used in financing activities		(391)	(316)
Net (decrease)/increase in cash and cash equivalents		(412)	(56)
Cash and cash equivalents at beginning of year		717	781
Cash held in disposal group		(26)	
Exchange differences		10	(8)
Cash and cash equivalents at end of year	17	289	717
Cash and cash equivalents at end of year comprise:			
– cash at bank and in hand		153	287
– short-term deposits		136	430
		289	717

Reconciliation of net cash-flow to movement in net debt

	Notes	Year ended 31 July 2019 £m	Year ended 31 July 2018 £m
Net debt at start of year	17	(893)	(967)
Net (decrease)/increase in cash and cash equivalents		(412)	(56)
Net cash held in disposal group		(23)	
Reduction and repayment of borrowings		194	135
Movement in net debt resulting from cash-flows		(241)	79
Capitalisation, interest accruals and unwind of capitalisation fees		1	2
Movement from fair value hedging		(46)	1
Exchange differences		(41)	(8)
Movement in net debt in the year		(327)	74
Net debt at end of year	17	(1,220)	(893)

ACCOUNTING POLICIES

Basis of preparation

The accounts have been prepared in accordance with the Companies Act 2006 applicable to companies reporting under International Financial Reporting Standards (IFRS) and International Financial Reporting Interpretations Committee (IFRIC) interpretations, as adopted by the European Union, on a going concern basis and under the historical cost convention modified to include revaluation of certain financial instruments, share options and pension assets and liabilities, held at fair value as described below.

The accounting policies adopted are consistent with those of the previous financial year.

Key estimates and significant judgements

The preparation of the accounts in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the accounts and the reported amounts of revenues and expenses during the reporting period. Actual results may differ from these estimates.

The key sources of estimation uncertainty together with the significant judgements and assumptions used for these consolidated financial statements are set out below.

Sources of estimation uncertainty

Business combinations

When acquiring businesses, the Group has to make assumptions and best estimates to value any identified intangible assets of the acquisition. Where acquisitions are significant, appropriate advice is sought from professional advisers on the identification and valuation of intangible assets. Otherwise valuations are undertaken by management using methodology consistent with that used on prior period acquisitions.

Key sources of estimation uncertainty for the acquisition of the United Flexible business relate to the assumptions used to underpin the valuation of acquired intangibles, particularly customer related (£134m) and tradenames (£13m). The value of these intangibles was determined by cash-flow forecasts discounted at a rate between 11% and 14%. The customer relationship intangible asset was valued by applying an annual attrition factor between 4.1% and 7.9% on base revenue to account for a potential loss of customer orders in the future.

Impairment reviews for intangible assets

In carrying out impairment reviews of intangible assets, a number of significant assumptions have to be made when preparing cash-flow projections to determine the value in use of the cash generating unit (CGU). These include the future rate of market growth, discount rates, the market demand for the products acquired, the future profitability of acquired businesses or products, levels of reimbursement and success in obtaining regulatory approvals. If actual results differ or changes in expectations arise, impairment charges may be required which would adversely impact operating results.

Retirement benefits

Determining the value of the future defined benefit obligation involves significant estimates in respect of the assumptions used to calculate present values. These include future mortality, discount rate and inflation. The Group uses previous experience and independent actuarial advice to select the values of critical judgements. The estimates, and the effect of variances in key estimates, are disclosed in note 8.

Receivables provisions

If the carrying value of any receivable is higher than the fair value, the Group makes provisions to write down the balance to its fair value. The fair value of receivables is considered individually for each customer and incorporates past experience and progress with collecting receivables.

The provision for the allowance for expected credit losses is calculated using historical write-offs as a basis with a default risk multiplier applied to reflect country risk premium. The value assigned to this risk multiplier is a source of estimation uncertainty.

At 31 July 2019 the gross value of receivables partly or fully provided for or more than three months overdue was £64m (FY2018: £70m) and there were provisions of £24m (FY2018: £32m) against these receivables. Consequently, these receivables were carried at a net value of £40m (FY2018: £38m). See note 14 for disclosures on credit risk and ageing of trade receivables.

Inventory provisions

The calculation of inventory provisions requires judgement by management of the expected value of future sales. If the carrying value of inventory is higher than the expected recoverable value, the Group makes provisions to write inventory down to its net recoverable value. Inventory is initially assessed for impairment by comparing inventory levels to recent utilisation rates and carrying values to historical selling prices. A detailed review is completed for inventory lines identified in the initial assessment considering sales activity, order flow, customer contracts and current selling prices.

At 31 July 2019, there were provisions of £51m (FY2018: £54m) against gross inventory of £468m (FY2018: £520m). See note 13 for a breakdown of inventory.

A 10% increase in the proportion of raw materials provided for would increase the provision by £17m (FY2018: £17m) and a 10% increase in the proportion of finished goods provided for would increase the provision by £17m (FY2018: £23m).

Provisions for liabilities and charges

Provisions are recognised when the Group has a present obligation (legal or constructive) as a result of a past event and it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation. Where the Group expects some or all of a provision to be reimbursed, for example under an insurance contract, the reimbursement is recognised as a separate asset but only when the reimbursement is virtually certain.

John Crane, Inc. (JCI), a subsidiary of the Group, is one of many co-defendants in litigation relating to products previously manufactured which contained asbestos. Provision of £237m (FY2018: £223m) has been made for the future defence costs which the Group is expected to incur and the expected costs of future adverse judgments against JCI. Whilst well-established incidence curves can be used to estimate the likely future pattern of asbestos-related disease, JCI's claims experience is significantly impacted by other factors which influence the US litigation environment. These can include: changing approaches on the part of the plaintiffs' bar; changing attitudes amongst the judiciary at both trial and appellate levels; and legislative and procedural changes in both the state and federal court systems. Therefore, because of the significant uncertainty associated with the future level of asbestos claims and of the costs arising out of the related litigation, there can be no guarantee that the assumptions used to estimate the provision will result in an accurate prediction of the actual costs that may be incurred.

JCI takes account of the advice of an expert in asbestos liability estimation in quantifying the expected costs. The following judgements were made in preparing the provision calculation:

- the period over which the expenditure can be reliably estimated is judged to be ten years, based on past experience regarding significant changes in the litigation environment that have occurred every few years and on the amount of time taken in the past for some of those changes to impact the broader asbestos litigation environment. See note 22 for a sensitivity showing the impact on the provision of reducing or increasing this time horizon;
- the future trend of legal costs; the rate of future claims filed; the rate of successful resolution of claims; and the average amount of judgments awarded have been projected based on the past history of JCI claims and well-established tables of asbestos incidence projections, since this is the best available evidence. Claims history from other defendants is not used to calculate the provision because JCI's defence strategy generates a significantly different pattern of legal costs and settlement expenses. See note 22 for a sensitivity showing the range of expected future spend.

Titeflex Corporation, a subsidiary of the Group in the Flex-Tek division, has received a number of claims from insurance companies seeking recompense on a subrogated basis for the effects of damage allegedly caused by lightning strikes in relation to its flexible gas piping product. It has also received a number of product liability claims regarding this product, some in the form of purported class actions. Titeflex Corporation believes that its products are a safe and effective means of delivering gas when installed in accordance with the manufacturer's instructions and local and national codes; however some claims have been settled on an individual basis without admission of liability. Provision of £74m (FY2018: £78m) has been made for the costs which the Group is expected to incur in respect of these claims. In preparing the provision calculation, judgements were made about the impact of safe installation initiatives on the level of future claims. See note 22 for a sensitivity showing the impact on the provision of reducing or increasing the expected impact. However, because of the significant uncertainty associated with the future level of claims, there can be no guarantee that the assumptions used to estimate the provision will result in an accurate prediction of the actual costs that may be incurred.

All provisions may be subject to potentially material revisions from time to time if new information becomes available as a result of future events.

Taxation

The Group has recognised deferred tax assets of £106m (FY2018: £121m) relating to losses and £68m (FY2018: £67m) relating to the John Crane, Inc. and Titeflex Corporation litigation provisions. The recognition of assets pertaining to these items involves judgement and estimates by management as to the likelihood of realisation of these deferred tax assets. This is based on a number of factors, which seek to assess the expectation that the benefit of these assets will be realised, including expected future levels of operating profit, expenditure on litigation, pension contributions and the timing of the unwind of other tax positions. It has been concluded that there are sufficient taxable profits in future periods to support recognition.

A 5% reduction in expected future operating profits would reduce the level of deferred tax recognised by £5m (FY2018: £1m), and a 5% increase in expected future operating profits would increase the level of deferred tax recognised by £5m (FY2018: £7m). Further detail on the Group's deferred taxation position is included in note 6.

Significant judgements made in applying accounting policies

Business combinations

On the acquisition of a business, the Group has to make judgements in identifying the intangible assets of the business and judgements about the fair value allocation of the purchase price.

Where acquisitions are significant, appropriate advice is sought from professional advisers before making such allocations.

Otherwise intangible assets are identified and the purchase price is allocated by management using methodology consistent with that used on prior period acquisitions.

Impairment testing

Goodwill is tested at least annually for impairment and other assets, including capitalised development costs and intangible assets acquired in business combinations, are tested if there are any indications of impairment.

Impairment testing is undertaken at the lowest level for which internal performance is monitored. Judgement is required in assessing the appropriate CGU level for impairment testing of each intangible asset.

Retirement benefits

At 31 July 2019 the Group has recognised a retirement benefit asset of £469m (FY2018: £526m), principally relating to UK schemes, which arises from the rights of the employers to recover the surplus at the end of the life of the scheme.

The recognition of this surplus is a significant judgement. It has been determined that the surplus is recoverable by the Group and therefore can be recognised. If the pension schemes were wound up while they still had members, the schemes would need to buy out the benefits of all members. The buyouts would cost significantly more than the present value of the scheme liabilities calculated in accordance with IAS 19: Employee benefits.

Capitalisation of development costs

Expenditure incurred in the development of major new products is capitalised as internally generated intangible assets only when it has been judged that strict criteria are met, specifically in relation to the products' technical feasibility and probable future economic benefits. The carrying value of intangible assets is amortised over their expected useful lives, commencing in the year that sales are first made.

The assessment of the future viability and technical feasibility of development projects and the determination of the underlying products' useful economic life and amortisation basis require significant judgement and the use of assumptions and estimates.

Revenue recognition

Revenue is recognised as the performance obligations to deliver products or services are satisfied and revenue is recorded based on the amount of consideration expected to be received in exchange for satisfying the performance obligations.

Smiths Detection has multi-year contractual arrangements for the sale of goods and services. Where these contracts have separately identifiable components with distinct patterns of delivery and customer acceptance, revenue is accounted for separately for each identifiable component. Judgement is applied in the identification of the performance obligations of the contract and the allocation of contract revenue to each performance obligation.

The Group enters into certain contracts for agreed fees that are performed across more than one accounting period and revenue is recognised over time. Judgement is required to assess the stage of completion of the contract activity at the balance sheet date. This assessment requires the expected total contract revenues and costs to be determined based on the contract progress.

Presentation of the Smiths Medical demerger

Following the Group's decision to pursue a demerger of the Smiths Medical business, judgement is required to determine the most appropriate financial reporting treatment of the division and its performance.

Management has determined that sufficient progress has been achieved on the demerger project for Smiths Medical to meet the criteria for classification as discontinued and held for distribution to owners.

The key judgement for this reclassification is that the following conditions were met at the balance sheet date:

- The entity is committed to distribute the assets;
- The assets are available for immediate sale in their present condition;
- Actions to complete the distribution have been initiated and shareholder approval is highly probable;
- The distribution must be expected to be completed within one year from the date of classification; and
- It should be unlikely that any significant changes will be made to the plan or that it will be withdrawn.

Following this reclassification, the results of Smiths Medical are presented as profit from discontinued operations in FY2019 and FY2018 and its assets and liabilities reported in assets and liabilities held for distribution to owners in FY2019. The prior year balance sheet has not been restated.

Presentation of headline profits and underlying growth

In order to provide users of the accounts with a clear and consistent presentation of the performance of the Group's ongoing trading activity, the income statement is presented in a three column format with 'headline' profits shown separately from non-headline items.

Judgement is required in determining which items should be included as non-headline. The amortisation of acquired intangibles, impairments, legacy liabilities, material one-off items and certain re-measurements are included in a separate column of the income statement. See note 3 for a breakdown of the items excluded from headline profit.

Performance measures for the Group's ongoing trading activity are described as 'headline' and used by management to measure and monitor performance. See note 1 for disclosures of headline operating profit and note 30 for more information about the calculation of return on capital employed and credit metrics.

In addition, the Group reports underlying growth rates for sales and profit measures. Determining which items should be adjusted involves judgement. Underlying growth excludes the impact of acquisitions, divestments, presentational changes and the effects of foreign exchange translation, by making the following adjustments:

- Exclude acquisitions from the current period for the first 12 months of ownership;
- Exclude the performance of divested businesses after the date of disposal from comparative period; and
- Retranslate the comparative to current year exchange rates before calculating growth measures.

SIGNIFICANT ACCOUNTING POLICIES

Basis of consolidation

The consolidated accounts incorporate the financial statements of Smiths Group plc (the 'Company') and its subsidiary undertakings, together with the Group's share of the results of its associates. A list of the subsidiaries of Smiths Group plc is provided on pages 208 to 216.

Subsidiaries are all entities controlled by the Company. Subsidiaries are fully consolidated from the date on which control is obtained by the Company to the date that control ceases.

Associates are entities which the Group has significant influence over but does not control, generally accompanied by a share of between 20% and 50% of the voting rights. Investments in associates are accounted for using the equity method.

Foreign currencies

The Company's presentational currency is sterling. The financial position of all subsidiaries and associates that have a functional currency different from sterling are translated into sterling at the rate of exchange at the date of that balance sheet, and the income and expenses are translated at average exchange rates for the period. All resulting exchange differences are recognised as a separate component of equity.

On consolidation, exchange differences arising from the translation of the net investment in foreign entities, and of borrowings and other currency instruments designated as hedges of such investments, are taken to shareholders' equity. When a foreign operation is sold, the cumulative amount of such exchange differences is recognised in the income statement as part of the gain or loss on sale.

Exchange differences arising on transactions are recognised in the income statement. Those arising on trading are taken to operating profit; those arising on borrowings are classified as finance income or cost.

Revenue

Revenue is measured at the fair value of the consideration received, net of trade discounts (including distributor rebates) and sales taxes. Revenue is discounted only where the impact of discounting is material.

When the Group enters into complex contracts with multiple, separately identifiable components, the terms of the contract are reviewed to determine whether or not the elements of the contract should be accounted for separately. If a contract is being split into multiple components, the contract revenue is allocated to the different components at the start of the contract. The basis of allocation depends on the substance of the contract. The Group considers relative stand-alone selling prices, contractual prices and relative cost when allocating revenue.

The Group has identified the following different types of revenue:

Sale of goods (i) – generic products manufactured by Smiths

Generic products are defined as either;

- Products that are not specific to any particular customer;
- Products that may initially be specific to a customer but can be reconfigured at minimal cost, i.e. retaining a margin, for sale to an alternative customer; or
- Products that are specific to a customer but are manufactured at Smiths' risk, i.e. we have no right to payment of costs plus margin if the customer refuses to take control of the goods.

For established products with simple installation requirements, revenue is recognised when the control of the product is passed to the customer. The point in time that control passes is defined in accordance with the agreed shipping terms and is determined on a case by case basis. The time of despatch or delivery of the goods to the customer is normally the point at which invoicing occurs.

For some generic products which are technically innovative and highly configured, revenue is recognised when the overall performance obligation has been completed, which is often after the customer has completed its acceptance procedures and has assumed control.

Products that are sold under multiple element arrangements, i.e. contracts involving a combination of products and services, are bundled into a single performance obligation unless the customer can benefit from the goods or services either on their own, or together with other resources that are readily available to the customer. For contracts that pass control of the product to the customer only on completion of installation services, revenue will be recognised upon completion of the installation.

An obligation to provide a refund for faulty products under the standard warranty terms is recognised as a provision. If the contract includes terms that either extend the warranty beyond the standard term or implies that maintenance is provided to keep the product working, these are service warranties and revenue is deferred to cover the performance obligation in an amount equivalent to the stand-alone selling price of that service.

Sale of goods (ii) – customer-specific products where the contractual terms include rights to payment for work performed to date

Customer-specific products are defined as being:

- Products that cannot be reconfigured economically such that it remains profitable to sell to another customer;
- Products that cannot be sold to another customer due to contractual restrictions; and
- Products that allow Smiths to charge for the work performed to date in an amount that represents the costs incurred to date plus a margin, should the customer refuse to take control of the goods.

For contracts that meet the terms listed above, revenue is recognised over the period that the Group is engaged in the manufacture of the product, calculated using the input method based on the amount of costs incurred to date compared to the overall costs of the contract. The time of despatch or delivery of the goods to the customer is normally the point at which invoicing occurs.

An obligation to provide a refund for faulty products under the standard warranty terms is recognised as a provision. If the contract includes terms that either extend the warranty beyond the standard term or implies that maintenance is provided to keep the product working, these are service warranties and revenue should be deferred to cover the performance obligation in an amount equivalent to the stand-alone selling price of that service.

Services relating to the installation, repair and ongoing maintenance of equipment

Services include installation, commissioning, testing, training, software hosting & maintenance, product repairs and contracts undertaking extended warranty services.

For complex installations where the supply of services cannot be separated from the supply of product, revenue is recognised upon acceptance of the combined performance obligation (see Sale of goods (i) above).

For services that can be accounted for as a separate performance obligation, revenue is recognised over time, assessed on the basis of the actual service provided as a proportion of the total services to be provided.

Depending on the nature of the contract, revenue will be recognised as follows:

- Installation, commissioning and testing services (when not linked to the supply of product and subject to acceptance) will be recognised rateably as the service is provided;
- Training services will be recognised on completion of the training course;
- Software hosting & maintenance services will be recognised rateably over the life of the contract;
- Product repair services, where the product is returned to Smiths premises for remedial action, will be recognised when the product is returned to the customer and they regain control of the asset;
- On-site ad hoc product repair services will be recognised rateably as the services are performed;
- Long-term product repair and maintenance contracts will be recognised rateably over the contract term; and
- Extended service warranties will be recognised rateably over the contract term.

Invoicing for services will depend on the nature of the service provided with some services charged in advance and others in arrears.

Where contracts are accounted for under the revenue recognised over time basis the proportion of costs incurred is used to determine the percentage of contract completion.

Contracts for the construction of substantial assets, which normally last in excess of one year, will be accounted for under the revenue recognised over time basis, using an input method.

For fixed-price contracts, revenue will be recognised based upon an assessment of the amount of cost incurred under the contract, compared to the total expected costs that will be incurred under the contract. This calculation will be applied cumulatively with any over/under recognition being adjusted in the current period.

For cost-plus contracts, revenue will be recognised based upon costs incurred to date plus any agreed margin.

For both fixed-price and cost-plus contracts, invoicing will normally be based on a schedule with milestone payments.

Contract costs

The Group has taken the practical expedient of not capitalising contract costs as they are expected to be expensed within one year from the date of signing.

Leases

Leases in which a significant portion of the risks and rewards of ownership are retained by the lessor are classified as operating leases. Payments made under operating leases are charged to the income statement on a straight-line basis over the period of the lease.

Taxation

The charge for taxation is based on profits for the year and takes into account taxation deferred because of temporary differences between the treatment of certain items for taxation and accounting purposes.

Current income tax assets and liabilities are measured at the amount expected to be recovered from or paid to taxation authorities. Tax benefits are not recognised unless it is likely that the tax positions are sustainable. Once considered to be likely, tax benefits are reviewed to assess whether a provision should be made based on prevailing circumstances. Tax provisions are included in current tax liabilities. The tax rates and tax laws used to compute the amount are those that are enacted or substantively enacted, at the reporting date in the countries where the Group operates and generates taxable income.

Deferred tax is provided in full using the balance sheet liability method. A deferred tax asset is recognised where it is probable that future taxable income will be sufficient to utilise the available relief. Tax is charged or credited to the income statement except when it relates to items charged or credited directly to equity, in which case the tax is also dealt with in equity.

Deferred tax is provided on temporary differences arising on investments in subsidiaries and associates, except where the timing of the reversal of the temporary differences is controlled by the Company and it is probable that the temporary difference will not reverse in the foreseeable future.

Deferred tax liabilities and assets are not discounted.

Employee benefits

Share-based compensation

The fair value of the shares or share options granted is recognised as an expense over the vesting period to reflect the value of the employee services received. The fair value of options granted, excluding the impact of any non-market vesting conditions, is calculated using established option pricing models, principally binomial models. The probability of meeting non-market vesting conditions, which include profitability targets, is used to estimate the number of share options which are likely to vest.

For cash-settled share-based payment, a liability is recognised based on the fair value of the payment earned by the balance sheet date. For equity-settled share-based payment, the corresponding credit is recognised directly in reserves.

Pension obligations and post-retirement benefits

The Group has defined benefit plans, defined contribution plans and post-retirement healthcare schemes.

For defined benefit plans and post-retirement healthcare schemes the liability for each scheme recognised in the balance sheet is the present value of the obligation at the balance sheet date less the fair value of any plan assets. The obligation is calculated annually by independent actuaries using the projected unit credit method. The present value is determined by discounting the estimated future cash outflows using interest rates of AA-rated corporate bonds that are denominated in the currency in which the benefits will be paid, and that have terms to maturity approximating to the terms of the related liability. Actuarial gains and losses arising from experience adjustments and changes in actuarial assumptions are recognised in full in the period in which they occur, outside of the income statement, and are presented in the statement of comprehensive income. Past service costs are recognised immediately in the income statement.

For defined contribution plans, the Group pays contributions to publicly or privately administered pension insurance plans on a mandatory, contractual or voluntary basis. Contributions are expensed as incurred.

Intangible assets

Goodwill

Goodwill represents the excess of the cost of an acquisition over the fair value of the Group's share of the identifiable net assets of the acquired subsidiary at the date of acquisition.

Goodwill arising from acquisitions of subsidiaries after 1 August 1998 is included in intangible assets, tested annually for impairment and carried at cost less accumulated impairment losses. Gains and losses on the disposal of an entity include the carrying amount of goodwill relating to the entity sold. Goodwill arising from acquisitions of subsidiaries before 1 August 1998 was set against reserves in the year of acquisition.

Goodwill is tested for impairment at least annually. Any impairment is recognised immediately in the income statement. Subsequent reversals of impairment losses for goodwill are not recognised.

Research and development

Expenditure on research and development is charged to the income statement in the year in which it is incurred with the exception of:

- amounts recoverable from third parties; and
- expenditure incurred in respect of the development of major new products where the outcome of those projects is assessed as being reasonably certain as regards viability and technical feasibility. Such expenditure is capitalised and amortised over the estimated period of sale for each product, commencing in the year that sales of the product are first made. Amortisation is charged straight line or based on the units produced, depending on the nature of the product and the availability of reliable estimates of production volumes.

The cost of development projects which are expected to take a substantial period of time to complete includes attributable borrowing costs.

Intangible assets acquired in business combinations

The identifiable net assets acquired as a result of a business combination may include intangible assets other than goodwill. Any such intangible assets are amortised straight line over their expected useful lives as follows:

Patents, licences and trademarks	up to 20 years
Technology	up to 13 years
Customer relationships	up to 11 years

The assets' useful lives are reviewed, and adjusted if appropriate, at each balance sheet date.

Software, patents and intellectual property

The estimated useful lives are as follows:

Software	up to 7 years
Patents and intellectual property	shorter of the economic life and the period the right is legally enforceable

The assets' useful lives are reviewed, and adjusted if appropriate, at each balance sheet date.

Property, plant and equipment

Property, plant and equipment is stated at historical cost less accumulated depreciation and any recognised impairment losses.

Land is not depreciated. Depreciation is provided on other assets estimated to write off the depreciable amount of relevant assets by equal annual instalments over their estimated useful lives.

In general, the rates used are: Freehold and long leasehold buildings – 2%; Short leasehold property – over the period of the lease; Plant, machinery, etc. – 10% to 20%; Fixtures, fittings, tools and other equipment – 10% to 33%.

The cost of any assets which are expected to take a substantial period of time to complete includes attributable borrowing costs.

The assets' residual values and useful lives are reviewed, and adjusted if appropriate, at each balance sheet date. An asset's carrying amount is written down immediately to its recoverable amount if the asset's carrying amount is greater than its estimated recoverable amount.

Inventories

Inventories are stated at the lower of cost and net realisable value. Cost is determined using the first-in, first-out (FIFO) method. The cost of finished goods and work in progress comprises raw materials, direct labour, other direct costs and related production overheads (based on normal operating capacity). The cost of items of inventory which take a substantial period of time to complete includes attributable borrowing costs. Net realisable value is the estimated selling price in the ordinary course of business, less applicable variable selling expenses.

Trade and other receivables

Trade receivables are initially recognised at fair value and subsequently measured at amortised cost, less any appropriate provision for expected credit losses.

A provision for expected credit losses is established when there is objective evidence that amounts due under the original payment terms will not be collected. Expected credit losses are calculated using historical write-offs as a basis with a default risk multiplier applied to reflect country risk premium.

Provisions

Provisions for warranties and product liability, disposal indemnities, restructuring costs, vacant leasehold property and legal claims are recognised when: the Company has a legal or constructive obligation as a result of a past event; it is probable that an outflow of resources will be required to settle the obligation; and the amount has been reliably estimated. Provisions are not recognised for future operating losses.

Provisions are discounted where the time value of money is material.

Where there is a number of similar obligations, for example where a warranty has been given, the likelihood that an outflow will be required in settlement is determined by considering the class of obligations as a whole. A provision is recognised even if the likelihood of an outflow with respect to any one item included in the same class of obligations may be small.

Businesses held for distribution to owners

Businesses classified as held for distribution to owners are measured at the lower of carrying amount and fair value less costs to sell. Impairment losses on initial classification as held for sale and gains or losses on subsequent remeasurements are included in the income statement. No depreciation is charged on assets and businesses classified as held for distribution.

Businesses are classified as held for distribution to owners if their carrying amount will be settled principally through a demerger transaction rather than through continuing use and the following criteria are met:

- The business must be a separate major line of business, available for immediate distribution in its present condition;

- Management is committed to the plan, shareholder approval is highly probable and the plan is unlikely to be significantly changed or withdrawn; and
- Distribution is expected to be completed within 12 months of the date of classification.

The assets and liabilities of businesses held for distribution to owners are presented as separate lines on the balance sheet but the prior year has not been restated.

Discontinued operations

A discontinued operation is either:

- a component of the Group's business that represents a separate major line of business or geographical area of operations that has been disposed of, has been abandoned or meets the criteria to be classified as held for distribution to owners; or
- a business acquired solely for the purpose of selling it.

Discontinued operations are presented on the income statement as a separate line and are shown net of tax.

Cash and cash equivalents

Cash and cash equivalents include cash at bank and in hand and highly liquid interest-bearing securities with maturities of three months or less.

In the cash-flow statement, cash and cash equivalents are shown net of bank overdrafts, which are included as current borrowings in liabilities on the balance sheet.

Financial assets

The classification of financial assets depends on the purpose for which the assets were acquired. Management determines the classification of an asset at initial recognition and re-evaluates the designation at each reporting date. Financial assets are classified as: measured at amortised cost, fair value through other comprehensive income or fair value through profit and loss.

Financial assets primarily include trade receivables, cash and cash equivalents (comprising cash at bank, money market funds and short term deposits), short term investments, derivatives (foreign exchange contracts and interest rate derivatives) and unlisted investments.

- Trade receivables are classified either as 'held to collect' and measured at amortised cost or as 'held to collect and sell' and measured at fair value through other comprehensive income (FVOCI). The Group may sell trade receivables due from certain customers before the due date. Any trade receivables from such customers that are not sold at the reporting date are classified as 'held to collect and sell'.
- Cash and cash equivalents (consisting of balances with banks and other financial institutions, money-market funds, short-term deposits) and short-term investments are subject to low market risk. Cash balances and short-term investments are measured at amortised cost. Money market funds and short-term deposits are measured at fair value through profit and loss (FVPL).
- Derivatives and unlisted investments are measured at FVPL.

Financial assets are derecognised when the right to receive cash-flows from the assets has expired, or has been transferred, and the Company has transferred substantially all of the risks and rewards of ownership. When securities classified as available for sale are sold or impaired, the accumulated fair value adjustments previously taken to reserves are included in the income statement.

Financial assets are classified as current if they are expected to be realised within 12 months of the balance sheet date.

Financial liabilities

Borrowings are initially recognised at the fair value of the proceeds, net of related transaction costs. These transaction costs, and any discount or premium on issue, are subsequently amortised under the effective interest rate method through the income statement as interest over the life of the loan and added to the liability disclosed in the balance sheet. Related accrued interest is included in the borrowings figure.

Borrowings are classified as current liabilities unless the Group has an unconditional right to defer settlement of the liability for at least one year after the balance sheet date.

Derivative financial instruments and hedging activities

The Group uses derivative financial instruments to hedge its exposures to foreign exchange and interest rates arising from its operating and financing activities.

Derivative financial instruments are initially recognised at fair value on the date a derivative contract is entered into and are subsequently re-measured at their fair value. The method of recognising any resulting gain or loss depends on whether the derivative financial instrument is designated as a hedging instrument and, if so, the nature of the item being hedged.

Where derivative financial instruments are designated into hedging relationships, the Group formally documents the following:

- the risk management objective and strategy for entering the hedge;
- the nature of the risks being hedged and the economic relationship between the hedged item and the hedging instrument; and
- whether the change in cash-flows of the hedged item and hedging instrument are expected to offset each other.

Changes in the fair value of any derivative financial instruments that do not qualify for hedge accounting are recognised immediately in the income statement.

Fair value hedge

The Group uses derivative financial instruments to convert part of its fixed rate debt to floating rate in order to hedge the risks arising from its external borrowings.

The Group designates these as fair value hedges of interest rate risk with changes in the hedging instrument recorded in the income statement, together with any changes in the fair values of the hedged assets or liabilities that are attributable to the hedged risk to the extent that the hedge is effective. Gains or losses relating to any ineffectiveness is immediately recognised in the income statement.

Cash-flow hedge

Cash-flow hedging is used by the Group to hedge certain exposures to variability in future cash-flows.

The effective portions of changes in the fair values of derivatives that are designated and qualify as cash-flow hedges are recognised in equity. The gain or loss relating to any ineffective portion is recognised immediately in the income statement. Amounts accumulated in the hedge reserve are recycled in the income statement in the periods when the hedged items will affect profit or loss (for instance when the forecast sale that is hedged takes place).

If a forecast transaction that is hedged results in the recognition of a non-financial asset (for example, inventory) or a liability, the gains and losses previously deferred in the hedge reserve are transferred from the reserve and included in the initial measurement of the

cost of the asset or liability. When a hedging instrument expires or is sold, or when a hedge no longer meets the criteria for hedge accounting, any cumulative gain or loss existing in the hedge reserve at that time remains in the reserve and is recognised when the forecast transaction is ultimately recognised in the income statement.

When a forecast transaction is no longer expected to occur, the cumulative gain or loss that was reported in other comprehensive income is immediately transferred to the income statement.

Net investment hedge

Hedges of net investments in foreign operations are accounted for similarly to cash-flow hedges. Any gain or loss on the hedging instrument relating to the effective portion of the hedge is recognised in other comprehensive income; the gain or loss relating to any ineffective portion is recognised immediately in the income statement. When a foreign operation is disposed of, gains and losses accumulated in equity related to that operation are included in the income statement for that period.

Fair value of financial assets and liabilities

The fair values of financial assets and financial liabilities are the amounts at which the instrument could be exchanged in a current transaction between willing parties, other than in a forced or liquidation sale.

'IFRS 13: Fair value measurement' requires fair value measurements to be classified according to the following hierarchy:

- level 1 – quoted prices in active markets for identical assets or liabilities;
- level 2 – valuations in which all inputs are observable either directly (i.e. as prices) or indirectly (i.e. derived from prices); and
- level 3 – valuations in which one or more inputs that are significant to the resulting value are not based on observable market data.

See note 20 for information on the methods the Group uses to estimate the fair values of its financial instruments.

Dividends

Dividends are recognised as a liability in the period in which they are authorised. The interim dividend is recognised when it is paid and the final dividend is recognised when it has been approved by shareholders at the Annual General Meeting.

New accounting standards effective 2019

IFRS 9: Financial instruments

On 1 August 2018, the Group adopted IFRS 9: Financial Instruments. There was no material impact on adoption of this new standard. The Group's risk management strategies and hedge documentation are aligned with the requirements of IFRS 9 and these relationships are therefore treated as continuing hedges.

The new standard addresses the classification and measurement of financial assets. The alignment of the classification and measurement model under IFRS 9 has resulted in changes in the classification of all financial assets excluding derivatives, see notes 18, 19 and 20 for further details. These changes did not have a quantitative impact on the financial statements.

IFRS 9 has introduced an expected credit loss model, requiring an expected credit loss to be recognised on all financial assets held at amortised cost. The Group has previously provided against bad and doubtful debts within trade and other receivables based on specific risk assessments and reference to past default experience. The reassessment of existing provisions has not had a material impact on the net assets of the Group.

IFRS 9 has also introduced changes to the qualifying criteria for hedge accounting and has expanded the financial and non-financial instruments which may be designated as hedged items and hedging instruments in order to align hedge accounting with business strategy. The changes to hedge accounting under IFRS 9 have resulted in qualitative enhancements to the interest rate and foreign currency risk management disclosures but did not have a quantitative impact on the financial statements.

IFRS 15: Revenue from contracts with customers

IFRS 15 has replaced IAS 18: Revenue and IAS 11: Construction contracts. The new standard has set out a five-step model for the recognition of revenue and has established principles for reporting useful information to users of financial statements about the nature, amount, timing and uncertainty of revenue and cash-flows arising from an entity's contracts with customers.

The principal areas of impact for the Group's revenue recognition comprise:

Continuing operations:

- Customer specific products – rephasing of revenue recognition for certain customer specific products in the Interconnect division that have no alternative use and for which the Group has the right to receive payment; and
- Contract assets and liabilities – certain assets and liabilities currently included within trade receivables, accrued income and deferred revenue have been reclassified as contract assets and liabilities.

Discontinued operations:

- Customer specific rights – rephasing of revenue recognition for contractual customer specific rights in the Medical division; and
- Variable selling costs – certain expenses currently classified as variable selling costs have been reclassified as offsets to revenue. This classification change reduces revenue and cost of sales but has no impact on profit.

The Group has adopted IFRS 15 retrospectively from a transition date of 1 August 2018. The transition to IFRS 15 has not impacted the primary statements for the FY2018 comparative results, but has resulted in the reclassification of £16m of variable selling costs as contras to revenue within the Smiths Medical discontinued operation.

New standards and interpretations not yet adopted

Certain new accounting standards and interpretations have been published that are not mandatory for 31 July 2019 reporting periods and have not been early adopted by the Group. None of these is expected to have a material impact on the financial statements of the Group except as set out below:

IFRS 16: Leases (effective year ending 31 July 2020)

IFRS 16 'Leases' introduces, for lessees, a single accounting model for the treatment of both operating and finance leases, replacing the existing standard of IAS 17 and related guidance. The Group will adopt the new standard from 1 August 2019. The new standard will require the Group to recognise the obligation to make future lease payments as lease liabilities on the balance sheet, with a corresponding 'right of use' asset.

The Group has elected to apply the modified retrospective transition approach, requiring no restatement of the comparative period. The Group has also elected to apply the practical expedients of:

- Applying the new definition of a lease only to contracts entered into after the transition date;
- Excluding short-term leases with a term of 12 months or less from the right of use asset or lease liability; and
- Excluding low value leases for which the underlying asset is value is less than £5,000, from the right of use asset or lease liability.

A preliminary assessment of the main changes arising on the adoption of IFRS 16 is that, on the 1 August 2019, the Group expects to recognise right of use assets and lease liabilities with a value in the region of £140m - £160m, including £45m - £50m within discontinued operations.

Operating profit for the year ended 31st July 2020 is estimated to increase by approximately £3m - £7m due to the reclassification of the financing charges inherent in operating lease costs being taken to finance costs. The depreciation of the right of use asset will remain as a charge within operating costs.

IFRIC 23: Uncertainty over income tax treatments (effective year ending 31 July 2020)

IFRIC 23 will apply to the Group from 1 August 2019 and clarifies how to recognise and measure uncertainties over income tax treatments. The Group already provides for tax uncertainties and the net impact on the Group of implementing IFRIC 23 is expected to be immaterial.

Parent Company

The ultimate Parent Company of the Group is Smiths Group plc, a company incorporated in England and Wales and listed on the London Stock Exchange.

The accounts of the Parent Company, Smiths Group plc, have been prepared in accordance with UK GAAP, applying Financial Reporting Standard 101, "Reduced Disclosure Framework". The Company accounts are presented in separate financial statements on pages 200 to 207. The principal subsidiaries of the Parent Company are listed in the above accounts.

NOTES TO THE ACCOUNTS

1 SEGMENT INFORMATION

Analysis by operating segment

The Group is organised into five divisions: John Crane, Smiths Detection, Flex-Tek, Smiths Interconnect and Smiths Medical. These divisions design, manufacture and support the following products:

- **John Crane** – mechanical seals, seal support systems, power transmission couplings and specialised filtration systems;
- **Smiths Detection** – sensors and systems that detect and identify explosives, narcotics, weapons, chemical agents, biohazards and contraband;
- **Flex-Tek** – engineered components, flexible hosing and rigid tubing that heat and move fluids and gases;
- **Smiths Interconnect** – specialised electronic and radio frequency board-level and waveguide devices, connectors, cables, test sockets and sub-systems used in high-speed, high reliability, secure connectivity applications; and
- **Smiths Medical** – infusion systems, vascular access products, patient airway and temperature management equipment and specialised devices in areas of diagnostic and emergency patient transport.

The position and performance of each division is reported at each Board meeting to the Board of Directors. This information is prepared using the same accounting policies as the consolidated financial information except that the Group uses headline operating profit to monitor divisional results and operating assets to monitor divisional position. See note 3 for an explanation of which items are excluded from headline measures.

Following the reclassification of the Smiths Medical business as a discontinued operation, the segmental information of the Smiths Medical division is disclosed in note 27.

Intersegment sales and transfers are charged at arm's length prices.

Segment trading performance

	Year ended 31 July 2019				
	John Crane £m	Smiths Detection £m	Flex-Tek £m	Smiths Interconnect £m	Corporate costs £m
Revenue	945	798	436	319	2,498
Divisional headline operating profit	220	127	84	47	478
Corporate headline operating costs					(51)
Headline operating profit/(loss)	220	127	84	47	(51)
Items excluded from headline measures (note 3)	(29)	(36)	(16)	(2)	(101)
Operating profit/(loss)	191	91	68	45	(69)
					326

	Year ended 31 July 2018 – restated*				
	John Crane £m	Smiths Detection £m	Flex-Tek £m	Smiths Interconnect £m	Corporate costs £m
Revenue	881	793	354	300	2,328
Divisional headline operating profit	202	134	67	42	445
Corporate headline operating costs					(57)
Headline operating profit/(loss)	202	134	67	42	(57)
Items excluded from headline measures (note 3)	(3)	(41)	1	(5)	2
Operating profit/(loss)	199	93	68	37	(55)
					342

* The comparatives for the year to 31 July 2018 have been restated to reflect the reclassification of the Smiths Medical business as a discontinued operation.

Headline operating profit is stated after charging the following items:

	Year ended 31 July 2019				
	John Crane £m	Smiths Detection £m	Flex-Tek £m	Smiths Interconnect £m	Corporate and non-headline £m
Depreciation	14	10	5	6	2
Amortisation of capitalised development		9			9
Amortisation of software, patents and intellectual property	3	2		2	2
Amortisation of acquired intangibles					42
Share-based payment	4	3	1	1	5
					14

1 SEGMENT INFORMATION CONTINUED

Analysis by operating segment continued

	Year ended 31 July 2018 – restated*					
	John Crane £m	Smiths Detection £m	Flex-Tek £m	Smiths Interconnect £m	Corporate and non-headline £m	Total £m
Depreciation	13	10	4	7	1	35
Amortisation of capitalised development		10				10
Amortisation of software, patents and intellectual property	3	5		2	4	14
Amortisation of acquired intangibles					26	26
Share-based payment	3	1	1	1	6	12

* The comparatives for the year to 31 July 2018 have been restated to reflect the reclassification of the Smiths Medical business as a discontinued operation.

Corporate and non-headline items are central costs and charges that are treated as non-headline (see note 3).

Segment assets and liabilities

Segment assets

	31 July 2019						
	John Crane £m	Smiths Detection £m	Flex-Tek £m	Smiths Interconnect £m	Smiths Medical £m	Corporate and non-headline £m	Total £m
Property, plant, equipment, development projects, other intangibles and investments	113	106	52	38	20	329	
Inventory, trade and other receivables	428	485	171	132	17	1,233	
Segment assets	541	591	223	170	37	1,562	
	31 July 2018						
	John Crane £m	Smiths Detection £m	Flex-Tek £m	Smiths Interconnect £m	Smiths Medical £m	Corporate and non-headline £m	Total £m
Property, plant, equipment, development projects, other intangibles and investments	94	101	37	35	242	21	530
Inventory, trade and other receivables	361	372	117	120	266	22	1,258
Segment assets	455	473	154	155	508	43	1,788

Non-headline assets comprise receivables relating to non-headline items, acquisitions and disposals. Further details of the segmental asset held for distribution to owners is disclosed in note 27.

Segment liabilities

	31 July 2019						
	John Crane £m	Smiths Detection £m	Flex-Tek £m	Smiths Interconnect £m	Smiths Medical £m	Corporate and non-headline £m	Total £m
Divisional liabilities	(158)	(287)	(63)	(56)			(564)
Corporate and non-headline liabilities						(386)	(386)
Segment liabilities	(158)	(287)	(63)	(56)	(386)	(950)	
	31 July 2018						
	John Crane £m	Smiths Detection £m	Flex-Tek £m	Smiths Interconnect £m	Smiths Medical £m	Corporate and non-headline £m	Total £m
Divisional liabilities	(138)	(257)	(46)	(43)	(116)		(600)
Corporate and non-headline liabilities						(370)	(370)
Segment liabilities	(138)	(257)	(46)	(43)	(116)	(370)	(970)

Non-headline liabilities comprise provisions and accruals relating to non-headline items, acquisitions and disposals. Further details of the segmental liabilities held for distribution to owners is disclosed in note 27.

Reconciliation of segment assets and liabilities to statutory assets and liabilities

	Assets		Liabilities	
	31 July 2019 £m	31 July 2018 £m	31 July 2019 £m	31 July 2018 £m
Segment assets and liabilities	1,562	1,788	(950)	(970)
Goodwill and acquired intangibles	1,606	1,867		
Derivatives	50	57	(6)	(11)
Current and deferred tax	126	218	(107)	(149)
Retirement benefit assets and obligations	469	526	(152)	(145)
Cash and borrowings	289	717	(1,509)	(1,610)
Assets and liabilities held for distribution to owners	1,216		(213)	
Statutory assets and liabilities	5,318	5,173	(2,937)	(2,885)

Segment capital expenditure

The capital expenditure on property, plant and equipment, capitalised development and other intangible assets for each division is:

	John Crane £m	Smiths Detection £m	Flex-Tek £m	Smiths Interconnect £m	Corporate and non-headline £m	Total £m
Capital expenditure year ended 31 July 2019	29	23	6	10	53	121
Capital expenditure year ended 31 July 2018	17	22	7	10	52	108

Corporate and non-headline items include corporate capital expenditure through Smiths Business Information Services on IT equipment and software and £52m (FY2018: £48m) of expenditure from businesses held for distribution to owners.

Segment capital employed

Capital employed is a non-statutory measure of invested resources. It comprises statutory net assets adjusted to add goodwill recognised directly in reserves in respect of subsidiaries acquired before 1 August 1998 of £787m (FY2018: £787m) and eliminate post-retirement benefit assets and liabilities and litigation provisions relating to non-headline items, both net of related tax, and net debt. See note 30 for a reconciliation of net assets to capital employed.

The 12-month rolling average capital employed by division, which Smiths use to calculate divisional return on capital employed, is:

	31 July 2019				
	John Crane £m	Smiths Detection £m	Flex-Tek £m	Smiths Interconnect £m	Total £m
Average divisional capital employed	938	1,113	359	368	2,778
Average capital employed – assets held for distribution to owners					1,253
Average corporate capital employed					(59)
Average total capital employed					3,972

	31 July 2018				
	John Crane £m	Smiths Detection £m	Flex-Tek £m	Smiths Interconnect £m	Total £m
Average divisional capital employed	881	1,108	191	356	2,536
Average capital employed – assets held for distribution to owners					1,195
Average corporate capital employed					4
Average total capital employed					3,735

The Smiths Medical division has been accounted for as a business held for distribution to owners. Further details of the segmental asset and liabilities of the Smiths Medical division is disclosed in note 27.

1 SEGMENT INFORMATION CONTINUED

Analysis of revenue

The revenue for the main product and service lines for each division is:

	Original equipment £m	Aftermarket £m	Total £m
John Crane			
Revenue year ended 31 July 2019	313	632	945
Revenue year ended 31 July 2018	292	589	881
Smiths Detection	Aviation security £m	Other security systems £m	Total £m
Revenue year ended 31 July 2019	522	276	798
Revenue year ended 31 July 2018	540	253	793
Flex-Tek	Aerospace £m	Industrials £m	Total £m
Revenue year ended 31 July 2019	121	315	436
Revenue year ended 31 July 2018	87	267	354
Smiths Interconnect	Components, Connectors & Subsystems £m		
Revenue year ended 31 July 2019			319
Revenue year ended 31 July 2018			300

Following a review the Group has rationalised the analysis of divisional revenue to focus on the key markets of each division and to reflect the measures of revenue performance that are reported to and reviewed by the chief operating decision maker of the business. This review has resulted in the following changes to the analysis of revenue, and comparatives have been updated accordingly:

- Smiths Detection – Air Transportation has been renamed as Aviation whilst Urban Security, Defence and Ports & Borders have been aggregated and reported as Other Security Systems;
- Flex-Tek – revenue is now analysed by end market, Aerospace and Industrials. Previously revenue was analysed by product line; and
- Smiths Interconnect – the Connectors and Microwave sectors have been aggregated and reported as Components, Connectors & Subsystems.

The Group's statutory revenue is analysed as follows:

	Year ended 31 July 2019 £m	Year ended 31 July 2018 restated* £m
Sale of goods recognised at a point in time	1,984	1,841
Sale of goods recognised over time	41	31
Services	473	456
	2,498	2,328

* The comparatives for the year to 31 July 2018 have been restated to reflect the adoption of IFRS 15 and the reclassification of the Smiths Medical business as a discontinued operation.

Analysis by geographical areas

The Group's revenue by destination and non-current operating assets by location are shown below:

	Revenue		Intangible assets and property plant and equipment	
	Year ended 31 July 2019 £m	Year ended 31 July 2018 restated* £m	31 July 2019 £m	31 July 2018 £m
Americas	1,243	1,158	1,299	1,676
Europe	558	545	533	588
Asia-Pacific	409	365	69	104
Rest of the World	288	260	15	13
	2,498	2,328	1,916	2,381

* The comparatives for the year to 31 July 2018 have been restated to reflect the reclassification of the Smiths Medical business as a discontinued operation.

2 OPERATING PROFIT IS STATED AFTER CHARGING

	Year ended 31 July 2019 £m	Year ended 31 July 2018 restated* £m
Research and development expense	84	75
Depreciation of property, plant and equipment	37	35
Amortisation of intangible assets	60	50
Operating leases:		
– land and buildings	25	23
– other	7	7

* The comparatives for the year to 31 July 2018 have been restated to reflect the reclassification of the Smiths Medical business as a discontinued operation.

Research and development (R&D) cash costs were £111m (FY2018: £96m) comprising £84m (FY2018: £75) of R&D expensed to the income statement, £9m (FY2018: £10m) of capitalised costs and £18m (FY2018: £11m) of customer funded R&D.

	Year ended 31 July 2019 £m	Year ended 31 July 2018 £m
Audit services		
Fees payable to the Company's auditors for the audit of the Company's annual financial statements	4.0	4.1
Fees payable to the Company's auditors and its associates for other services:		
– the audit of the Company's subsidiaries	1.5	1.4
	5.5	5.5
All other services	0.2	0.3

Other services comprise audit-related assurance services £0.2m (FY2018: £0.2m) and other services £nil (FY2018: £0.1m). Total fees for non-audit services comprise 4% (FY2018: 5%) of audit fees. Audit-related assurance services include the review of the Interim Report.

3 NON-STATUTORY PROFIT MEASURES

Headline profit measures

The Company seeks to present a measure of performance which is not impacted by material non-recurring items or items considered non-operational in nature. This measure of profit is described as 'headline' and is used by management to measure and monitor performance. See the disclosures on presentation of results in accounting policies for an explanation of the adjustments. The items excluded from 'headline' are referred to as 'non-headline' items.

Non-headline operating profit items

The non-headline items included in statutory operating profit for continuing operations are as follows:

	Notes	Year ended 31 July 2019 £m	Year ended 31 July 2018 restated* £m
Post-acquisition integration costs and fair value adjustment unwind			
Integration programme costs		(17)	(19)
Unwind of acquisition balance sheet fair value uplift		(6)	(2)
Acquisition and disposal related transaction costs and provision releases			
Business acquisition / disposal costs		(10)	(2)
Release of acquisition related provisions		4	
Legacy pension scheme arrangements			
Guaranteed Minimum Pension (GMP) equalisation	8	(29)	
Settlement (loss)/gain on post-retirement benefit schemes	8	(1)	4
Non-headline litigation provision movements			
Net release of provision held against Titeflex Corporation subrogation claims	22	6	2
Provision for John Crane, Inc. asbestos litigation	22	(17)	(10)
Cost recovery for John Crane, Inc. asbestos litigation		11	
Other items			
Amortisation of acquisition related intangible assets	10	(42)	(26)
Profit on disposal of businesses	28	7	
Non-headline items in operating profit – continuing operations		(101)	(46)

* The comparatives for the year to 31 July 2018 have been restated to reflect the reclassification of the Smiths Medical business as a discontinued operation.

Post-acquisition integration costs and fair value adjustment unwind

The £17m (FY2018: £19m) of integration programme costs relate to defined projects for the integration of Morpho Detection into the existing Smiths Detection business and United Flexible into the existing Flex-Tek business. Integration programme costs include the direct costs of organisational change, IT system harmonisation expenses, site rationalisation and entity closure costs. The Morpho Detection integration programme is due to conclude in 2020 and the United Flexible integration programme is due to conclude in 2021. Integration costs are recognised as non-headline items because they are considered material and non-recurring.

The impact of unwinding the acquisition balance sheet fair value adjustments required by IFRS 3 'Business combinations' are recognised as non-headline as the charge does not relate to trading activity. The £6m (FY2018: £2m) charge is due to the unwind of fair value uplifts on the United Flexible and Morpho Detection acquisitions.

Acquisition and disposal transaction costs and provision releases

The £10m of business acquisition / disposal costs (FY2018: £2m) comprise £7m of directly linked incremental transaction costs, principally related to the acquisition of United Flexible which completed in February 2019 and £2m of litigation settlement costs relating to a prior year disposal. These costs do not include the cost of employees working on transactions and are reported as non-headline because they are dependent on the level of acquisition and disposal activity in the year.

The release of acquisition related provisions of £4m (FY2018: £nil) represents the release of excess accruals for deferred consideration on business acquisitions. These are reported as non-headline as the initial provision accrual was not recognised as a headline expense.

Legacy pension scheme arrangement

In the current year £29m of past service costs (FY2018: £nil) were recognised following the UK High Court ruling that GMP equalisation is required. A £1m settlement loss (FY2018: £4m gain) was recognised when defined benefit pension scheme members opted to take lump sums in lieu of annuities. These items are included in non-headline as they are non-recurring and relate to legacy pension liabilities. See note 8 for further details.

Non-headline litigation provision movements

The following litigation costs and recoveries have been treated as non-headline items because the provisions were treated as non-headline when originally recognised and the subrogation claims and litigation relate to products that the Group no longer sells in these markets:

- A provision release of £6m (FY2018: £2m) has been recognised by Titeflex Corporation in respect of changes to the estimated cost of future claims. The release is principally related to a fall in the expected number of claims. See note 22 for further details; and
- The £17m (FY2018: £10m) charge in respect of John Crane, Inc. asbestos litigation is principally due to litigation management expenses. The costs recovered via insurer settlements in the current year were £11m (FY2018: £nil). See note 22 for further details.

Other items

Acquisition related intangible asset amortisation costs of £42m (FY2018: £26m) were recognised in the current year. This is considered to be a non-headline item on the basis that these charges result from acquisition accounting and do not relate to current trading activity.

The £7m profit on disposal of businesses in FY2018 principally relates to the sale of John Crane Bearings. This is considered to be a non-headline item since the proceeds and cash impact are material and non-recurring.

Non-headline finance costs items

The non-headline items included in finance costs for continuing operations are as follows:

	Notes	Year ended 31 July 2019 £m	Year ended 31 July 2018 £m
Unwind of discount on provisions	22	(8)	(6)
Other finance income – retirement benefits	8	11	7
Foreign exchange gain on intercompany loan with discontinued operations		39	2
Other financing losses		(13)	(3)
Non-headline items in finance costs – continuing operations		29	
Continuing operations – non-headline loss before taxation		(72)	(46)

The financing elements of non-headline legacy liabilities, including the £8m (FY2018: £6m) unwind of discount on provisions, are excluded from headline finance costs because these provisions were originally recognised as non-headline and this treatment has been maintained for ongoing costs and credits.

Other finance income comprises £11m (FY2018: £7m) of financing credits relating to retirement benefits. These are excluded from headline finance costs because the ongoing costs and credits are a legacy of previous employee pension arrangements.

Following the reclassification of Smiths Medical division as a discontinued operation, foreign exchange gains or losses on intercompany financing between Smiths Medical and the continuing group are recognised on the face of the income statement as a non-headline item. The £39m foreign exchange gain in continuing operations (FY2018: £2m gain) offsets the foreign exchange loss in discontinued operations. This is excluded from headline net finance costs as these fair value movements are non-operational in nature and are purely a consequence of the presentational requirements for discontinued operations.

Other financing losses represent the fair value movements on financial instruments and foreign exchange movements on borrowings which the Group excludes from headline net finance costs. The current year loss of £13m (FY2018: £3m) is principally due to prior year hedge ineffectiveness following a change in valuation methodology for the bonds designated as fair value hedges, this hedge ineffectiveness will reverse over the remaining period to maturity. These fair value movements are excluded from headline net finance costs when the following requirements are met:

- Fair value gains and losses on the interest element of derivative financial instruments hedging the Group's net debt exposures are excluded from headline as they will either reverse over time or be matched in future periods by interest charges.
- Fair value gains and losses on the currency element of derivative financial instruments hedging the Group's net debt and exposures, and exchange gains and losses on borrowings are excluded as the relevant foreign exchange gains and losses on the commercially hedged items are recognised as a separate component of other comprehensive income in accordance with the Group's foreign currencies accounting policy.

3 NON-STATUTORY PROFIT MEASURES CONTINUED

Non-headline taxation items

The non-headline items included in taxation for continuing operations are as follows:

	Notes	Year ended 31 July 2019 £m	Year ended 31 July 2018 £m
Tax on non-headline loss	6	12	(3)
Tax on the repatriation of treasury legacy cash pools	6	(17)	
Impact of US tax reform	6		(78)
US deferred tax asset derecognition	6	(18)	
UK deferred tax asset derecognition	6	(36)	
Non-headline items in taxation – continuing operations		(59)	(81)
Continuing operations – non-headline loss for the year		(131)	(127)

Tax on the repatriation of treasury legacy cash pools

A £17m tax charge on prior year undistributed overseas earnings has been recognised following the adoption of a new Treasury cash repatriation policy. This cost has been reported as non-headline because the impact of the policy change was material and non-recurring.

Impact of US tax reform

In the prior year, US tax reform led to the Group recognising a £78m tax charge for continuing operations and a £26m tax credit for discontinued operations, following a reduction in the US Federal tax rate. This cost was reported as non-headline, because the impact of US tax reform was both material and non-recurring.

US deferred tax asset derecognition

Smiths Detection US business has generated tax losses from tax-deductible amortisation relating to the acquisition of Morpho in March 2017. The utilisation of these losses has been affected by changes in US tax legislation. As a consequence deferred tax of £18m on tax losses has been derecognised. The losses equated to non-headline amortisation of intangibles and their derecognition has therefore also been treated as non-headline.

UK deferred tax asset derecognition

In prior years UK deferred tax of £69m was recognised as a non-headline credit. The decision to separate Smiths Medical will reduce Group profitability in the UK. As a consequence, deferred tax of £36m has been derecognised. The derecognition has been reported as non-headline because the original credit was reported as non-headline.

Non-headline items for discontinued operations

The non-headline items for discontinued operations are as follows:

	Notes	Year ended 31 July 2019 £m	Year ended 31 July 2018 £m
Acquisition and disposal related transaction costs and provision releases			
Business acquisition / disposal costs		(2)	(1)
Medical separation costs		(8)	
Other items			
Amortisation of acquisition related intangible assets		(3)	(3)
Profit on disposal of businesses		17	
Non-headline finance costs items			
Foreign exchange loss on intercompany loan with parent		(39)	(2)
Other financing gains		1	
Non-headline taxation items			
Tax on non-headline loss	6	8	25
Tax on the repatriation of treasury legacy cash pools	6	(1)	
Non headline impact of US tax reform	6		26
Non-headline items in profit from discontinued operations		(27)	45
Profit for the year – non headline items for continuing and discontinued operations		(158)	(82)

The £2m of Business acquisition / disposal costs (FY2018: £1m) comprise incremental deal costs. These costs do not include the cost of employees working on transactions and are reported as non-headline because they are dependent on the level of activity in the year.

The incremental costs incurred by the Group on the transaction to demerge the Smiths Medical business amounted to £8m in the current year. This cost has been reported as non-headline as the full year effect of the transaction on the Group's financial statements is both material and non-recurring.

The £39m foreign exchange loss on intercompany loan with parent (FY2018: £2m gain) offsets the foreign exchange gain in continuing operations. This is excluded from headline net finance costs as these fair value movements are non-operational in nature and are purely a consequence of the presentational requirements for discontinued operations.

The profit on disposal of businesses of £17m (FY2018: £nil) relates to the sale of Medical's sterile water bottling and EMEA kitting businesses. See note 27. These are considered to be a non-headline items since the profit and cash impact are material and non-recurring arising from the sale of a business.

4 NET FINANCE COSTS

	Notes	Year ended 31 July 2019 £m	Year ended 31 July 2018 restated* £m
Interest receivable		11	10
Interest payable:			
– bank loans and overdrafts, including associated fees		(7)	(6)
– other loans		(55)	(59)
Interest payable		(62)	(65)
Headline net finance costs		(51)	(55)
Other financing gains/(losses):			
– valuation movements on fair value hedged debt		(52)	3
– valuation movements on fair value derivatives		42	(3)
– net foreign exchange losses		(3)	(3)
Other financing losses		3	(13)
Foreign exchange gain on intercompany loan with discontinued operations		3	39
Unwind of discount on provisions		3	(8)
Net interest income on retirement benefit obligations		8	11
Non-headline finance cost items		29	
Net finance costs		(22)	(55)

* The comparatives for the year to 31 July 2018 have been restated to reflect the reclassification of the Smiths Medical business as a discontinued operation.

5 EARNINGS PER SHARE

Basic earnings per share are calculated by dividing the profit for the year attributable to equity shareholders of the Company by the average number of ordinary shares in issue during the year.

	Year ended 31 July 2019 £m	Year ended 31 July 2018 £m
Profit attributable to equity shareholders for the year:		
– continuing	140	117
– discontinued	85	160
Total	225	277
Average number of shares in issue during the year	395,936,520	395,723,069
Statutory earnings per share continuing operations – basic	35.4p	29.6p
Statutory earnings per share continuing operations – diluted	35.1p	29.2p
Statutory earnings per share total – basic	56.8p	70.0p
Statutory earnings per share total – diluted	56.5p	69.1p

Diluted earnings per share are calculated by dividing the profit attributable to ordinary shareholders by 398,375,376 (FY2018: 400,999,220) ordinary shares, being the average number of ordinary shares in issue during the year adjusted by the dilutive effect of employee share schemes. For the year ended 31 July 2019, zero options (FY2018: zero) were excluded from this calculation because their effect was anti-dilutive for continuing operations.

A reconciliation of statutory and headline earnings per share is as follows:

	Year ended 31 July 2019			Year ended 31 July 2018		
	£m	Basic EPS (p)	Diluted EPS (p)	£m	Basic EPS (p)	Diluted EPS (p)
Total profit attributable to equity shareholders of the Parent Company	225	56.8	56.5	277	70.0	69.1
Exclude: Non-headline items (note 3)	158			82		
Headline earnings per share	383	96.8	96.1	359	90.7	89.5
Profit from continuing operations attributable to equity shareholders of the Parent Company	140	35.4	35.1	117	29.6	29.2
Exclude: Non-headline items (note 3)	131			127		
Headline earnings per share	271	68.4	68.0	244	61.7	60.8

6 TAXATION

This note only provides information about corporate income taxes under IFRS. Smiths companies operate in over 50 countries across the world. They pay and collect many different taxes in addition to corporate income taxes including: payroll taxes; value added and sales taxes; property taxes; product-specific taxes and environmental taxes. The costs associated with these other taxes are included in profit before tax.

	Year ended 31 July 2019 £m	Year ended 31 July 2018 restated* £m
The taxation charge in the consolidated income statement for the year comprises:		
Continuing operations		
- current income tax charge	93	93
- current tax adjustments in respect of prior periods	5	10
Current taxation	98	103
Deferred taxation	64	65
Total taxation expense – continuing operations	162	168
Discontinued operations		
- current income tax credit	36	11
- deferred taxation	(11)	(23)
Total taxation expense – discontinued operations	25	(12)
Total taxation expense in the consolidated income statement	187	156

* The comparatives for the year to 31 July 2018 have been restated to reflect the reclassification of the Smiths Medical business as a discontinued operation.

	Year ended 31 July 2019 £m	Year ended 31 July 2018 £m
Tax on items charged/(credited) to equity		
Deferred tax charge/(credit):		
- retirement benefit schemes	(13)	18
- cash-flow hedge accounting	(1)	(1)
- share-based payments	3	1
	(10)	18

Of the £13m credit to equity for retirement benefits, £12m relates to UK retirement schemes and £1m to US pension schemes.

Current taxation

	Current tax £m
At 31 July 2017	17
Foreign exchange gains and losses	(1)
Charge to income statement	(115)
Tax paid	65
At 31 July 2018	(34)
Current tax receivable	38
Current tax payable	(72)
At 31 July 2018	(34)
Foreign exchange gains and losses	(1)
Charge to income statement	(132)
Reclassified to businesses held for distribution to owners (note 27)	9
Tax paid	107
At 31 July 2019	(51)
Current tax receivable	11
Current tax payable within one year	(56)
Corporation tax payable after more than one year	(6)
At 31 July 2019	(51)

Provisions included in current tax liabilities are established based on reasonable estimates of the possible consequences of tax authority audits in the various countries in which the Group operates. Management judgement is used to determine the amount of such provisions based on an understanding of the relevant local tax law, taking into account the differences of interpretation that can arise on a wide variety of issues, depending on the prevailing circumstances, including the nature of current tax audits and the experience of previous enquiries.

Reconciliation of the tax charge

The tax charge on the profit for the year for continuing operations is different from the standard rate of corporation tax in the UK of 19.0% (FY2018: 19.0%). The difference is reconciled as follows:

	Year ended 31 July 2019 £m	Year ended 31 July 2018 restated £m
Profit before taxation	304	286
Notional taxation expense at UK rate of 19.0% (FY2018: 19.0%)	58	54
Different tax rates on non-UK profits and losses	22	33
Non-deductible expenses	18	9
Tax credits and non-taxable income	(14)	(8)
Non-headline derecognition of UK deferred tax asset	36	
Other adjustments to unrecognised deferred tax	3	15
Non-headline derecognition of US deferred tax asset	18	
Non-headline impact of US tax reform – deferred tax revaluation		62
Non-headline impact of US tax reform – deemed repatriation tax		17
Provision for prior year deferred tax on unremitted overseas earnings	17	
Effect of non-taxable profits on disposal of businesses		(1)
Tax on Medical consolidation adjustments	7	(8)
Prior Year true-up	(3)	(5)
Tax on continuing activities	162	168
Tax on discontinued activities	25	(12)
Total taxation expense in the consolidated income statement	187	156
Comprising:		
Taxation on headline profit	103	87
Non-headline taxation items:		
– tax on non-headline loss	(12)	3
– UK deferred tax asset derecognition	36	
– US deferred tax asset derecognition	18	
– tax on the repatriation of treasury legacy cash pools	17	
– Impact of US tax reform	78	
Taxation on non-headline items	59	81
Taxation on discontinued operation	25	(12)
Total taxation expense in the consolidated income statement	187	156

The head office of Smiths Group is domiciled in the UK; so the tax charge has been reconciled to UK tax rates.

6 TAXATION CONTINUED

Deferred taxation

	Property, plant and equipment and intangible assets £m	Employment benefits £m	Losses carried forward £m	Provisions £m	Other £m	Total £m
At 31 July 2017	(148)	(10)	129	138	52	161
Reallocation				2	(2)	
(Charge)/credit to income statement – continuing	60	(21)	(7)	(55)	(18)	(41)
(Charge)/credit to income statement – discontinued	2		(1)		(1)	
(Charge) to equity			(18)			(18)
Business combinations	1					1
Exchange adjustments	1	(1)		(1)	1	
At 31 July 2018	(84)	(50)	121	84	32	103
Deferred tax assets	3	(56)	120	80	33	180
Deferred tax liabilities	(87)	6	1	4	(1)	(77)
At 31 July 2018	(84)	(50)	121	84	32	103
Reallocation			1	3	(4)	
Charge to income statement – continuing	(19)	(9)	(21)	(2)	(2)	(53)
Credit to equity		10				10
Business combinations	(31)		2	1	(1)	(29)
Reclassified to businesses held for distribution to owners (note 27)	61		(1)	(2)	(23)	35
Exchange adjustments	(11)	1	4	7	3	4
At 31 July 2019	(84)	(48)	106	91	5	70
Deferred tax assets	(20)	(57)	103	66	23	115
Deferred tax liabilities	(64)	9	3	25	(18)	(45)
At 31 July 2019	(84)	(48)	106	91	5	70

Discontinued operations had net deferred tax liabilities of £35m at 31 July 2019.

In 2017, as a result of improvement in the legacy UK pension position and financing changes UK deferred tax of £69m was recognised as a non-headline gain in the period. The largest contribution to UK profitability derives from the activities of the Medical division and following the decision to separate Medical next year, net deferred tax assets related to non-Medical activities have been de-recognised, generating a non-headline charge of £36m. The closing net deferred tax asset balance related to UK activities and included in the balance at 31 July 2019 amounted to £nil (FY2018: £35m).

The deferred tax asset relating to losses has been recognised on the basis that evidence demonstrates a consistent pattern of improving results and the Group has implemented plans to support continuing improvements, or the losses relate to specific, identified non-recurring events. To the extent that losses have been derecognised, the derecognition has been reported on a consistent basis as the original credit. See note 3 for further details on the deferred tax derecognised in the current year.

Deferred tax relating to provisions includes £50m (FY2018: £48m) relating to John Crane Inc litigation provision, and £18m (FY2018: £19m) relating to Titeflex Corporation litigation provision. See note 22 for additional information on provisions.

Included in other deferred tax balances above is a deferred tax asset related to inventory of £6m (FY2018: £8m), deferred revenue of £9m (FY2018: £9m) and rebate reserve of £nil (FY2018: £6m).

Unrecognised Deferred Tax

The Group has unrecognised deferred tax relating to non-UK losses amounting to £243m (FY2018: £73m).

The expiry date of operating losses carried forward is dependent upon the law of the various territories in which the losses arise. A summary of expiry dates for losses in respect of which deferred tax has not been recognised is set out below:

	2019 £m	Expiry of losses	2018 £m	Expiry of losses
Restricted losses – Asia	29	2020-2026	16	2019-2025
Restricted losses – Americas	53	2020-2032		
Unrestricted losses – operating losses	161	No expiry	57	No expiry
Total losses	243		73	

Franked Investment Income Group Litigation Order (FII GLO)

Smiths Group is one of the companies enrolled in the FII GLO litigation against HMRC. The court actions first filed in 2003 are nearing an end and some claimants with different fact patterns have received payments. Smiths' recoveries are estimated at circa £22m (computed on a simple interest basis and after deducting 45% withholding tax) however there are further relevant legal actions that may impact this estimate.

The Group has not recognised any of this potential tax credit to the financial statements in the current period or the prior year.

EU Commission Investigation re Claims for Partial (75%) Exemption for Profits from qualifying loan relationships

In April 2019, the European Commission issued its decision in respect of a state aid investigation into the Group Financing Exemption in the UK controlled foreign company rules. The European Commission's decision found that part of the Group Financing Exemption constitutes state aid. The Group Financing Exemption was introduced in legislation by the UK Government in 2013. In common with other UK-based international companies whose arrangements were in line with the then UK CFC legislation, Smiths Group may be affected by the ultimate outcome of this decision.

In June 2019 the UK government and some other UK-based international companies appealed to the General Court of the European Union against the decision. Smiths is considering whether to appeal itself. Nonetheless, the UK Government is required to commence recovery from beneficiaries of the alleged aid in line with the European Commission's decision. As the first step in this recovery process HMRC have written to beneficiaries, including Smiths, for information. At present it is not possible to determine the amount that the UK government will seek to collect from Smiths.

If the European Commission's decision is ultimately upheld, the estimated maximum potential liability (which includes both tax and interest) is approximately £15m. Based on our current assessment, no provision is being made in respect of this issue.

7 EMPLOYEES

	Year ended 31 July 2019			Year ended 31 July 2018		
	Continuing operations £m	Discontinued operations £m	Total £m	Continuing operations £m	Discontinued operations £m	Total £m
Staff costs during the period						
Wages and salaries	645	245	890	603	236	839
Social security	80	25	105	74	23	97
Share-based payments (note 9)	14	1	15	14	2	16
Pension costs (including defined contribution schemes) (note 8)	27	13	40	26	11	37
	766	284	1,050	717	272	989

The average number of persons employed, rounded to the nearest 50 employees, was:

	Year ended 31 July 2019	Year ended 31 July 2018
John Crane	6,200	6,100
Smiths Detection	2,850	2,750
Flex-Tek	2,550	2,150
Smiths Interconnect	2,350	2,300
Corporate (including central/shared IT services)	300	350
Continuing operations	14,250	13,650
Discontinued operations – Smiths Medical	7,750	8,050
Total	22,000	21,700

Key management

The key management of the Group comprises Smiths Group plc Board Directors and Executive Committee members. Their aggregate compensation is shown below. Details of Directors' remuneration are contained in the report of the Remuneration Committee on pages 100 to 122.

	Year ended 31 July 2019 £m	Year ended 31 July 2018 £m
Key management compensation		
Salaries and short-term employee benefits	10.2	11.4
Cost of post-retirement benefits	0.3	0.1
Cost of share-based incentive plans	5.0	5.4

No member of key management had any material interest during the period in a contract of significance (other than a service contract or a qualifying third-party indemnity provision) with the Company or any of its subsidiaries.

7 EMPLOYEES CONTINUED

Options and awards held at the end of the period by key management in respect of the Company's share-based incentive plans were:

	Year ended 31 July 2019		Year ended 31 July 2018	
	Number of instruments '000	Weighted average exercise price	Number of instruments '000	Weighted average exercise price
CIP / SMP			88	
SEP	231		309	
LTIP	1,463		1,455	
Restricted stock	178		296	
SAYE	12	£10.63	9	£10.48

Related party transactions

The only related party transactions in FY2019 were key management compensation (FY2018: key management compensation).

8 POST-RETIREMENT BENEFITS

Smiths provides post-retirement benefits to employees in a number of countries. This includes defined benefit and defined contribution plans and, mainly in the United Kingdom (UK) and United States of America (US), post-retirement healthcare.

Defined contribution plans

The Group operates defined contribution plans across many countries. In the UK a defined contribution plan has been offered since the closure of the UK defined benefit pension plans. In the US a 401(k) defined contribution plan operates. The total expense recognised in the consolidated income statement in respect of all these plans was £37m (FY2018: £34m).

Defined benefit and post-retirement healthcare plans

The principal defined benefit pension plans are in the UK and in the US and these have been closed so that no future benefits are accrued.

For all schemes, pension costs are assessed in accordance with the advice of independent, professionally qualified actuaries. These valuations have been updated by independent qualified actuaries in order to assess the liabilities of the schemes as at 31 July 2019. Scheme assets are stated at their market values. Contributions to the schemes are made on the advice of the actuaries, in accordance with local funding requirements.

The changes in the present value of the net pension asset in the period were:

	Year ended 31 July 2019 £m	Year ended 31 July 2018 £m
At beginning of period	381	224
Exchange adjustment	(4)	
Current service cost	(3)	(3)
Scheme administration costs	(4)	(5)
Past service cost, curtailments, settlements	(30)	5
Finance income – retirement benefits	11	7
Contributions by employer	36	49
Actuarial (loss)/gain	(76)	104
Net retirement benefit asset	311	381

The £311m net retirement benefit assets includes £6m of pension obligations disclosed as liabilities held for distribution to owners.

UK pension schemes

Smiths funded UK pension schemes are subject to a statutory funding objective, as set out in UK pension legislation. Scheme trustees need to obtain regular actuarial valuations to assess the scheme against this funding objective. The trustees and sponsoring companies need to agree funding plans to improve the position of a scheme when it is below the acceptable funding level.

The UK Pensions Regulator has extensive powers to protect the benefits of members, promote good administration and reduce the risk of situations arising which may require compensation to be paid from the Pension Protection Fund. These include imposing a schedule of contributions or the calculation of the technical provisions, where a trustee and company fail to agree appropriate calculations.

Smiths Industries Pension Scheme ('SIPS')

This scheme was closed to future accrual effective 1 November 2009. SIPS provides index-linked pension benefits based on final earnings at date of closure. SIPS is governed by a corporate trustee (SI Pension Trustee Limited, a wholly owned subsidiary of Smiths Group plc). The board of trustee directors currently comprises four company-nominated trustees and four member-nominated trustees, with an independent chairman selected by Smiths Group plc. Trustee Directors are responsible for the management, administration, funding and investment strategy of the scheme.

The most recent actuarial valuation of this scheme has been performed using the Projected Unit Method as at 31 March 2017, and experience gains and losses identified during this valuation have been incorporated into the IAS 19 valuation. Under the funding plan for SIPS agreed in June 2018 Smiths pays cash contributions of £1m a month until the Scheme reaches full funding on a 'gilts + 0%' basis. Under the governing documentation of SIPS, any future surplus would be returnable to Smiths Group plc by refund, assuming gradual settlement of the liabilities over the lifetime of the scheme.

On 26 October 2018, the High Court of Justice of England and Wales issued a judgment that schemes need to equalise GMP benefits for men and women. We have estimated the financial effect of equalising benefits in respect of GMPs and any conversion of GMPs into non-GMPs to be £21m. This has been recognised as a past service cost in the income statement for the year ended 31 July 2019. The estimate is based on method C2.

The duration of SIPS liabilities is around 23 years (FY2018: 23 years) for active deferred members, 23 years (FY2018: 22 years) for deferred members and 12 years (FY2018: 11 years) for pensioners and dependants. On 3 July 2019 SIPS purchased a buy-in annuity policy with Canada Life for a premium of £176m. An actuarial loss of £14m was recognised as a result of this buy-in agreement.

TI Group Pension Scheme ('TIGPS')

This scheme was closed to future accrual effective 1 November 2009. TIGPS provides index-linked pension benefits based on final earnings at the date of closure. TIGPS is governed by a corporate trustee (TI Pension Trustee Limited, an independent company). The board of trustee directors comprises four company-nominated trustees and four member-nominated trustees, with an independent trustee director selected by the Trustee. The Trustee is responsible for the management, administration, funding and investment strategy of the scheme.

The most recent actuarial valuation of this scheme has been performed using the Projected Unit Method as at 5 April 2017. Under the funding plan for TIGPS agreed in June 2018, Smiths pays cash contributions of £1m a month until the Scheme is fully funded on a solvency basis. Under the governing documentation of TIGPS, any future surplus would be returnable to Smiths Group plc by refund, assuming gradual settlement of the liabilities over the lifetime of the scheme.

On 26 October 2018, the High Court of Justice of England and Wales issued a judgment that schemes need to equalise GMP benefits for men and women. We have estimated the financial effect of equalising benefits in respect of GMPs and any conversion of GMPs into non-GMPs to be £8m. This has been recognised as a past service cost in profit and loss in the year ending 31 July 2019. The estimate is based on method C2.

The duration of the TIGPS liabilities is around 25 years (FY2018: 24 years) for active deferred members, 22 years (FY2018: 22 years) for deferred members and 11 years (FY2018: ten years) for pensioners and dependants.

US pension plans

The valuations of the principal US pension and post-retirement healthcare plans were performed using census data at 1 January 2018.

The pension plans were closed with effect from 30 April 2009 and benefits were calculated as at that date and are not revalued. Governance of the US pension plans is managed by a Settlor Committee appointed by Smiths Group Services Corp, a wholly-owned subsidiary.

The duration of the liabilities for the largest US plan is around 18 years (FY2018: 19 years) for active deferred members, 18 years (FY2018: 19 years) for deferred members and 11 years (FY2018: 12 years) for pensioners and dependants.

Risk management

The pensions schemes are exposed to risks that:

- investment returns are below expectations, leaving the scheme with insufficient assets in future to pay all their pension obligations;
- members and dependants live longer than expected, increasing the value of the pensions the schemes have to pay;
- inflation rates are higher than expected, causing amounts payable under index-linked pensions to be higher than expected; and
- increased contributions are required to meet regulatory funding targets if lower interest rates increase the current value of liabilities.

These risks are managed separately for each pension scheme. However the Group has adopted a common approach of closing defined benefit schemes to cap members' entitlements and supporting trustees in adopting investment strategies which aim to match assets to future obligations, after allowing for the funding position of the scheme.

TIGPS

TIGPS has covered roughly 50% of liabilities with matching annuities, eliminating investment return, longevity, inflation and funding risks in respect of those liabilities. It has also adopted a liability matching strategy to hedge interest and inflation risks of the scheme's uninsured liabilities by investment in gilts together with the use of gilt repurchase arrangements and total return swaps. The strategy also takes into account the scheme's corporate bond investments.

SIPS

SIPS has covered roughly 30% of liabilities with matching annuities, eliminating investment return, longevity, inflation and funding risks in respect of those liabilities. It has also adopted a liability matching strategy to hedge interest and inflation risks of the scheme's uninsured liabilities by investment in gilts together with the use of gilt repurchase arrangements, total return swaps, inflation swaps and interest rate swaps. The strategy also takes into account the scheme's corporate bond investments.

8 POST-RETIREMENT BENEFITS CONTINUED

The principal assumptions used in updating the valuations are set out below:

	2019 UK	2019 US	2019 Other	2018 UK	2018 US	2018 Other
Rate of increase in salaries	n/a	n/a	3.3%	n/a	n/a	3.1%
Rate of increase for active deferred members	4.2%	n/a	n/a	4.1%	n/a	n/a
Rate of increase in pensions in payment	3.3%	n/a	3.1%	3.2%	n/a	2.5%
Rate of increase in deferred pensions	3.3%	n/a	n/a	3.2%	n/a	n/a
Discount rate	2.1%	3.5%	2.8%	2.8%	4.15%	3.4%
Inflation rate	3.3%	n/a	2.6%	3.2%	n/a	3.3%
Healthcare cost increases	4.7%	n/a	n/a	4.7%	n/a	n/a

The assumptions used in calculating the costs and obligations of the Group's defined benefit pension plans are set by the Group after consultation with independent professionally qualified actuaries. The assumptions used are estimates chosen from a range of possible actuarial assumptions which, due to the timescale covered, may not necessarily occur in practice. For countries outside the UK and USA; assumptions are disclosed as a weighted average.

Discount rate assumptions

The UK schemes use a discount rate based on the annualised yield on the Aon GBP Select AA Curve, using the expected cash-flows from a notional scheme with obligations of the same duration as that of the UK schemes.

Mortality assumptions

The mortality assumptions used in the principal UK schemes are based on the "SAPS S2" All Birth year tables with relevant scaling factors based on the recent experience of the schemes. The assumption allows for future improvements in life expectancy in line with the 2018 CMI projections, with a smoothing factor of 7.0 and A parameter of 0.5% and blended to a long-term rate of 1.25%. The mortality assumptions used in the principal US schemes are based on the RP-2014 table for healthy employees and healthy annuitants, removing MP-2014 improvement projections from 2006-2014 and applying scale MP-2018 mortality improvements from 2006 on a generational basis.

Expected further years of life	UK schemes				US schemes			
	Male 31 July 2019	Female 31 July 2019	Male 31 July 2018	Female 31 July 2018	Male 31 July 2019	Female 31 July 2019	Male 31 July 2018	Female 31 July 2018
Member who retires next year at age 65	22	24	22	24	21	23	21	23
Member, currently 45, when they retire in 20 years' time	23	25	24	25	22	24	22	24

Sensitivity

Sensitivities in respect of the key assumptions used to measure the principal pension schemes as at 31 July 2019 are set out below. These sensitivities show the hypothetical impact of a change in each of the listed assumptions in isolation, with the exception of the sensitivity to inflation which incorporates the impact of certain correlating assumptions. In practice, such assumptions rarely change in isolation.

	Profit before tax for year ended 31 July 2019 £m	Increase/ (decrease) in scheme assets 31 July 2019 £m	(Increase)/ decrease in scheme liabilities 31 July 2019 £m	Profit before tax for year ended 31 July 2018 £m	Increase/ (decrease) in scheme assets 31 July 2018 £m	(Increase)/ decrease in scheme liabilities 31 July 2018 £m
Rate of mortality – 1 year increase in life expectancy	(2)	86	(195)	(3)	70	(166)
Rate of mortality – 1 year decrease in life expectancy	2	(85)	193	3	(71)	166
Rate of inflation – 0.25% increase	(2)	26	(109)	(2)	22	(94)
Discount rate – 0.25% increase	4	(33)	152	5	(28)	135
Market value of scheme assets – 2.5% increase	2	76		2	74	

The effect on profit before tax reflects the impact of current service cost and net interest cost. The value of the scheme assets is affected by changes in mortality rates, inflation and discounting because they affect the carrying value of the insurance assets.

Asset valuation

Liquidity funds, equities and bonds are valued using quoted market prices in active markets. Exchange traded equity index futures are valued at market prices.

Total return, interest and inflation swaps are bilateral agreements between counterparties and do not have observable market prices. These derivative contracts are valued using observable market inputs.

Insured liabilities comprise annuity policies matching the scheme obligation to identified groups of pensioners. These assets are valued at the actuarial valuation of the corresponding liability, reflecting this matching relationship. Property is valued by specialists applying recognised property valuation methods incorporating current market data on rental yields and transaction prices.

Retirement-benefit plan assets

	31 July 2019 – £m				31 July 2018 – £m			
	UK schemes	US schemes	Other countries	Total	UK schemes	US schemes	Other countries	Total
Cash and cash equivalents:								
- cash	31	1	1	33	26	1	1	28
- liquidity funds	14			14	32			32
Equities:								
- UK funds	1		1	2	1		1	2
- other regions and global funds	60		3	63	79		3	82
Government bonds	2,230	85	3	2,318	1,679	72	4	1,755
Corporate bonds	1,174	196		1,370	1,097	166		1,263
Insured liabilities	1,343		1	1,344	1,154		1	1,155
Property	103		1	104	121			121
Other:								
- diversified growth funds and scheme receivables	310		26	336	544		23	567
- gilt repurchase obligations	(1,160)			(1,160)	(866)			(866)
Total market value	4,106	282	36	4,424	3,867	239	33	4,139

UK other investments at 31 July 2019 included £4m (FY2018: £19m) of interest and inflation swaps held by SIPS.

The scheme assets do not include any property occupied by, or other assets used by, the Group. Equities include investments in broad-based equity indices, some of which hold ordinary equity shares in Smiths Group plc.

Present value of funded scheme liabilities and assets for the main UK and US schemes

	31 July 2019 – £m			31 July 2018 – £m		
	SIPS	TIGPS	US schemes	SIPS	TIGPS	US schemes
Present value of funded scheme liabilities:						
- Active deferred members	(42)	(60)	(95)	(57)	(56)	(88)
- Deferred members	(930)	(587)	(123)	(784)	(550)	(115)
- Pensioners	(1,142)	(857)	(72)	(1,070)	(804)	(47)
Present value of funded scheme liabilities	(2,114)	(1,504)	(290)	(1,911)	(1,410)	(250)
Market value of scheme assets	2,377	1,710	282	2,214	1,633	239
Surplus/(deficit)	263	206	(8)	303	223	(11)

Net retirement benefit obligations

	31 July 2019 – £m				31 July 2018 – £m			
	UK schemes	US schemes	Other countries	Total	UK schemes	US schemes	Other countries	Total
Market value of scheme assets								
4,106	282	36	4,424	3,867	239	33	4,139	
Present value of funded scheme liabilities	(3,637)	(291)	(45)	(3,973)	(3,342)	(250)	(41)	(3,633)
Surplus/(deficit)	469	(9)	(9)	451	525	(11)	(8)	506
Unfunded pension plans	(56)	(8)	(59)	(123)	(53)	(7)	(49)	(109)
Post-retirement healthcare	(5)	(10)	(2)	(17)	(5)	(9)	(2)	(16)
Present value of unfunded obligations	(61)	(18)	(61)	(140)	(58)	(16)	(51)	(125)
Net pension asset/(liability)	408	(27)	(70)	311	467	(27)	(59)	381
Post-retirement assets	469			469	526			526
Post-retirement liabilities	(61)	(27)	(64)	(152)	(59)	(27)	(59)	(145)
Liabilities held for distribution to owners				(6)	(6)			
Net pension asset/(liability)	408	(27)	(70)	311	467	(27)	(59)	381

Liabilities held for distribution to owners comprises £5m of unfunded pension plans and £1m deficit on defined benefit schemes within the Smiths Medical division.

Where any individual scheme shows a recoverable surplus under IAS 19, this is disclosed on the balance sheet as a retirement benefit asset. The IAS 19 surplus of any one scheme is not available to fund the IAS 19 deficit of another scheme. The retirement benefit asset disclosed arises from the rights of the employers to recover the surplus at the end of the life of the scheme.

8 POST-RETIREMENT BENEFITS CONTINUED

Amounts recognised in the consolidated income statement

	Year ended 31 July 2019 £m	Year ended 31 July 2018 £m
Amounts charged to operating profit		
Current service cost	3	3
Past service costs – Guaranteed Minimum Pension (GMP) equalisation	29	
Settlement loss/(gain)	1	(4)
Scheme administration costs	4	5
	37	4
The operating cost is charged as follows:		
Cost of sales	1	1
Sales and distribution costs	1	1
Headline administrative expenses	5	6
Non-headline settlement loss/(gain)	1	(4)
Non-headline administrative expenses	29	
	37	4
Amounts credited to finance costs		
Non-headline other finance income – retirement benefits	(11)	(7)

Amounts recognised directly in the consolidated statement of comprehensive income

	Year ended 31 July 2019 £m	Year ended 31 July 2018 £m
Actuarial gains/(losses)		
Difference between interest credit and return on assets	355	(18)
Experience losses on scheme liabilities	(4)	(10)
Actuarial gains arising from changes in demographic assumptions	25	5
Actuarial (losses)/gains arising from changes in financial assumptions	(452)	127
	(76)	104

Changes in present value of funded scheme assets

	31 July 2019 – £m				31 July 2018 – £m			
	UK schemes	US schemes	Other countries	Total	UK schemes	US schemes	Other countries	Total
At beginning of period	3,867	239	33	4,139	3,959	266	34	4,259
Interest on assets	105	10	1	116	101	9	1	111
Actuarial movement on scheme assets	332	24	(1)	355	(6)	(12)	(1)	(19)
Employer contributions	24	5	1	30	28	12	1	41
Assets distributed on settlement						(27)		(27)
Scheme administration costs	(3)	(1)		(4)	(3)	(1)		(4)
Exchange adjustments		18	3	21		1		1
Benefits paid	(219)	(13)	(1)	(233)	(212)	(9)	(2)	(223)
At end of period	4,106	282	36	4,424	3,867	239	33	4,139

Changes in present value of funded defined benefit obligations

	31 July 2019 – £m				31 July 2018 – £m			
	UK schemes	US schemes	Other countries	Total	UK schemes	US schemes	Other countries	Total
At beginning of period	(3,342)	(250)	(41)	(3,633)	(3,571)	(292)	(42)	(3,905)
Current service cost			(1)	(1)			(1)	(1)
Past service costs	(29)			(29)				
Interest on obligations	(91)	(9)	(2)	(102)	(90)	(10)	(2)	(102)
Actuarial movement on liabilities	(394)	(24)		(418)	107	13	1	121
Liabilities extinguished on settlement						31		31
Exchange adjustments		(21)	(2)	(23)				
Benefits paid	219	13	1	233	212	9	2	223
At end of period	(3,637)	(291)	(45)	(3,973)	(3,342)	(249)	(42)	(3,633)

Changes in present value of unfunded defined benefit pensions and post-retirement healthcare plans

	Assets		Obligations	
	Year ended 31 July 2019 £m	Year ended 31 July 2018 £m	Year ended 31 July 2019 £m	Year ended 31 July 2018 £m
At beginning of period			(125)	(130)
Reclassification of small unfunded obligations				1
Liabilities transferred on disposals				(2)
Current service cost				(2)
Interest on obligations				(3)
Actuarial movement				(13)
Employer contributions	6	7		
Exchange adjustments				(3)
Benefits paid	(6)	(7)	6	7
At end of period			(140)	(125)

Cash contributions

Company contributions to the defined benefit pension plans and post-retirement healthcare plans for 2019 totalled £36m (FY2018: £49m). This comprised regular contributions to funded schemes of £12m (FY2018: £24m) to SIPS, £12m (FY2018: £5m) to TIGPS, a one-off £5m contribution (FY2018: £12m) to funded US schemes and contributions to other schemes of £1m (FY2018: £2m). In addition, £6m (FY2018: £7m) was spent on providing benefits under unfunded defined benefit pension and post-retirement healthcare plans.

In 2020, the cash contributions to the Group's schemes are expected to total about £40m, including £12m to SIPS and £12m to TIGPS, with the balance relating mainly to the US scheme. Group contributions in respect of the unfunded schemes and post-retirement healthcare are expected to be in line with 2019.

9 EMPLOYEE SHARE SCHEMES

The Group operates share schemes and plans for the benefit of employees. The nature of the principal schemes and plans, including general conditions, is set out below:

Long-Term Incentive Plan (LTIP)

The LTIP is a share plan under which an award over a capped number of shares will vest after the end of a three-year performance period if performance conditions are met. LTIP awards are made to selected senior executives, including the Executive Directors.

LTIP performance conditions

Each performance condition has a threshold below which no shares vest and a maximum performance target at or above which the award vests in full. For performance between 'threshold' and 'maximum', awards vest on a straight-line sliding scale. The performance conditions are assessed separately so performance on one condition does not affect the vesting of the other elements of the award. To the extent that the performance targets are not met over the three-year performance period, awards will lapse. There is no re-testing of the performance conditions.

LTIP awards have performance conditions relating to underlying revenue growth, growth in headline EPS, ROCE and cash conversion.

Smiths Share Matching Plan (SMP)

Under the scheme, participants were required to invest between 25% and 50% of their post-tax bonus to purchase the Company's shares at the prevailing market price. Matching shares granted in October 2015 vested during the year at a rate correlating to the performance of the Group LTIP issued for the same performance period. There are no SMP awards outstanding at 31 July 2019 and no future awards will be made under the SMP.

Smiths Excellence Plan (SEP)

In September 2016, the Smiths Excellence plan (SEP) was introduced. The SEP is designed to reinforce value creation over the medium term by focusing on specific objectives in key areas of operational performance. Awards vest after two years, depending on performance on the operational objectives during the first year and continued employment with the Group. There is no re-testing of performance. However, the Remuneration Committee has discretion to adjust vesting rates if material misstatements in reported performance are subsequently identified and awards are subject to clawback provisions in the event of misconduct.

Directors are not eligible to participate in the SEP.

9 EMPLOYEE SHARE SCHEMES CONTINUED

Restricted stock

Restricted stock is used by the Remuneration Committee, as a part of the recruitment strategy, to make awards in recognition of incentive arrangements forfeited on leaving a previous employer. If an award is considered appropriate, the award will take account of relevant factors including the fair value of awards forfeited, any performance conditions attached, the likelihood of those conditions being met and the proportion of the vesting period remaining.

	Long-term incentive plans	SMP	SEP	Restricted stock	Save as you earn scheme	Total	Weighted average exercise price £
Ordinary shares under option ('000)							
31 July 2017	3,798	926	748	205	1,110	6,787	£1.64
Granted	1,600		857	283	268	3,008	£1.07
Exercised	(444)	(424)	(55)	(178)	(298)	(1,399)	£2.12
Lapsed	(1,043)	(89)	(191)	(6)	(118)	(1,447)	£0.86
31 July 2018	3,911	413	1,359	304	962	6,949	£1.46
Granted	1,602		928	24	315	2,869	£1.30
Exercised	(406)	(331)	(379)	(79)	(193)	(1,388)	£1.27
Lapsed	(1,215)	(82)	(621)	(57)	(72)	(2,047)	£0.41
31 July 2019	3,892		1,287	192	1,012	6,383	£1.77

Options and awards were exercised on an irregular basis during the period. The average closing share price over the financial year was 1,479.21p (FY2018: 1,589.60p). There has been no change to the effective option price of any of the outstanding options during the period.

Range of exercise prices	Total shares under option at 31 July 2019 ('000)	Weighted average remaining contractual life at 31 July 2019 (months)	Total shares under option at 31 July 2018 ('000)	Weighted average remaining contractual life at 31 July 2018 (months)	Exercisable weighted average exercise price for options exercisable at 31 July 2019		Options exercisable at 31 July 2018 ('000)	Exercisable weighted average exercise price for options exercisable at 31 July 2018
					Options exercisable at 31 July 2019 ('000)	exercise price at 31 July 2019		
£0.00 – £2.00	5,370	15	5,986	13	n/a	n/a	n/a	n/a
£6.01 – £10.00	312	10	504	17	n/a	n/a	n/a	n/a
£10.01 – £14.00	700	36	459	40	n/a	n/a	n/a	n/a

For the purposes of valuing options to arrive at the share-based payment charge, the binomial option-pricing model has been used. The key assumptions used in the models for 2019 and 2018 are volatility of 25% to 20% (FY2018: 25% to 20%) and dividend yield of 3% (FY2018: 3%), based on historical data, for the period corresponding with the vesting period of the option. These generated a weighted average fair value for SEP of £14.48 (FY2018: £14.87), LTIP of £14.52 (FY2018: £13.48), and restricted stock of £13.43 (FY2018: £12.73).

Included within staff costs is an expense arising from share-based payment transactions of £15m (FY2018: £16m), of which £14m (FY2018: £14m) relates to equity-settled share-based payment.

10 INTANGIBLE ASSETS

	Goodwill £m	Development costs £m	Acquired intangibles (see table below) £m	Software, patents and intellectual property £m	Total £m
Cost					
At 31 July 2017	1,658	330	574	206	2,768
Exchange adjustments	1	1	1	1	4
Business combinations (note 26)	46		29	1	76
Additions		29		11	40
Disposals				(11)	(11)
Business disposals (note 28)	(1)		(22)	(1)	(24)
At 31 July 2018	1,704	360	582	207	2,853
Exchange adjustments	110	24	47	9	190
Business combinations (note 26)	127		148		275
Additions		30		12	42
Disposals				(7)	(7)
Business disposals (note 27)	(7)				(7)
Reclassified to assets held for distribution to owners (note 27)	(622)	(270)	(212)	(50)	(1,154)
At 31 July 2019	1,312	144	565	171	2,192
Amortisation and impairments					
At 31 July 2017	88	180	324	161	753
Exchange adjustments		1		1	2
Charge for the year		24	29	18	71
Disposals				(11)	(11)
Business disposals (note 28)			(22)	(1)	(23)
At 31 July 2018	88	205	331	168	792
Exchange adjustments	5	14	24	6	49
Charge for the year		23	45	13	81
Disposals				(6)	(6)
Reclassified to assets held for distribution to owners (note 27)	(27)	(143)	(195)	(43)	(408)
At 31 July 2019	66	99	205	138	508
Net book value at 31 July 2019	1,246	45	360	33	1,684
Net book value at 31 July 2018	1,616	155	251	39	2,061
Net book value at 31 July 2017	1,570	150	250	45	2,015

10 INTANGIBLE ASSETS CONTINUED

In addition to goodwill, the acquired intangible assets comprise:

	Patents, licences and trademarks £m	Technology £m	Customer relationships £m	Total acquired intangibles £m
Cost				
At 31 July 2017	57	211	306	574
Exchange adjustments		1		1
Business combinations (note 26)		2	27	29
Business disposals (note 28)		(22)		(22)
At 31 July 2018	57	214	311	582
Exchange adjustments	4	16	27	47
Business combinations (note 26)	13		135	148
Reclassified to assets held for distribution to owners (note 27)	(59)	(90)	(63)	(212)
At 31 July 2019	15	140	410	565
Amortisation				
At 31 July 2017	36	110	178	324
Charge for the year	3	11	15	29
Business disposals (note 28)			(22)	(22)
At 31 July 2018	39	121	171	331
Exchange adjustments	3	10	11	24
Charge for the year	3	12	30	45
Reclassified to assets held for distribution to owners (note 27)	(42)	(90)	(63)	(195)
At 31 July 2019	3	53	149	205
Net book value at 31 July 2019	12	87	261	360
Net book value at 31 July 2018	18	93	140	251
Net book value at 31 July 2017	21	101	128	250

Individually material intangible assets comprise £132m of customer related intangibles attributable to United Flexible (remaining amortisation period: 7 years) and £105m of customer relationship intangibles attributable to Morpho Detection (remaining amortisation period: 13 years).

11 IMPAIRMENT TESTING

Goodwill

Goodwill is tested for impairment at least annually or when there is an indication that the carrying value may not be recoverable.

Recoverable amount is determined by value in use or fair value less cost to sell calculations for each group of cash generating units (CGU) that goodwill is allocated to.

Value in use is calculated as the net present value of the projected risk-adjusted cash-flows of the CGU. These forecast cash-flows are based on the 2019 budget, the five-year strategic plan approved by the Board and detailed divisional strategic projections, where these have been prepared and approved by the Board.

Fair value less cost to sell is calculated using available information on past and expected future profitability, valuation multiples for comparable quoted companies and similar transactions (adjusted as required for significant differences) and information on costs of similar transactions. Fair value less costs to sell models are used when trading projections in the strategic plan cannot be adjusted to eliminate the impact of a major restructuring.

Goodwill is allocated by division as follows:

	2019 £m	2019 Number of CGUs	2018 £m	2018 Number of CGUs
John Crane	140	1	133	1
Smiths Detection	673	1	642	1
Flex-Tek	171	1	35	2
Smiths Interconnect	261	1	243	2
Smiths Medical – reclassified as an asset held for distribution at 31 July 2019 (note 27)		1	563	1
	1,245	5	1,616	7

Flex-Tek acquired United Flexible in February 2019 and a single management team was in place covering Flex-Tek and United Flexible. The integration of the two businesses since the acquisition date has progressed well and is such that they are considered to be a single CGU for impairment testing.

Impairment testing assumptions

The key assumptions used in value in use calculations are:

- Sales: projected sales are built up with reference to markets and product categories. They incorporate past performance, historical growth rates and projections of developments in key markets;
- Margins: projected margins reflect historical performance and the impact of all completed projects to improve operational efficiency and leverage scale. The projections do not include the impact of future restructuring projects to which the Group is not yet committed;
- Discount rate: the discount rates have been calculated based on the Group's weighted average cost of capital and risks specific to the CGU being tested. Pre-tax rates of 9.9% to 13.9% (FY2018: 12.0% to 14.9%) have been used for the impairment testing; and
- Long-term growth rates: as required by IAS 36, growth rates for the period after the detailed forecasts are based on the long-term GDP projections of the primary market for the CGU. The average growth rate used in the testing was 2.0% (FY2018: 2.0%). These rates do not reflect the long-term assumptions used by the Group for investment planning.

The assumptions used in the impairment testing of CGUs with significant goodwill balances are as follows:

	Year ended 31 July 2019				
	John Crane	Smiths Detection	Flex-Tek	Smiths Interconnect	Smiths Medical
Net book value of goodwill (£m)	140	673	171	261	595
Basis of valuation	Value in use	Value in use	Value in use	Value in use	Value in use
Discount rate (pre-tax)	13.9%	11.2%	11.3%	12.6%	9.9%
Period covered by management projections	5 years	5 years	5 years	5 years	5 years
Long-term growth rates	2.1%	2.1%	1.8%	1.8%	1.8%
	Year ended 31 July 2018				
	John Crane	Smiths Detection	Smiths Interconnect	Smiths Medical	
Net book value of goodwill (£m)	133	642	75	168	563
Basis of valuation	Value in use	Value in use	Value in use	Value in use	Value in use
Discount rate (pre-tax)	14.0%	13.5%	12.4%	14.9%	12.0%
Period covered by management projections	5 years	5 years	5 years	5 years	5 years
Long-term growth rates	2.2%	1.8%	2.0%	2.0%	1.9%

Goodwill impairment

No impairment charges have been incurred (FY2018: £nil).

Other intangible assets

The Group has no indefinite life intangible assets other than goodwill. During the year, impairment tests were carried out for capitalised development costs that have not yet started to be amortised and acquired intangibles where there were indications of impairment. Value in use calculations were used to determine the recoverable values of these assets.

No impairment charges have been incurred (FY2018: £nil).

12 PROPERTY, PLANT AND EQUIPMENT

	Land and buildings £m	Plant and machinery £m	Fixtures, fittings, tools and equipment £m	Total £m
Cost or valuation				
At 31 July 2017	204	635	209	1,048
Exchange adjustments		1	(1)	
Business combinations (note 26)	2	1		3
Additions	8	47	13	68
Disposals	(6)	(28)	(24)	(58)
Business disposals (note 28)	(1)	(19)	(3)	(23)
At 31 July 2018	207	637	194	1,038
Exchange adjustments	14	41	4	59
Business combinations (note 26)	3	8		11
Additions	7	57	15	79
Disposals	(2)	(38)	(17)	(57)
Reclassified to assets held for distribution to owners (note 27)	(43)	(309)	(58)	(410)
At 31 July 2019	186	396	138	720
Depreciation				
At 31 July 2017	107	461	165	733
Exchange adjustments		1	(1)	
Charge for the year	7	35	13	55
Disposals	(6)	(24)	(23)	(53)
Business disposals (note 28)	(1)	(14)	(2)	(17)
At 31 July 2018	107	459	152	718
Exchange adjustments	6	31	2	39
Charge for the year	10	33	13	56
Disposals		(36)	(14)	(50)
Reclassified to assets held for distribution to owners (note 27)	(19)	(216)	(40)	(275)
At 31 July 2019	104	271	113	488
Net book value at 31 July 2019	82	125	25	232
Net book value at 31 July 2018	100	178	42	320
Net book value at 31 July 2017	97	174	44	315

13 INVENTORIES

	31 July 2019 £m	31 July 2018 £m
Inventories comprise		
Raw materials and consumables	146	149
Work in progress	111	94
Finished goods	160	223
	417	466

Note: Smiths Medical is classified as held for distribution to owners in the current year, the prior year comparatives have not been restated.

The Group consumed £1,440m (FY2018: £1,424m) of inventories during the period. In the year to 31 July 2019, £21m (FY2018: £13m) was charged for the write-down of inventory and £8m (FY2018: £7m) was released from inventory provisions no longer required.

Inventory provisioning

	31 July 2019 £m	31 July 2018 £m
Gross inventory carried at full value	357	391
Gross value of inventory partly or fully provided for	111	129
	468	520
Inventory provision		(54)
Inventory after provisions	417	466

14 TRADE AND OTHER RECEIVABLES

	31 July 2019 £m	31 July 2018 restated* £m
Non-current		
Trade receivables	1	1
Contract assets	45	45
Other receivables	6	11
	52	57
Current		
Trade receivables	574	564
Prepayments	25	31
Contract assets	125	103
Other receivables	40	35
	764	733

* The comparatives for 31 July 2018 have been represented to reflect the adoption of IFRS 15. Note: Smiths Medical is classified as held for distribution to owners in the current year, the prior year comparatives have not been restated.

Trade receivables do not carry interest. Management considers that the carrying value of trade and other receivables approximates to the fair value. Trade and other receivables, including prepayments, accrued income and other receivables qualifying as financial instruments are classified as 'loans and receivables'. The maximum credit exposure arising from these financial assets is £713m (FY2018: £688m).

Trade receivables are disclosed net of provisions for bad and doubtful debts. The provisions for bad and doubtful debts are based on specific risk assessment and reference to past default experience.

Contract assets comprise balances not yet due on contracts, where revenue recognition does not align with the agreed payment schedule. The main movements in the year arise from increases in contract asset balances of £22m (FY2018: £19m) due to £8m of foreign currency translation gains and an increase of £9m in Interconnect's receivables.

Credit risk is managed separately for each customer and, where appropriate, a credit limit is set for the customer based on previous experience of the customer and third party credit ratings. The Group has no significant concentration of credit risk, with exposure spread over a large number of customers. The largest single customer is the US Federal Government, representing 6% (FY2018: less than 5%) of Group revenue.

Ageing of trade receivables

	31 July 2019 £m	31 July 2018 £m
Trade receivables which are not impaired and not yet due	553	566
Trade receivables which are not impaired and less than three months overdue	93	97
Trade receivables which are not impaired and more than three months overdue	38	27
Gross value of partially and fully provided receivables	26	43
	710	733
Provision for bad and doubtful debts	(24)	(32)
Trade receivables	686	701

15 TRADE AND OTHER PAYABLES

	31 July 2019 £m	31 July 2018 restated* £m
Non-current		
Other payables	15	14
Contract liabilities	15	13
	30	27
Current		
Trade payables	221	244
Other payables	12	23
Other taxation and social security costs	19	22
Accruals	201	185
Contract liabilities	116	132
	569	606

* The comparatives for 31 July 2018 have been represented to reflect the adoption of IFRS 15. Note: Smiths Medical is classified as held for distribution to owners in the current year, the prior year comparatives have not been restated.

15 TRADE AND OTHER PAYABLES CONTINUED

Trade and other payables, including accrued expenses and other payables qualifying as financial instruments, are accounted for at amortised cost and are categorised as other financial liabilities.

Contract liabilities include deferred income balances of £131m (FY2018: £104m) in respect of payments being made in advance of the revenue recognition and balances of £nil (FY2018: £41m) relating to amounts deferred under variable consideration agreements. The movement in the year arises primarily from the liabilities of the Smiths Medical division being classified as held for distribution (see note 27) and movements in the long term contracts of the Smiths Detection division.

16 FINANCIAL ASSETS

At 31 July 2019, £13m (FY2018: £13m) was held on deposit with banks as security for liabilities or letters of credit.

The remaining balance of financial assets relate to the Group's investments in early stage businesses that are developing or commercialising related technology.

17 BORROWINGS AND NET DEBT

This note sets out the calculation of net debt, an important measure in explaining our financing position. The net debt figure includes accrued interest and fair value adjustments relating to hedge accounting.

	31 July 2019 £m	31 July 2018 £m
Cash and cash equivalents		
Net cash and deposits	289	717
Short-term borrowings		
\$250m 7.20% US\$ Guaranteed notes 2019	(190)	
Bank and other loans	(1)	(1)
Interest accrual	(9)	(12)
	(9)	(203)
Long-term borrowings		
\$400m 3.625% US\$ Guaranteed notes 2022	(329)	(298)
€600m 1.25% Eurobond 2023	(564)	(533)
€650m 2.00% Eurobond 2027	(607)	(575)
Bank and other loans	(1)	(1)
	(1,500)	(1,407)
Borrowings	(1,509)	(1,610)
Net debt	(1,220)	(893)

Cash and cash equivalents include highly liquid investments with maturities of three months or less. Borrowings are accounted for at amortised cost and are categorised as other financial liabilities. See note 18 for a maturity analysis of borrowings. Interest of £36m (FY2018: £42m) was charged to the consolidated income statement in this period in respect of public bonds.

Secured loans

Loans amounting to £nil (FY2018: £2m) were secured on plant and equipment with a book value of £nil (FY2018: £3m).

Cash and cash equivalents

	31 July 2019 £m	31 July 2018 £m
Cash at bank and in hand	153	287
Short-term deposits	136	430
Cash and cash equivalents	289	717

Netting

Cash and overdraft balances in interest compensation cash pooling systems are reported gross on the balance sheet. The cash pooling agreements incorporate a legally enforceable right of net settlement. However, as there is no intention to settle the balances net, these arrangements do not qualify for net presentation. At 31 July 2019 the total value of overdrafts on accounts in interest compensation cash pooling systems was £nil (FY2018: £nil). The balances held in zero balancing cash pooling arrangements have daily settlement of balances. Therefore netting is not relevant.

Movements in assets/(liabilities) arising from financing activities

	Changes in net debt				Changes in other financing items				Total liabilities from financing activities £m
	Net cash and cash equivalents £m	Other short-term borrowings £m	Long-term borrowings £m	Net debt £m	Interest rate & cross-currency swaps £m	Foreign exchange contracts £m	Other financing items £m		
At 31 July 2018	717	(203)	(1,407)	(893)	43	4	47	(846)	
Foreign exchange gains and losses	10	(4)	(47)	(41)		5,733	5,733	5,692	
Net cash outflow	(218)			(218)	(30)	(5,733)	(5,763)	(5,981)	
Repayment of borrowings	(194)	194							
Capitalisation, interest accruals and unwind of capitalised fees		2	(1)	1	30		30	31	
Fair value movement from interest rate hedging			(46)	(46)				(46)	
Revaluation of derivative contracts					2	(1)	1	1	
Reclassified to asset/liability held for distribution to owners	(26)	2	1	(23)		(4)	(4)	(27)	
At 31 July 2019	289	(9)	(1,500)	(1,220)	45	(1)	44	(1,176)	

Change of control

The Company has in place credit facility agreements under which a change in control would trigger prepayment clauses. The Company also has bonds in issue, the terms of which would allow bondholders to exercise put options and require the Company to buy back the bonds at their principal amount plus interest if a rating downgrade occurs at the same time as a change of control takes effect.

18 FINANCIAL RISK MANAGEMENT

The Group's international operations and debt financing expose it to financial risks which include the effects of changes in foreign exchange rates, changes in debt market prices, interest rates, credit risks and liquidity risks. The management of operational credit risk is discussed in note 14.

Treasury Risk Management Policy

The Board maintains a Treasury Risk Management Policy, which governs the treasury operations of the Group and its subsidiary companies and the consolidated financial risk profile to be maintained. A report on treasury activities, financial metrics and compliance with the Policy is prepared monthly. This is circulated to the Chief Financial Officer each month and key elements to the Audit and Risk Committee on a semi-annual basis.

The Policy maintains a treasury control framework within which counterparty risk, financing and debt strategy, cash and liquidity, interest rate risk and currency translation management are reserved for Group Treasury, while currency transaction management is devolved to operating divisions.

Centrally directed cash management systems exist globally to manage overall liquid resources efficiently across the divisions. The Group uses financial instruments to raise financing for its global operations, to manage related interest rate and currency financial risk, and to hedge transaction risk within subsidiary companies.

The Group does not speculate in financial instruments. All financial instruments hedge existing business exposures and all are recognised on the balance sheet.

The Policy defines four treasury risk components and for each component a set of financial metrics to be measured and reported monthly compared against pre-agreed objectives.

Credit quality

The Group's strategy is to maintain a solid investment-grade rating to ensure access to the widest possible sources of financing at the right time and to minimise the resulting cost of debt capital. The credit ratings at the end of July 2019 were BBB+ / Baa2 (both stable) from Standard & Poor's and Moody's respectively. An essential element of an investment-grade rating is consistent and robust cash-flow metrics. The Group's objective is to maintain a net debt/headline EBITDA ratio at two times or lower over the medium term. Capital management is discussed in more detail in note 25.

Debt and interest rate

The Group's risk management objectives are to ensure that the majority of funding is drawn from the public debt markets, the average maturity profile of gross debt is at or greater than three years, and between 40-60% of gross debt is at fixed rates. At 31 July 2019 these measures were 100% (FY2018: 100%), 5.2 years (FY2018: 5.5 years) and 48% (FY2018: 55%).

The Group remains in full compliance with all covenants within its external debt agreements. Interest rate risk management is discussed in note 18(b).

18 FINANCIAL RISK MANAGEMENT CONTINUED

Treasury Risk Management Policy continued

Liquidity management

The Group's objective is to ensure that at any time undrawn committed facilities, net of short-term overdraft financing, are at least £300m and that committed facilities have at least 12 months to run until maturity. At 31 July 2019, these measures were £655m (FY2018: £609m) and 51 months (FY2018: 51 months). At 31 July 2019, net cash resources were £289m (FY2018: £717m). Liquidity risk management is discussed in note 18(d).

Currency management

The Group is an international business with the majority of its net assets denominated in foreign currency. We protect our balance sheet and reserves from adverse foreign exchange movements by financing our foreign currency assets where appropriate in the same currency. The Group's objective for managing transaction currency exposure is to reduce medium-term volatility to cash-flow, margins and earnings. Foreign exchange risk management is discussed in note 18(a) below.

(a) Foreign exchange risk

Transactional currency exposure

The Group is exposed to foreign currency risks arising from sales or purchases by businesses in currencies other than their functional currency. It is Group policy that, when the net foreign exchange exposure to known future sales and purchases is material, this exposure is hedged using forward foreign exchange contracts. The net exposure is calculated by adjusting the expected cash-flow for payments or receipts in the same currency linked to the sale or purchase. This policy minimises the risk that the profits generated from the transaction will be affected by foreign exchange movements which occur after the price has been determined. Hedge accounting documentation and effectiveness testing are only undertaken if it is cost effective.

The following table shows the currency of financial instruments. It excludes loans and derivatives designated as net investment hedges.

	At 31 July 2019				
	Sterling £m	US\$ £m	Euro £m	Other £m	Total £m
Financial assets and liabilities					
Financial instruments included in trade and other receivables	35	380	130	168	713
Financial instruments included in trade and other payables	(47)	(204)	(70)	(73)	(394)
Cash and cash equivalents	27	150	23	89	289
	15	326	83	184	608
Exclude balances held in operations with the same functional currency	(15)	(155)	(75)	(177)	(422)
Exposure arising from intra-group loans		(11)	55	(41)	3
Forward foreign exchange contracts	(17)	(149)	(19)	185	
	(17)	11	44	151	189
	Sterling £m	US\$ £m	Euro £m	Other £m	Total £m
Financial assets and liabilities					
Financial instruments included in trade and other receivables	42	375	106	165	688
Financial instruments included in trade and other payables	(49)	(237)	(77)	(78)	(441)
Cash and cash equivalents	53	444	58	162	717
Cross currency swaps (not hedge accounted)		(242)	267		25
Borrowings not designated as net investment hedges	(1)	(2)	(271)	(2)	(276)
	45	338	83	247	713
Exclude balances held in operations with the same functional currency	(40)	(195)	(63)	(227)	(525)
Exposure arising from intra-group loans		(307)	(65)	(38)	(410)
Forward foreign exchange contracts	(100)	(6)	41	65	
	(95)	(170)	(4)	47	(222)

Financial instruments included in trade and other receivables comprise trade receivables, accrued income and other receivables which qualify as financial instruments. Similarly, financial instruments included in trade and other payables comprise trade payables, accrued expenses and other payables that qualify as financial instruments.

Based on the assets and liabilities held at the year-end, if the specified currencies were to strengthen 10% while all other market rates remained constant, the change in the fair value of financial instruments not designated as net investment hedges would have the following effect:

	Impact on profit for the year 31 July 2019 £m	Gain/(loss) recognised in reserves 31 July 2019 £m	Impact on profit for the year 31 July 2018 £m	Gain/(loss) recognised in reserves 31 July 2018 £m
US dollar	(10)	3	19	(4)
Euro	(3)	(1)	(1)	2
Sterling	10	(2)	(32)	(6)

These sensitivities were calculated before adjusting for tax and exclude the effect of quasi-equity intra-group loans.

Cash-flow hedging

The Group uses forward foreign exchange contracts to hedge future foreign currency sales and purchases. At 31 July 2019, contracts with a nominal value of £54m (FY2018: £385m) were designated as hedging instruments. In addition, the Group had outstanding foreign currency contracts with a nominal value of £431m (FY2018: £275m) which were being used to manage transactional foreign exchange exposures, but were not accounted for as cash-flow hedges. The fair value of the contracts is disclosed in note 19.

The majority of hedged transactions will be recognised in the consolidated income statement in the same period that the cash-flows are expected to occur, with the only differences arising because of normal commercial credit terms on sales and purchases. It is the Group's policy to hedge 80% of certain exposures for the next two years and 50% of highly probable exposures for the next 12 months.

Hedge effectiveness is determined at the inception of the hedge relationship, and through periodic prospective effectiveness assessments to ensure that an economic relationship exists between the hedged item and hedging instrument. The foreign exchange forward contracts have similar critical terms to the hedged items, such as the notional amounts and maturities. Therefore, there is an economic relationship and the hedge ratio is established as 1:1.

The main sources of hedge ineffectiveness in these hedging relationships is the effect of the counterparty and the Group's own credit risk on the fair value of the foreign exchange forward contracts, which is not reflected in the fair value of the hedged item attributable to changes in foreign exchange rates and the risk of over-hedging where the hedge relationship requires re-balancing. No other sources of ineffectiveness emerged from these hedging relationships. Any hedge ineffectiveness is recognised immediately in the income statement in the period that it occurs. Of the foreign exchange contracts designated as hedging instruments, 100% are for periods of 12 months or less (FY2018: 81%).

The following table presents a reconciliation by risk category of the cash-flow hedge reserve and analysis of other comprehensive income in relation to hedge accounting:

	Year ended 31 July 2019 £m	Year ended 31 July 2018 £m
Brought forward cash-flow hedge reserve at start of year	2	1
Foreign exchange forward contracts:		
Net fair value gains on effective hedges	2	2
Amount reclassified to income statement – revenue	(2)	1
Amount reclassified to income statement – cost of sales	(2)	(2)
Carried forward cash-flow hedge reserve at end of year	2	

The following tables set out information regarding the change in value of the hedged item used in calculating hedge ineffectiveness as well as the impacts on the cash-flow hedge reserve:

Hedged item	Hedged exposure	Hedging instrument	Cash-flow hedge reserve		
			Changes in value of the hedged item for calculating ineffectiveness £m	Changes in value of the hedging instrument for calculating ineffectiveness £m	Continued hedges £m
Sales and purchases	Foreign currency risk	Foreign exchange contracts	2	(2)	

Cash-flow hedges generated £nil of ineffectiveness in FY2019 which was recognised in the income statement through finance costs.

Translational currency exposure

The Group has significant investments in overseas operations, particularly in the United States and Europe. As a result, the sterling value of the Group's balance sheet can be significantly affected by movements in exchange rates. The Group seeks to mitigate the effect of these translational currency exposures by matching the net investment in overseas operations with borrowings denominated in their functional currencies, except where significant adverse interest differentials or other factors would render the cost of such hedging activity uneconomic. This is achieved by borrowing primarily in the relevant currency or in some cases indirectly using cross-currency swaps.

18 FINANCIAL RISK MANAGEMENT CONTINUED

(a) Foreign exchange risk continued

Net investment hedges

The table below sets out the currency of loans and swap contracts designated as net investment hedges:

	At 31 July 2019			At 31 July 2018				
	US\$ £m	Euro £m	Total £m	Sterling £m	US\$ £m	Euro £m	Other £m	Total £m
Loans designated as net investment hedges	(325)	(854)	(1,179)		(491)	(836)		(1,327)
Cross-currency swap	(613)	364	(249)		(329)	357		28
Currency swap contracts			110			(110)		
	(938)	(490)	(1,428)	110	(820)	(479)	(110)	(1,299)

At 31 July 2019, cross-currency swaps hedged the Group's exposure to US dollars and Euros (31 July 2018: US dollars and Euros). All the cross-currency swaps designated as net investment hedges are non-current (FY2018: non-current).

Swaps generating £353m of the US dollar exposure (FY2018: £329m) will mature in April 2023 and swaps generating £260m of the US dollar exposure (FY2018: £nil) will mature in February 2027.

In addition, non-swapped borrowings were also used to hedge the Group's exposure to US dollars and euros (31 July 2018 US dollars and euros). Borrowings generating £325m of the US dollar exposure (FY2018: £302m April 2023 and £189m May 2019) will mature in April 2023. Borrowings generating £543m of the euro exposure (FY2018: £531m) will mature in April 2023 and borrowings generating £312m of the euro exposure (FY2018: £305m) will mature in February 2027.

In the prior year swap contracts hedged the Group's exposure to Canadian dollars, Japanese yen and Chinese renminbi. All these currency swap contracts designated as net investment hedges in the prior year were current.

Hedge effectiveness is determined at the inception of the hedge relationship, and through periodic prospective effectiveness assessments to ensure that an economic relationship exists between the hedged item and hedging instrument. The swaps and borrowings have the same notional amount to the hedged items and therefore, there is an economic relationship with the hedge ratio established as 1:1.

The main sources of hedge ineffectiveness in these hedging relationships is the effect of the counterparty and the Group's own credit risk on the fair value of the cross-currency swaps and cross-currency basis risk which are not reflected in the fair value of the hedged item. No other sources of ineffectiveness emerged from these hedging relationships. Any hedge ineffectiveness is recognised immediately in the income statement in the period that it occurs.

The following table presents a reconciliation by risk category of the net investment hedge reserve and analysis of other comprehensive income in relation to hedge accounting:

	Year ended 31 July 2019 £m	Year ended 31 July 2018 £m
Brought forward net investment hedge reserve at start of year	(304)	(291)
Cross-currency swaps	Net fair value losses on effective hedges	(35) (7)
Bonds	Net fair value losses on effective hedges	(44) (1)
Amounts removed from the hedge reserve and recognised in the income statement	Profit/(loss) on business disposal	(5) (5)
Carried forward net investment hedge reserve at end of year	(383)	(304)

The following table sets out information regarding the change in value of the hedged item used in calculating hedge ineffectiveness as well as the impacts on the net investment hedge reserve as at 31 July 2019:

Hedged item	Hedged exposure	Hedging instrument	Changes in value of the hedged item for calculating ineffectiveness £m	Changes in value of the hedging instrument for calculating ineffectiveness £m	Net investment hedge reserve	
					Continued hedges £m	Discontinued hedges £m
Overseas operation	Foreign currency risk	Forward contracts			(1)	
Overseas operation	Foreign currency risk	Cross-currency swaps	35	(37)	(35)	
Overseas operation	Foreign currency risk	Bonds	44	(44)	(44)	
			79	(82)	(79)	

Net investment hedges generated £1m of ineffectiveness in FY2019 which was recognised in the income statement through finance costs.

The fair values of these net investment hedges are subject to exchange rate movements. Based on the hedging instruments in place at the year-end, if the specified currencies were to strengthen 10% while all other market rates remained constant, it would have the following effect:

	Loss recognised in hedge reserve 31 July 2019 £m	Loss recognised in hedge reserve 31 July 2018 £m
US dollar	104	91
Euro	54	53

These movements would be fully offset by an opposite movement on the retranslation of the net assets of the overseas subsidiaries. These sensitivities were calculated before adjusting for tax.

(b) Interest rate risk

The Group operates an interest rate policy designed to optimise interest cost and reduce volatility in reported earnings. The Group's current policy is to require interest rates to be fixed within a band of between 40% and 60 % of the level of gross debt. This is achieved through fixed rate borrowings and interest rate swaps. At 31 July 2019, 48% (FY2018: 55%) of the Group's gross borrowings were at fixed interest rates, after adjusting for interest rate swaps and the impact of short maturity derivatives designated as net investment hedges.

The Group monitors its fixed rate risk profile against both gross and net debt. For medium-term planning, it now focuses on gross debt to eliminate the fluctuations of variable cash levels over the cycle. The weighted average interest rate on borrowings and cross-currency swaps at 31 July 2019, after interest rate swaps, is 3.22% (FY2018: 3.69%).

Interest rate profile of financial assets and liabilities and the fair value of borrowings

The following table shows the interest rate risk exposure of investments, cash and borrowings, with the borrowings adjusted for the impact of interest rate hedging. The other financial assets and liabilities do not earn or bear interest and for all financial instruments except for borrowings the carrying value is not materially different from their fair value.

	At fair value through profit or loss 31 July 2019 £m	Cash and cash equivalents 31 July 2019 £m	Borrowings 31 July 2019 £m	Fair value of borrowings 31 July 2019 £m	Available for sale investments 31 July 2018 £m	Cash and cash equivalents 31 July 2018 £m	Borrowings 31 July 2018 £m	Fair value of borrowings 31 July 2018 £m
Fixed interest								
Less than one year								(190)
Between one and five years				(384)	(391)			(365)
Greater than five years				(314)	(342)			(307)
Total fixed interest financial liabilities				(698)	(733)			(862)
Floating rate interest financial assets/(liabilities)	6	238	(811)	(811)	4	657	(748)	(758)
Total interest-bearing financial assets/(liabilities)	6	238	(1,509)	(1,544)	4	657	(1,610)	(1,636)
Non-interest-bearing assets in the same category	13	51			14	60		
Total	19	289	(1,509)	(1,544)	18	717	(1,610)	(1,636)

Interest rate hedging

The Group also has exposures to the fair values of non-derivative financial instruments such as EUR and USD fixed rate borrowings. To manage the risk of changes in these fair values, the Group has entered into fixed-to-floating interest rate swap and cross-currency interest rate swaps which for accounting purposes are designated as fair value hedges.

At 31 July 2019 and 31 July 2018, the Group had designated the following hedges against variability in the fair value of borrowings arising from fluctuations in base rates:

- USD150m interest rate swap which matures on 12 October 2022 partially hedging the USD 2022 Guaranteed notes; and
- €400m of the fixed/floating element of EUR/USD interest rate swaps maturing on 28 April 2023 partially hedging the € 2023 Eurobond.

Additionally at 31 July 2019 the Group designated the following hedge against variability in the fair value of borrowings arising from fluctuations in base rates:

- €300m of the fixed/floating and € exchange exposure of EUR/USD interest rate swaps maturing on 23 February 2027 partially hedging the € 2027 Eurobond.

The fair values of the hedging instruments are disclosed in note 19. The effect of the swaps is to convert £761m (FY2018: £471m) debt from fixed rate to floating rate. The swaps have similar critical terms to the hedged items, such as the reference rate, reset dates, notional amounts, payment dates and maturities. Therefore, there is an economic relationship and the hedge ratio is established as 1:1. Hedge effectiveness is determined at the inception of the hedge relationship, and through periodic prospective effectiveness assessments to ensure that an economic relationship exists between the hedged item and hedging instrument.

18 FINANCIAL RISK MANAGEMENT CONTINUED

(b) Interest rate risk continued

The main sources of hedge ineffectiveness in these hedging relationships is the effect of the counterparty and the Group's own credit risk on the fair value of the cross-currency and interest rate swaps and currency basis risk on cross-currency interest rate swaps which are not reflected in the fair value of the hedged item. No other sources of ineffectiveness emerged from these hedging relationships. Any hedge ineffectiveness is recognised immediately in the income statement in the period that it occurs.

The following table sets out the details of the hedged exposures covered by the Group's fair value hedges:

Hedged item	Hedged exposure	Changes in value of hedged item for calculating ineffectiveness £m	Changes in value of the hedging instrument for calculating ineffectiveness £m	Carrying amount		Accumulated fair value adjustments on hedged item	
				Assets £m	Liabilities £m	Assets £m	Liabilities £m
Fixed rate bonds (a) Interest rate risk		8	(5)	123			2
Fixed rate bonds (a) Interest rate and currency rate risk		44	(37)	638			39
		52	(42)	761			41

(a) Classified as borrowings

Fair value hedges generated £10m of ineffectiveness in FY2019 which was recognised in the income statement through finance costs.

Sensitivity of interest charges to interest rate movements

The Group has exposure to sterling, US dollar and euro interest rates. However, the Group does not have a significant exposure to interest rate movements for any individual currency. Based on the composition of net debt and investments at 31 July 2019, and taking into consideration all fixed rate borrowings and interest rate swaps in place, a one percentage point (100 basis points) change in average floating interest rates for all three currencies would have less than £5m impact (FY2018: £3m impact) on the Group's profit before tax.

(c) Financial credit risk

The Group is exposed to credit-related losses in the event of non-performance by counterparties to financial instruments, but does not currently expect any counterparties to fail to meet their obligations. Credit risk is mitigated by the Board-approved policy of only placing cash deposits with highly rated relationship bank counterparties within counterparty limits established by reference to their Standard & Poor's long-term debt rating. In the normal course of business, the Group operates cash pooling systems, where a legal right of set-off applies.

The maximum credit risk exposure in the event of other parties failing to perform their obligations under financial assets, excluding trade and other receivables and derivatives, totals £308m at 31 July 2019 (FY2018: £735m).

	31 July 2019 £m	31 July 2018 £m
Cash in AAA liquidity funds	85	200
Cash at banks with at least a AA- credit rating	97	306
Cash at banks with all other A credit ratings	97	74
Cash at other banks	10	137
Investments in bank deposits	13	13
Other investments	6	5
	308	735

At 31 July 2019, the maximum exposure with a single bank for deposits and cash is £179m (FY2018: £127m), whilst the maximum mark to market exposure with a single bank for derivatives is £17m (FY2018: £17m). These banks have A+ and AA- credit ratings respectively (FY2018: Both AA-).

(d) Liquidity risk

Borrowing facilities

The Board policy specifies the maintenance of unused committed credit facilities of at least £300m at all times to ensure it has sufficient available funds for operations and planned development, which is provided by a multi-currency revolving credit facility.

Smiths has a \$800m Revolving Credit Facility that matures on 1 November 2023. At the balance sheet date, the Group had the following undrawn credit facilities:

	31 July 2019 £m	31 July 2018 £m
Expiring after more than two years	655	609

Cash deposits

As at 31 July 2019, £136m (FY2018: £430m) of cash and cash equivalents was on deposit with various banks of which £32m (FY2018: £71m) was on deposit with UK banks, £85m (FY2018: £200m) was in liquidity funds and £13m (FY2018: £13m) of investments comprised bank deposits held to secure liabilities and letters of credit.

Gross contractual cash-flows for borrowings

	Borrowings (note 17) 31 July 2019 £m	Fair value adjustments 31 July 2019 £m	Contractual interest payments 31 July 2019 £m	Total contractual cash-flows 31 July 2019 £m	Borrowings (note 17) 31 July 2018 £m	Fair value adjustments 31 July 2018 £m	Contractual interest payments 31 July 2018 £m	Total contractual cash-flows 31 July 2018 £m
Less than one year	(9)		(31)	(40)	(203)		(43)	(246)
Between one and two years			(31)	(31)			(29)	(29)
Between two and three years			(31)	(31)			(29)	(29)
Between three and four years	(893)	20	(25)	(898)			(29)	(29)
Between four and five years			(12)	(12)	(832)	(5)	(24)	(861)
Greater than five years	(607)	20	(36)	(623)	(575)		(46)	(621)
Total	(1,509)	40	(166)	(1,635)	(1,610)	(5)	(200)	(1,815)

The figures presented in the borrowings column include the non-cash adjustments which are highlighted in the adjacent column. The contractual interest reported for borrowings is before the effect of interest rate swaps.

Gross contractual cash-flows for derivative financial instruments

	Receipts 31 July 2019 £m	Payments 31 July 2019 £m	Net cash-flow 31 July 2019 £m	Receipts 31 July 2018 £m	Payments 31 July 2018 £m	Net cash-flow 31 July 2018 £m
Assets						
Less than one year	217	(236)	(19)	379	(386)	(7)
Greater than one year	712	(652)	60	726	(657)	69
Liabilities						
Less than one year	241	(238)	3	319	(324)	(5)
Greater than one year	19	(18)	1	36	(42)	(6)
Total	1,189	(1,144)	45	1,460	(1,409)	51

This table presents the undiscounted future contractual cash-flows for all derivative financial instruments. For this disclosure, cash-flows in foreign currencies are translated using the spot rates at the balance sheet date. The fair values of these financial instruments are presented in note 20.

Gross contractual cash-flows for other financial liabilities

The contractual cash-flows for financial liabilities included in trade and other payables are: £384m (FY2018: £432m) due in less than one year, £6m (FY2018: £6m) due between one and five years and £3m (FY2018: £3m) due after more than five years.

19 DERIVATIVE FINANCIAL INSTRUMENTS

The tables below set out the nominal amount and fair value of derivative contracts held by the Group, identifying the derivative contracts which qualify for hedge accounting treatment:

	Contract or underlying nominal amount £m	At 31 July 2019		
		Assets £m	Liabilities £m	Fair value £m
Foreign exchange contracts (cash-flow hedges)	54		(2)	(2)
Foreign exchange contracts (not hedge accounted)	431	4	(3)	1
Total foreign exchange contracts	485	4	(5)	(1)
Cross-currency swaps (fair value and net investment hedges)	613	46		46
Interest rate swaps (fair value hedges)	123		(1)	(1)
Total financial derivatives	1,221	50	(6)	44
Balance sheet entries				
Non-current	777	47	(1)	46
Current	444	3	(5)	(2)
Total financial derivatives	1,221	50	(6)	44

19 DERIVATIVE FINANCIAL INSTRUMENTS CONTINUED

		At 31 July 2018		
	Contract or underlying nominal amount £m	Assets £m	Liabilities £m	Fair value £m
Foreign exchange contracts (cash-flow hedges)	385	6	(4)	2
Foreign exchange contracts (not hedge accounted)	275	2		2
Total foreign exchange contracts	660	8	(4)	4
Currency swaps (net investment hedges)	110			
Cross-currency swaps (fair value and net investment hedges)	328	28		28
Cross-currency swaps (not hedge accounted)	242	21		21
Interest rate swaps (fair value hedges)	114		(6)	(6)
Total financial derivatives	1,454	57	(10)	47
Balance sheet entries				
Non-current	760	50	(6)	44
Current	694	7	(4)	3
Total financial derivatives	1,454	57	(10)	47

Maturity profile, average interest and foreign currency exchange rates of the hedging instruments used in the Group's hedging strategies:

Hedged exposure	Hedging instrument	Maturity		
		Up to one year	One to five years	More than five years
Fair value hedges				
Interest rate risk	Interest Rate Swaps – USD	- Notional amount (£m)	123	
		- Average spread over 6 month USD LIBOR	1.797%	
	Interest Rate Swaps – EUR	- Notional amount (£m)	364	
		- Average spread over 3 month EUR LIBOR	1.015%	
Interest rate risk/ Foreign currency risk	Cross-currency swaps (EUR:GBP)	- Notional amount (£m)		254
		- Average exchange rate		0.8450
		- Average spread over 3 month USD LIBOR		1.750%
Net investment hedges				
Foreign currency risk	Cross-currency swaps (EUR:USD)	- Notional amount (£m)	353	
		- Average exchange rate	1.0773	
	Cross-currency swaps (GBP:USD)	- Notional amount (£m)		260
		- Average exchange rate		1.2534
Cash-flow hedges				
Foreign currency risk	Foreign exchange contracts (EUR:USD)	- Notional amount (£m)	24	
		- Average exchange rate	1.1885	
	Foreign exchange contracts (EUR:GBP)	- Notional amount (£m)	12	
		- Average exchange rate	0.9021	
	Foreign exchange contracts (USD:GBP)	- Notional amount (£m)	12	
		- Average exchange rate	1.3523	
	Foreign exchange contracts (GBP:CZK)	- Notional amount (£m)	6	
		- Average exchange rate	28.8236	

At 31 July 2019, the Group had forward foreign exchange contracts with a nominal value of £54m designated as cash-flow hedges. These forward foreign exchange contracts are in relation to sale and purchase of multiple currencies with varying maturities up to 28 July 2020. The largest single currency pairs are disclosed above and make up 100% of the notional hedged exposure. The notional and fair values of these foreign exchange forward derivatives are shown in the nominal amount and fair value of derivative contracts table on page 179.

Accounting for other derivative contracts

Any foreign exchange contracts which are not formally designated as hedges and tested are classified as 'held for trading' and not hedge accounted.

Netting

International Swaps and Derivatives Association (ISDA) master netting agreements are in place with derivative counterparties except for contracts traded on a dedicated international electronic trading platform used for operational foreign exchange hedging. Under these agreements if a credit event occurs, all outstanding transactions under the ISDA are terminated and only a single net amount per counterparty is payable in settlement of all transactions. The ISDA agreements do not meet the criteria for offsetting, since the offsetting is enforceable only if specific events occur in the future, and there is no intention to settle the contracts on a net basis.

	Assets 31 July 2019 £m	Liabilities 31 July 2019 £m	Assets 31 July 2018 £m	Liabilities 31 July 2018 £m
Gross value of assets and liabilities	50	(6)	57	(10)
Related assets and liabilities subject to master netting agreements	(2)	2	(1)	
Net exposure	48	(4)	56	(10)

20 FAIR VALUE OF FINANCIAL INSTRUMENTS

As at 31 July 2019	Notes	Basis for determining fair value	At amortised cost £m	At fair value through profit or loss £m	Total carrying value £m	Total fair value £m
Financial assets						
Other investments	16	A		13	13	13
Other investments	16	E		6	6	6
Cash and cash equivalents	17	A	153	136	289	289
Trade and other financial receivables	14	A/B	764		764	764
Derivative financial instruments	19	B		50	50	50
Total financial assets			917	205	1,122	1,122
Financial liabilities						
Trade and other financial payables	15	A	(569)		(569)	(569)
Short-term borrowings	17	C	(9)		(9)	(9)
Long-term borrowings	17	C	(1,500)		(1,500)	(1,535)
Finance leases	21	D	(3)		(3)	(3)
Derivative financial instruments	19	B		(6)	(6)	(6)
Total financial liabilities			(2,081)	(6)	(2,087)	(2,122)
As at 31 July 2018						
As at 31 July 2018	Notes	Basis for determining fair value	Loans and receivables/other financial liabilities £m	Fair value through profit or loss £m	Total carrying value £m	Total fair value £m
Financial assets						
Other investments	16	A		13	13	13
Other investments	16	E		5	5	5
Cash and cash equivalents	17	A	717		717	717
Trade and other financial receivables	14	A/B	733		733	733
Derivative financial instruments	19	B		57	57	57
Total financial assets			1,450	75	1,525	1,525
Financial liabilities						
Trade and other financial payables	15	A	(606)		(606)	(606)
Short-term borrowings	17	C	(203)		(203)	(203)
Long-term borrowings	17	C	(1,405)		(1,405)	(1,433)
Finance leases	21	D	(2)		(2)	(2)
Derivative financial instruments	19	B		(10)	(10)	(10)
Total financial liabilities			(2,216)	(10)	(2,226)	(2,254)

The fair value of a financial instrument is the price at which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arms-length transaction. Fair values have been determined with reference to available market information at the balance sheet date, using the methodologies described below:

- A Carrying value is assumed to be a reasonable approximation to fair value for all of these assets and liabilities (Level 2 as defined by IFRS 13 Fair Value Measurement).
- B Fair values of derivative financial assets and liabilities and trade receivables held to collect or sell are estimated by discounting expected future contractual cash-flows using prevailing interest rate curves. Amounts denominated in foreign currencies are valued at the exchange rate prevailing at the balance sheet date. These financial instruments are included on the balance sheet at fair value, derived from observable market prices (Level 2 as defined by IFRS 13 Fair Value Measurement).

20 FAIR VALUE OF FINANCIAL INSTRUMENTS CONTINUED

- C Borrowings are carried at amortised cost. Amounts denominated in foreign currencies are valued at the exchange rate prevailing at the balance sheet date. The fair value of borrowings is estimated using quoted prices (Level 1 as defined by IFRS 13).
- D Leases are carried at amortised cost. Amounts denominated in foreign currencies are valued at the exchange rate prevailing at the balance sheet date. The fair value of the lease contract is estimated by discounting contractual future cash-flows (Level 2 as defined by IFRS 13).
- E The fair value of investments is estimated by (Level 3 as defined by IFRS 13).

IFRS 13 defines a three level valuation hierarchy:

- Level 1 – quoted prices for similar instruments
- Level 2 – directly observable market inputs other than Level 1 inputs
- Level 3 – inputs not based on observable market data

21 COMMITMENTS

Operating lease commitments – minimum lease payments

The minimum uncancelable lease payments which the Group is committed to make are:

	31 July 2019		31 July 2018	
	Land and buildings £m	Other £m	Land and buildings £m	Other £m
Payments due:				
- not later than one year	36	8	34	7
- later than one year and not later than five years	84	9	83	8
- later than five years	17		23	
	137	17	140	15

Other commitments

At 31 July 2019, commitments, comprising bonds and guarantees arising in the normal course of business, amounted to £209m (FY2018: £184m), including pension commitments of £54m (FY2018: £54m).

22 PROVISIONS AND CONTINGENT LIABILITIES

	Trading £m	Non-headline and legacy			Total £m
		John Crane, Inc. litigation £m	Titeflex Corporation litigation £m	Other £m	
Current liabilities	21	29	20	6	76
Non-current liabilities	2	194	58	8	262
At 31 July 2018	23	223	78	14	338
Exchange adjustments	1	17	5	1	24
Business combinations (note 26)				12	12
Provision charged	15	15			30
Provision released	(6)		(6)		(12)
Unwind of provision discount		6	2		8
Utilisation	(12)	(24)	(5)	(3)	(44)
Reclassified to liability held for distribution to owners (note 27)	(3)			(2)	(5)
At 31 July 2019	18	237	74	22	351
Current liabilities	17	29	16	4	66
Non-current liabilities	1	208	58	18	285
At 31 July 2019	18	237	74	22	351

The John Crane, Inc. and Titeflex Corporation litigation provisions are the only provisions that are discounted.

Trading

Warranty provision and product liability

At 31 July 2019, the Group has warranty and product liability provisions of £17m (FY2018: £22m). Warranties over the Group's products typically cover periods of between one and three years. Provision is made for the likely cost of after-sales support based on the recent past experience of individual businesses.

Commercial disputes and litigation in respect of ongoing business activities

The Group has on occasion been required to take legal action to protect its intellectual property and other rights against infringement. It has also had to defend itself against proceedings brought by other parties, including product liability and insurance subrogation claims. Provision is made for any expected costs and liabilities in relation to these proceedings where appropriate, though there can be no guarantee that such provisions (which may be subject to potentially material revision from time to time) will accurately predict the actual costs and liabilities that may be incurred.

Contingent liabilities

In the ordinary course of its business, the Group is subject to commercial disputes and litigation such as government price audits, product liability claims, employee disputes and other kinds of lawsuits, and faces different types of legal issues in different jurisdictions. The high level of activity in the US, for example, exposes the Group to the likelihood of various types of litigation commonplace in that country, such as 'mass tort' and 'class action' litigation, legal challenges to the scope and validity of patents, and product liability and insurance subrogation claims. These types of proceedings (or the threat of them) are also used to create pressure to encourage negotiated settlement of disputes. Any claim brought against the Group (with or without merit) could be costly to defend. These matters are inherently difficult to quantify. In appropriate cases a provision is recognised based on best estimates and management judgement but there can be no guarantee that these provisions (which may be subject to potentially material revision from time to time) will result in an accurate prediction of the actual costs and liabilities that may be incurred. There are also contingent liabilities in respect of litigation for which no provisions are made.

The Group operates in some markets where the risk of unethical or corrupt behaviour is material and has procedures, including an employee 'Ethics Alertline', to help it identify potential issues. Such procedures will, from time to time, give rise to internal investigations, sometimes conducted with external support, to ensure that Smiths Group properly understands risks and concerns and can take steps both to manage immediate issues and to improve its practices and procedures for the future. The Group also co-operates with relevant authorities in investigating business conduct issues whenever requested to. The Group is not aware of any issues which are expected to generate material financial exposures.

Non-headline and legacy

John Crane, Inc.

John Crane, Inc. (JCI) is one of many co-defendants in numerous lawsuits pending in the United States in which plaintiffs are claiming damages arising from alleged exposure to, or use of, products previously manufactured which contained asbestos. Until 2006, the awards, the related interest and all material defence costs were met directly by insurers. In 2007, JCI secured the commutation of certain insurance policies in respect of product liability. Provision is made in respect of the expected costs of defending known and predicted future claims and of adverse judgments in relation thereto, to the extent that such costs can be reliably estimated.

The JCI products generally referred to in these cases consist of industrial sealing product, primarily packing and gaskets. The asbestos was encapsulated within these products in such a manner that causes JCI to believe, based on tests conducted on its behalf, that the products were safe. JCI ceased manufacturing products containing asbestos in 1985.

JCI continues to actively monitor the conduct and effect of its current and expected asbestos litigation, including the most efficacious presentation of its 'safe product' defence, and intends to continue to resist these asbestos claims based upon this defence. The table below summarises the JCI claims experience over the last 39 years since the start of this litigation:

	Year ended 31 July 2019	Year ended 31 July 2018	Year ended 31 July 2017	Year ended 31 July 2016	Year ended 31 July 2015
JCI claims experience					
Claims against JCI that have been dismissed	285,000	277,000	273,000	247,000	242,000
Claims JCI is currently a defendant in	38,000	43,000	50,000	74,000	76,000
Cumulative final judgments, after appeals, against JCI since 1979	144	140	138	137	133
Cumulative value of awards (\$'m) since 1979	168	164	160	158	153

The number of claims outstanding at 31 July 2019 reflects the benefit of 8,000 claims being dismissed in the year.

JCI has also incurred significant additional defence costs. The litigation involves claims for a number of allegedly asbestos-related diseases, with awards, when made, for mesothelioma tending to be larger than those for the other diseases. JCI's ability to defend mesothelioma cases successfully is, therefore, likely to have a significant impact on its annual aggregate adverse judgment and defence costs.

John Crane, Inc. litigation provision

The provision is based on past history of JCI claims and well-established tables of asbestos-related disease incidence projections. The provision is determined using advice from asbestos valuation experts, Bates White LLC. The assumptions made in assessing the appropriate level of provision include: the period over which the expenditure can be reliably estimated; the future trend of legal costs; the rate of future claims filed; the rate of successful resolution of claims; and the average amount of judgments awarded.

Established incidence curves can be used to estimate the likely future pattern of asbestos-related disease. However, JCI's claims experience is also significantly impacted by other factors which influence the US litigation environment. These can include: changing approaches on the part of the plaintiffs' bar; changing attitudes amongst the judiciary at both trial and appellate levels in specific jurisdictions which move the balance of risk and opportunity for claimants; and legislative and procedural changes in both the state and federal court systems.

22 PROVISIONS AND CONTINGENT LIABILITIES CONTINUED

Non-headline and legacy continued

The build-up of assets in trusts established by asbestos defendants in Chapter 11 restructuring ('524(g) trusts') will increase the influence of these trusts on the behaviour of claimants. Developments in the Garlock Sealing Technologies LLC Chapter 11 proceedings have provided additional data on plaintiff claims to 524 (g) trusts. Given the evidence that emerged of inconsistent duplicate claims, there is a significant likelihood that this will lead to changes in the pattern of claims made in the future, and the costs arising from claims.

The projections use a limited time horizon on the basis that Bates White LLC consider that there is substantial uncertainty in the asbestos litigation environment. So probable expenditures are not reasonably estimable beyond this time horizon. Asbestos is the longest running mass tort litigation in American history and is constantly evolving in ways that cannot be anticipated. JCI's defence strategy also generates a significantly different pattern of legal costs and settlement expenses from other defendants. Thus JCI is in an extremely rare position, and evidence from other litigation cannot be used to improve the reliability of the projections. A ten year (FY2018: ten year) time horizon has been used based on past experience regarding significant changes in the litigation environment that have occurred every few years and on the amount of time taken in the past for some of those changes to impact the broader asbestos litigation environment, and recent events, like the Garlock Sealing Technologies LLC Chapter 11 proceedings, which may lead to further major changes.

The rate of future claims filed has been estimated using well-established tables of asbestos incidence projections to determine the likely population of potential claimants, and JCI's past experience to determine what proportion of this population will make a claim against JCI. The JCI products generally referred to in claims had industrial and marine applications. As a result, the incidence curve used for JCI projections excludes construction workers, and is a composite of the curves that predict asbestos exposure-related disease from shipyards and other occupations. This is consistent with JCI's litigation history.

The rate of successful resolution of claims and the average amount of any judgments awarded are projected based on the past history of JCI claims, since this is the best available evidence, given JCI's unusual strategy of defending all claims.

The future trend of legal costs is estimated based on JCI's past experience, adjusted to reflect the assumed levels of claims and trial activity, since the number of trials is a key driver of legal costs.

John Crane, Inc. litigation insurance recoveries

While JCI has excess liability insurance, the availability of such insurance and scope of the cover are currently the subject of litigation in the United States. Pending the outcome of that litigation, JCI has met defence costs directly. The calculation of the provision does not take account of any potential recoveries from insurers.

John Crane, Inc. litigation provision history

The JCI asbestos litigation provision has developed over the last five years as follows:

	Year ended 31 July 2019 £m	Year ended 31 July 2018 £m	Year ended 31 July 2017 £m	Year ended 31 July 2016 £m	Year ended 31 July 2015 £m
John Crane, Inc. litigation provision					
Gross provision	257	251	260	267	236
Discount	(20)	(28)	(23)	(15)	(20)
Discounted provision	237	223	237	252	216
Operating profit charge/(credit)					
Increased provisions for adverse judgments and legal defence costs	7	13	17	8	14
Change in US risk-free rates	8	(6)	(13)	7	1
Subtotal – items charged to/(released from) the provision	15	7	4	15	15
Litigation management, legal fees in connection with litigation against insurers and defence strategy	2	3	11	8	4
Recoveries from insurers	(11)		(6)	(16)	
Total operating profit charge	6	10	9	7	19
Cash-flow					
Provision utilisation	(24)	(27)	(24)	(22)	(24)
John Crane, Inc. litigation spend	26	30	32	32	27

The increase in 2019 is principally due to decreasing US dollar discount rates, with no material movement in the gross provision.

The operating charge for John Crane, Inc. litigation comprises:

- a charge of £7m (FY2018: £13m) in respect of the net increased provision for adverse judgments and legal defence costs;
- a charge of £8m arising from a decrease in US risk-free rates (FY2018: credit of £6m);
- £2m (FY2018: £3m) costs for litigation management, defence strategy and legal fees in connection with litigation against insurers; and
- a credit of £11m arising from the recovery of costs through a settlement with an insurer. This agreement does not provide any cover for future costs. So there is no material impact on the closing litigation provision.

John Crane, Inc. litigation provision sensitivities

The provision may be subject to potentially material revision from time to time if new information becomes available as a result of future events. There can be no guarantee that the assumptions used to estimate the provision will result in an accurate prediction of the actual costs that may be incurred because of the significant uncertainty associated with the future level of asbestos claims and of the costs arising out of related litigation.

Statistical reliability of projections over the ten year time horizon

In order to evaluate the statistical reliability of the projections, a population of outcomes is modelled using randomised verdict outcomes. This generated a distribution of outcomes with future spend at the 5th percentile of £234m and future spend at the 95th percentile of £297m (FY2018: £230m and £290m, respectively). Statistical analysis of the distribution of these outcomes indicates that there is a 50% probability that the total future spend will fall between £242m and £267m (FY2018: between £238m and £263m), compared to the gross provision value of £257m (FY2018: £251m).

Sensitivity of the projections to changes in the time horizon used

If the asbestos litigation environment becomes more volatile and uncertain, for example if defendants are successful in legal cases against plaintiff law firms and this impacts the nature of claims filed, the time horizon over which the provision can be calculated may reduce. Conversely, if the environment became more stable, or JCI changed approach and committed to long-term settlement arrangements, the time period covered by the provision might be extended.

The projections use a ten year time horizon. Reducing the time horizon by one year would reduce the provision by £17m (FY2018: £15m) and reducing it by five years would reduce the provision by £100m (FY2018: £91m).

We consider, after obtaining advice from Bates White LLC, that to forecast beyond ten years requires that the litigation environment remains largely unchanged with respect to the historical experience used for estimating future asbestos expenditures. Historically, the asbestos litigation environment has undergone significant changes more often than every ten years. If one assumed that the asbestos litigation environment would remain unchanged for longer and extended the time horizon by one year it would increase the provision by £14m (FY2018: £13m) and extending it by five years would increase the provision by £59m (FY2018: £52m). However, there are also reasonable scenarios that, given certain recent events in the US asbestos litigation environment, would result in no additional asbestos litigation for JCI beyond ten years. At this time, how the asbestos litigation environment may evolve beyond ten years is not reasonably estimable.

John Crane, Inc. contingent liabilities

Provision has been made for future defence costs and the cost of adverse judgments expected to occur. JCI's claims experience is significantly impacted by other factors which influence the US litigation environment. These can include: changing approaches on the part of the plaintiffs' bar; changing attitudes amongst the judiciary at both trial and appellate levels; and legislative and procedural changes in both the state and federal court systems. As a result, whilst the Group anticipates that asbestos litigation will continue beyond the period covered by the provision, the uncertainty surrounding the US litigation environment beyond this point is such that the costs cannot be reliably estimated.

Although the methodology used to calculate the JCI litigation provision can in theory be applied to show claims and costs for longer periods, the Directors consider, based on advice from Bates White LLC, that the level of uncertainty regarding the factors used in estimating future costs is too great to provide for reasonable estimation of the numbers of future claims, the nature of such claims or the cost to resolve them for years beyond the ten year time horizon.

Titeflex Corporation

Titeflex Corporation, a subsidiary of the Group in the Flex-Tek division, has received a number of claims from insurance companies seeking recompense on a subrogated basis for the effects of damage allegedly caused by lightning strikes in relation to its flexible gas piping product. It has also received a number of product liability claims regarding this product, some in the form of purported class actions. Titeflex Corporation believes that its products are a safe and effective means of delivering gas when installed in accordance with the manufacturer's instructions and local and national codes. However some claims have been settled on an individual basis without admission of liability. Equivalent third-party products in the US marketplace face similar challenges.

22 PROVISIONS AND CONTINGENT LIABILITIES CONTINUED

Non-headline and legacy continued

Titeflex Corporation litigation provision

The continuing progress of claims and the pattern of settlement, together with recent market-place activity, provide sufficient evidence to recognise a liability in the accounts. Therefore provision has been made for the costs which the Group is expected to incur in respect of future claims to the extent that such costs can be reliably estimated. Titeflex Corporation sells flexible gas piping with extensive installation and safety guidance (revised in 2008) designed to assure the safety of the product and minimise the risk of damage associated with lightning strikes.

The assumptions made in assessing the appropriate level of provision, which are based on past experience, include: the period over which expenditure can be reliably estimated; the number of future settlements; the average amount of settlements; and the impact of statutes of repose and safe installation initiatives on the expected number of future claims.

The provision of £74m (FY2018: £78m) is a discounted pre-tax provision using discount rates, being the risk-free rate on US debt instruments for the appropriate period. The deferred tax asset related to this provision is shown within the deferred tax balance (note 6).

	31 July 2019 £m	31 July 2018 £m
Gross provision	118	129
Discount	(44)	(51)
Discounted pre-tax provision	74	78
Deferred tax	(18)	(19)
Discounted post-tax provision	56	59

Titeflex Corporation litigation provision history

A credit of £6m (FY2018: £6m charge) has been recognised by Titeflex Corporation in respect of changes to the estimated cost of future claims from insurance companies seeking recompense for damage allegedly caused by lightning strikes. The lower gross provision value has been driven by a reduction in the average number of claims per year and a decline in the settlement rate experienced.

Titeflex Corporation litigation provision sensitivities

The significant uncertainty associated with the future level of claims and of the costs arising out of related litigation means that there can be no guarantee that the assumptions used to estimate the provision will result in an accurate prediction of the actual costs that may be incurred. Therefore the provision may be subject to potentially material revision from time to time, if new information becomes available as a result of future events.

The projections incorporate a long-term assumption regarding the impact of safe installation initiatives on the level of future claims. If the assumed annual benefit of bonding and grounding initiatives were 0.5% higher, the provision would be £5m (FY2018: £4m) lower, and if the benefit were 0.5% lower, the provision would increase by £6m (FY2018: £5m).

Other non-headline and legacy

Legacy provisions comprise provisions relating to former business activities and properties no longer used by Smiths. Non-headline provisions comprise all provisions that were disclosed as non-headline items when they were charged to the consolidated income statement. These provisions include non-headline reorganisation, vacant properties, disposal indemnities and litigation in respect of old products and discontinued business activities.

Reorganisation

At 31 July 2019, there were reorganisation provisions of £3m relating to the integration of the Morpho business into the Detection division (FY2018: £7m). The Morpho integration provision is expected to be utilised in the next year.

Property

At 31 July 2019, there were provisions of £14m (FY2018: £2m) related to actual and potential environmental issues for sites currently or previously occupied by Smiths operations and £1m (FY2018: £2m) related to onerous leases and dilapidations provisions.

Disposal

Other provisions include disposal provisions of £3m (FY2018: £3m) relating to warranties and other obligations in respect of the disposal of the Marine Systems and Aerospace businesses.

23 SHARE CAPITAL

	Number of shares	Issued capital £m	Consideration £m
Ordinary shares of 37.5p each			
Total share capital at 31 July 2017	395,476,662	148	
Exercise of share options	284,565		3
Total share capital at 31 July 2018	395,761,227	148	
Exercise of share options	195,554		2
Total share capital at 31 July 2019	395,956,781	148	

Share capital structure

As at 31 July 2019, the Company's issued share capital was 395,956,781 ordinary shares with a nominal value of 37.5p per share, all of the issued share capital was in free issue and all issued shares are fully paid.

The Company's ordinary shares are listed and admitted to trading on the Main Market of the London Stock Exchange. The Company has an American Depository Receipt (ADR) programme and one ADR equates to one ordinary share. As at 31 July 2019, 8,401,830 ordinary shares were held by the nominee of the programme in respect of the same number of ADRs in issue.

The holders of ordinary shares are entitled to receive the Company's Reports and Accounts, to attend and speak at general meetings of the Company, to appoint proxies and to exercise voting rights. None of the ordinary shares carry any special rights with regards to control of the Company.

There are no known agreements relating to, or restrictions on, voting rights attached to the ordinary shares (other than the 48 hour cut-off for casting proxy votes prior to a general meeting). There are no restrictions on the transfer of shares, and there is no requirement to obtain approval for a share transfer. There are no known arrangements under which financial rights are held by a person other than the holder of the ordinary shares. There are no known limitations on the holding of shares.

Powers of Directors

The Directors are authorised to issue and allot shares and to buy back shares subject to annual shareholder approval at the AGM. Such authorities were granted by shareholders at the 2018 AGM, and at the 2019 AGM it will be proposed that the Directors be granted new authorities to allot and buy back shares.

Repurchase of shares

The Company did not purchase any of its own shares during the financial year ended 31 July 2019. As at 16 September 2019 (the latest practicable date for inclusion in this report), the Company had an unexpired authority to repurchase ordinary shares up to a maximum of 40m ordinary shares. As at 16 September 2019, the Company did not hold any shares in treasury. Any ordinary shares purchased may be cancelled or held in treasury.

Employment share schemes

Shares acquired through Company share schemes and plans rank pari passu with the shares in issue and have no special rights. The Company operates an Employee Benefit Trust, with an independent trustee, to hold shares pending employees becoming entitled to them under the Company's share schemes and plans. On 31 July 2019, the trust held 53,058 ordinary shares in the Company. The trust waived its dividend entitlement on its holding during the year, and the trust abstains from voting the shares at general meetings.

24 DIVIDENDS

The following dividends were declared and paid in the period:

	Year ended 31 July 2019 £m	Year ended 31 July 2018 £m
Ordinary final dividend of 30.75p for FY2018 (FY2017: 29.70p) paid 16 November 2018	122	117
Ordinary interim dividend of 14.10p for FY2019 (FY2018: 13.80p) paid 26 April 2019	56	55
	178	172

The final dividend for the year ended 31 July 2019 of 31.80p per share was recommended by the Board on 19 September 2019 and will be paid to shareholders on 15 November 2019, subject to approval by the shareholders. This dividend has not been included as a liability in these accounts and is payable to all shareholders on the register of Members at close of business on 18 October 2019.

Waiver of dividends

The following waived all dividends payable in the year, and all future dividends, on their shareholdings in the Company:

- Wealth Nominees Limited (Smiths Industries Employee Share Trust)
- Reuter File Limited

25 RESERVES

Retained earnings include the value of Smiths Group plc shares held by the Smiths Industries Employee Benefit Trust. In the year the Company issued 1,170,315 (FY2018: nil) shares to the Trust, and the Trust purchased 1,222,607 shares (FY2018: 952,111 shares) in the market for a consideration of £19m (FY2018: £15m). At 31 July 2019, the Trust held 53,058 (FY2018: 766) ordinary shares.

The capital redemption reserve, revaluation reserve and merger reserve arose from: share repurchases; revaluations of property, plant and equipment; and merger accounting for business combinations before the adoption of IFRS, respectively.

Capital management

Capital employed comprises total equity adjusted for goodwill recognised directly in reserves, net post-retirement benefit related assets and liabilities, net litigation provisions relating to non-headline items and net debt. The efficiency of the allocation of the capital to the divisions is monitored through the return on capital employed (ROCE). This ratio is calculated over a rolling 12-month period and is the percentage that headline operating profit comprises of monthly average capital employed. The ROCE was 14.4% (FY2018: 14.6%), see note 30.

The capital structure is based on the Directors' judgement of the balance required to maintain flexibility while achieving an efficient cost of capital.

The ratio of net debt to headline EBITDA of 1.8 (FY2018: 1.4) is within the Group's stated policy of 2.0 or less over the medium term.

The Group's robust balance sheet and record of strong cash generation is more than able to fund the immediate investment needs and other legacy obligations. See note 30 for the definition of headline EBITDA and the calculation of this ratio.

As part of its capital management the Group strategy is to maintain a solid investment grade credit rating to ensure access to the widest possible sources of financing and to minimise the resulting cost of capital. At 31 July 2019, the Group had a credit rating of BBB+/Baa2 (FY2018: BBB+/Baa2) with Standard & Poor's and Moody's respectively.

The Board has a progressive dividend policy for future payouts, with the aim of increasing dividends in line with the long-term underlying growth in earnings. In setting the level of dividend payments, the Board will take into account prevailing economic conditions and future investment plans, along with the objective to maintain minimum dividend cover of around 2.0.

Hedge reserve

	31 July 2019 £m	31 July 2018 £m
The hedge reserve on the balance sheet comprises:		
- cash-flow hedge reserve	2	
- net investment hedge reserve	(383)	(304)
	(383)	(302)

See transactional currency exposure risk management disclosures in note 18 for additional details of cash-flow hedges, and translational currency exposure risk management disclosure also in note 18 for additional details of net investment hedges.

26 ACQUISITIONS

On 19 February 2019, the Group's Flex-Tek division completed the acquisition of the entire share capital of United Flexible, an engineering solutions business, for a headline price of \$345m. The acquisition strengthens Flex-Tek's global position in aerospace and industrial end markets. The intangible assets recognised on this acquisition comprise customer relationships, order backlog and tradenames. Goodwill represents the expected synergies from the strategic fit of the acquisition and the value of the expertise in the assembled workforce.

From the date of acquisition to 31 July 2019, United Flexible contributed £56m to revenue and £11m to profit before taxation. If the Group had acquired this business at the beginning of the financial year, the acquisition would have contributed £123m to revenue and £15m to profit before taxation. Due to the size of the acquired business, the assessment of the fair value of the assets and liabilities acquired has not yet been finalised and in accordance with IFRS 3 'Business combinations' they are shown as provisional in the table below.

On 17 April 2019, the Group's John Crane division completed the acquisition of the Industrial Division of Advanced Diamond Technologies for £6m. This business has been renamed John Crane Diamond. John Crane Diamond has developed unrivalled expertise in proprietary materials that capture the properties of natural diamond using chemical vapor deposition, further enhancing John Crane's industry leadership. Goodwill represents the expected synergies from the strategic fit of the acquisition and the value of the expertise in the assembled workforce.

From the date of acquisition to 31 July 2019, John Crane Diamond contributed £1m to revenue and less than £1m to profit before taxation. If the Group had acquired this business at the beginning of the financial year, the acquisition would have contributed £2m to revenue and £1m to profit before taxation.

The provisional balance sheets at the date of acquisition are:

		United Flexible £m	John Crane Diamond £m	Total £m
Non-current assets	- acquired intangible assets	146	2	148
	- land and buildings	3		3
	- plant and equipment	8		8
Current assets	- inventory	25		25
	- trade and other receivables	15	1	16
	- cash and cash equivalents	7		7
Current liabilities	- trade and other payables	(13)		(13)
Non-current liabilities	- provisions	(12)		(12)
	- deferred tax	(31)		(31)
Net assets acquired		148	3	151
Goodwill on current year acquisitions		124	3	127
Cash paid during the year		271	6	277
Deferred consideration		1		1
Total consideration		272	6	278

27 DISCONTINUED OPERATIONS AND BUSINESSES HELD FOR DISTRIBUTION TO OWNERS

On 22 March 2019, the Group formally announced the intention to pursue a demerger of the Smiths Medical business and separately list it on the UK Stock Exchange. At the July 2019 Smith Group Board meeting, it was determined that the project had progressed sufficiently for Smiths Medical business to be accounted for as a discontinued operation and as a business held for distribution to owners. The Group is on track to complete the demerger of Smiths Medical during the first half of calendar year 2020.

Discontinued operations

The financial performance of the Smiths Medical business in the current and prior years is presented below:

	Year ended 31 July 2019			Year ended 31 July 2018 – restated*		
	Headline £m	Non-headline (note 3) £m	Total £m	Headline £m	Non-headline (note 3) £m	Total £m
Revenue	874		874	869		869
Cost of sales	(412)		(412)	(405)		(405)
Gross profit	462		462	464		464
Sales and distribution costs	(183)		(183)	(177)		(177)
Administrative expenses	(132)	(13)	(145)	(131)	(4)	(135)
Profit on business disposal		17	17			
Operating profit	147	4	151	156	(4)	152
Finance costs	(3)	(38)	(41)	(2)	(2)	(4)
Taxation	(32)	7	(25)	(39)	51	12
Profit from discontinued operations	112	(27)	85	115	45	160

* The comparatives for FY2018 have been restated to reflect the adoption of IFRS 15 – see page 146 for further details.

£3.3m (FY2018: £2.8m) interest was capitalised as part of the costs of Smiths Medical development projects. £0.6m (FY2018: £0.8m) of tax relief has been recognised as current tax relief in the period. The demerger of the Medical division is not anticipated to give rise to material tax charges, however, it is noted that the relevant regulatory filings and clearances are still in progress.

Cash-flow from discontinued operations included in the consolidated cash-flow statement is as follows:

	31 July 2019 £m	31 July 2018 £m
Net cash inflow from operating activities	149	123
Net cash-flow used in investing activities	(28)	(43)
Net cash-flow used in financing activities	(60)	(59)
	61	21

27 DISCONTINUED OPERATIONS AND BUSINESSES HELD FOR DISTRIBUTION TO OWNERS CONTINUED

Businesses held for distribution to owners

The carrying value of the assets and liabilities of the Smiths Medical business as at 31 July 2019 are as follows:

	31 July 2019 £m
Assets classified as held for distribution to owners:	
Intangible assets	746
Property, plant and equipment	135
Inventories	151
Deferred tax assets	13
Current tax receivable	2
Trade and other receivables	138
Cash and cash equivalents	26
Financial derivatives	5
Assets classified as held for distribution to owners	1,216
Liabilities classified as held for distribution to owners:	
Financial liabilities	
- borrowings	(3)
- financial derivatives	(2)
Trade and other payables	(137)
Current tax payable	(11)
Deferred tax liabilities	(48)
Retirement benefit obligations	(6)
Provisions for liabilities and charges	(6)
Liabilities classified as held for distribution to owners	(213)

Additional segmental information for discontinued operations

Headline operating profit for discontinued operations is stated after charging depreciation £19m (FY2018: £20m), amortisation £21m (FY2018: £18m) and share based payments £nil (FY2018: £2m).

The capital expenditure on property, plant and equipment, capitalised development and other intangible assets for discontinued operations is £45m (FY2018: £48m).

Revenue for the Smiths Medical discontinued operation is analysed by the following product lines: Infusion Systems £307m (FY2018: £302m), Vascular Access £286m (FY2018: £294m) and Vital Care/Other £281m (FY2018: £273m).

Revenue by destination and non-current operating assets by location for discontinued operations is shown below:

	Year ended 31 July 2019				Year ended 31 July 2018			
	Americas £m	Europe, Middle East & Africa £m	Asia-Pacific £m	Total £m	Americas £m	Europe, Middle East & Africa £m	Asia-Pacific £m	Total £m
Revenue	493	233	148	874	476	241	152	869
Intangible assets and property, plant and equipment	772	64	45	881	711	78	42	831

28 DISPOSALS

In the prior year, the Group recognised a net profit of £7m for business disposals, this profit was principally due to the sale of John Crane Bearings which completed on 31 May 2018.

29 CASH-FLOW

Cash-flow from operating activities

	Year ended 31 July 2019			Year ended 31 July 2018 – restated		
	Headline £m	Non-headline £m	Total £m	Headline £m	Non-headline £m	Total £m
Operating profit – continuing operations	427	(101)	326	388	(46)	342
– discontinued operations	147	4	151	156	(4)	152
Amortisation of intangible assets	36	45	81	39	32	71
Depreciation of property, plant and equipment	56		56	55		55
(Profit)/loss on disposal of property, plant and equipment	4		4	(1)		(1)
Profit on disposal of businesses		(18)	(18)		(7)	(7)
Share-based payment expense	15		15	14	2	16
Retirement benefits	7	(6)	1	5	(49)	(44)
Decrease/(increase) in inventories	(52)	4	(48)	(19)	2	(17)
Decrease/(increase) in trade and other receivables	(105)		(105)	(17)		(17)
Increase/(decrease) in trade and other payables	60	6	66	26	(5)	21
Decrease in provisions	(7)	(19)	(26)	(6)	(30)	(36)
Cash generated from operations	588	(85)	503	640	(105)	535
Interest paid	(64)		(64)	(71)	(1)	(72)
Interest received	6		6	7		7
Tax paid	(99)		(99)	(65)		(65)
Net cash inflow from operating activities	431	(85)	346	511	(106)	405

The split of tax payments between headline and non-headline only considers the nature of payments made. No adjustment has been made for reductions in tax payments due to tax relief received on non-headline items.

Headline cash measures

The Group measure of headline operating cash includes capital expenditure supporting organic growth and excludes interest and tax.

	Year ended 31 July 2019			Year ended 31 July 2018		
	Headline £m	Non-headline £m	Total £m	Headline £m	Non-headline £m	Total £m
Net cash inflow from operating activities	431	(85)	346	511	(106)	405
Include:						
Expenditure on capitalised development, other intangible assets and property, plant and equipment	(118)		(118)	(106)		(106)
Disposals of property, plant and equipment	4		4	4		4
Investment in financial assets relating to operating activities and pensions financing	2		2	(1)		(1)
Free cash-flow			234			302
Exclude:						
Investment in financial assets relating to operating activities and pensions financing outstanding at the balance sheet	(2)		(2)	1		1
Interest paid	64		64	71	1	72
Interest received	(6)		(6)	(7)		(7)
Tax paid	99		99	65		65
Headline operating cash-flow	474	(85)	389	538	(105)	433

Headline cash conversion

Headline operating cash conversion for the total Group is calculated as follows:

	Year ended 31 July 2019 £m	Year ended 31 July 2018 £m
Headline operating profit	574	544
Headline operating cash-flow	474	538
Headline operating cash conversion	83%	99%

Reconciliation of headline free cash-flow to total movement in cash and cash-equivalents

	Year ended 31 July 2019 £m	Year ended 31 July 2018 £m
Free cash-flow	234	302
Acquisition of businesses	(277)	(71)
Disposal of businesses and discontinued operations	22	29
Net cash-flow used in financing activities	(391)	(316)
Net decrease in cash and cash equivalents	(412)	(56)

30 NON-STATUTORY CAPITAL AND CREDIT METRICS

In addition to the non-statutory profit measures explained in note 3, the Group calculates credit metrics and return on capital employed incorporating the same adjustments. See the disclosures on presentation of results in accounting policies for an explanation of the excluded items.

Return on capital employed (ROCE)

Smiths ROCE is calculated over a rolling 12-month period and is the percentage that headline operating profit comprises of monthly average capital employed. See note 1 for the divisional headline operating profit and average divisional capital employed used to calculate divisional ROCE.

Capital employed

Capital employed is a non-statutory measure of invested resources. It comprises statutory net assets adjusted to add goodwill recognised directly in reserves in respect of subsidiaries acquired before 1 August 1998 of £787m (FY2018: £787m) and eliminate post-retirement benefit assets and liabilities and litigation provisions relating to non-headline items, both net of related tax, and net debt.

	Notes	31 July 2019 £m	31 July 2018 £m
Net assets		2,381	2,288
Adjust for:			
Goodwill recognised directly in reserves		787	787
Post-retirement benefit assets and liabilities	8	(311)	(381)
Tax related to post-retirement benefit assets and liabilities		55	62
John Crane, Inc. litigation provisions and related tax	22	187	175
Titeflex Corporation litigation provisions and related tax	22	56	59
Net debt- including £23m of net cash in discontinued operations	17	1,197	893
Capital employed		4,352	3,883

Return on capital employed

	Notes	Year ended 31 July 2019 £m	Year ended 31 July 2018 £m
Headline operating profit for previous 12 months – including discontinued operations		574	544
Average capital employed	1	3,972	3,735
ROCE		14.4%	14.6%

Credit metrics

Smiths Group monitors the ratio of net debt to Headline EBITDA as part of its management of credit ratings, see note 25 for details. This ratio is presented for the whole Group, including discontinued operations, and is calculated as follows:

Headline earnings before interest, tax, depreciation and amortisation (Headline EBITDA)

	Notes	Year ended 31 July 2019 £m	Year ended 31 July 2018 restated £m
Headline operating profit		427	388
Include:			
- headline operating profit of discontinued operations	27	147	156
Exclude:			
- depreciation	12	56	55
- amortisation of development costs	10	23	24
- amortisation of software, patents and intellectual property	10	13	18
Headline EBITDA		666	641

£1m of software amortisation was charged to restructuring projects and treated as a non-headline cost.

Ratio of net debt to headline EBITDA – including discontinued operations

	Notes	Year ended 31 July 2019 £m	Year ended 31 July 2018 £m
Headline EBITDA		666	641
Net debt – including £23m of net cash in discontinued operations	17	1,197	893
Ratio of net debt to headline EBITDA		1.8	1.4

UNAUDITED GROUP FINANCIAL RECORD 2015-2019

The headline income statement metrics shown below for the years ended 31 July 2018, 2017, 2016 and 2015 have been represented to show the results of Smiths Medical as a discontinued operation.

		Year ended 31 July 2019 £m	Year ended 31 July 2018 restated* £m	Year ended 31 July 2017 £m	Year ended 31 July 2016 £m	Year ended 31 July 2015 £m
Income statement metrics – headline*						
Continuing operations	Revenue	2,498	2,328	2,329	2,075	2,061
	Headline operating profit	427	388	355	292	315
	Headline profit before tax	376	333	296	234	263
Discontinued operations	Revenue	874	869	951	874	836
	Headline operating profit	147	156	194	174	150
	Headline profit before tax	144	154	192	173	150
Income statement metrics – statutory**						
Revenue		2,498	2,328	3,280	2,949	2,897
Operating profit		326	342	674	387	394
Profit before taxation		304	287	601	346	325
Profit for the year		227	279	572	261	248
Balance sheet metrics***						
Net debt		(1,197)	(893)	(967)	(978)	(818)
Shareholders' equity		2,360	2,272	2,089	1,646	1,419
Average capital employed		3,972	3,735	3,639	3,324	3,197
Ratios***						
Headline operating profit: revenue (%)		17.0	17.0	18.0	17.3	17.6
Headline effective tax rate (%)		25.9	25.8	26.5	25.0	25.5
Return on capital employed (%)		14.4	14.6	16.2	15.3	16.0
Return on shareholders' funds (%)		12.3	12.1	14.5	14.3	15.8
Cash-flow metrics***						
Headline operating cash		474	538	695	520	484
Headline operating cash conversion (%)		83	99	118	102	95
Free cash-flow		234	302	370	243	158
Free cash-flow per share (p)		59.1	76.3	93.6	61.1	40.1
Earnings per share***						
Headline earnings per share (p)		96.8	90.7	97.6	85.2	86.1
Dividends and dividend cover***						
Pence per share		45.90	44.55	43.25	42.00	41.00
Headline dividend cover		2.1	2.0	2.3	2.0	2.1
Number of employees (000s)***						
United Kingdom		1.6	1.5	1.5	1.5	1.7
Overseas		20.5	20.2	20.4	20.5	21.6
		22.0	21.7	21.9	22.0	23.3

* The headline income statement metrics in the above five year record have been presented to reflect the reclassification of the Smiths Medical business as a discontinued operation and the Group's current accounting policy of including restructuring and pension administration costs within headline profit. The discontinued operations comparatives for the year ended 31 July 2018 have also been restated for the adoption of IFRS 15.

** The statutory income statement metrics are presented based on continuing operations for both the current and comparative year. The year ended 31 July 2017 and prior years are presented as originally published.

*** Balance sheet metrics, ratios, cash-flow metrics, earnings per share, dividend cover and number of employees are presented based on both continuing and discontinued operations for all years.

UNAUDITED SUPPLEMENTARY CONSOLIDATED INCOME STATEMENT – US DOLLAR TRANSLATION

	Notes	Year ended 31 July 2019			Year ended 31 July 2018 – restated*		
		Headline \$m	Non-headline (note 3) \$m	Total \$m	Headline \$m	Non-headline (note 3) \$m	Total \$m
Continuing operations							
Revenue	1	3,218		3,218	3,139		3,139
Cost of sales		(1,841)		(1,841)	(1,789)		(1,789)
Gross profit		1,377		1,377	1,350		1,350
Sales and distribution costs		(344)		(344)	(348)		(348)
Administrative expenses		(483)	(130)	(613)	(479)	(71)	(550)
Profit on business disposal	28				9		9
Operating profit/(loss)	2	550	(130)	420	523	(62)	461
Interest receivable		14		14	13		13
Interest payable		(80)		(80)	(88)		(88)
Other financing gains/(losses)		23		23	(9)		(9)
Other finance charges – retirement benefits	8	14		14	9		9
Finance costs	4	(66)	37	(29)	(75)		(75)
Continuing operations – Profit before taxation		484	(93)	391	448	(62)	386
Taxation	6	(133)	(76)	(209)	(117)	(110)	(227)
Continuing operations – Profit for the year		351	(169)	182	331	(172)	159
Discontinued operations							
Loss on discontinued operations	27	144	(35)	109	155	61	216
Profit for the year		495	(204)	291	486	(111)	375
Attributable to							
Smiths Group shareholders – continuing operations		348	(169)	179	328	(172)	156
Smiths Group shareholders – discontinued operations		144	(35)	109	155	61	216
Non-controlling interests in respect of continuing operations		3		3	3		3
		495	(204)	291	486	(111)	375
Earnings per share	5						
Basic				73.2c			94.4c
Basic – continuing				45.5c			39.9c
Diluted				72.8c			93.1c
Diluted – continuing				45.3c			39.3c

* Results for the year ended 31 July 2018 have been restated to reflect the adoption of IFRS 15 and the reclassification of the Smiths Medical business as a discontinued operation.

Assets and liabilities have been translated into US dollars at the exchange rate at the date of that balance sheet and income, expenses and cash-flows are translated at average exchange rates for the period. This reflects the accounting approach that Smiths Group plc would use if the Group moved to reporting in US dollars without making any changes to its Group structure or financing arrangements.

UNAUDITED SUPPLEMENTARY CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME – US DOLLAR TRANSLATION

	Notes	Year ended 31 July 2019 \$m	Year ended 31 July 2018 \$m
Profit for the year		291	375
Other comprehensive income:			
Actuarial gains on retirement benefits	8	(98)	140
Taxation recognised on actuarial movements	6	17	(24)
Other comprehensive income and expenditure which will not be reclassified to the consolidated income statement		(81)	116
Other comprehensive income which will be reclassified and reclassifications:			
Exchange (losses)/gains		30	(11)
Cumulative exchange gains recycled on disposal			(7)
Fair value gains/(losses) and reclassification adjustments:			
– deferred on available for sale financial assets		2	1
– reclassified to income statement on available for sale financial assets	4		
– deferred in the period on cash-flow and net investment hedges		(99)	(8)
– reclassified to income statement on cash-flow and net investment hedges		(5)	(8)
Taxation recognised on fair value gains	6		
Total other comprehensive income		(153)	83
Total comprehensive income		138	458
Attributable to			
Smiths Group shareholders		135	456
Non-controlling interests		3	2
		138	458

UNAUDITED SUPPLEMENTARY CONSOLIDATED BALANCE SHEET – US DOLLAR TRANSLATION

	Notes	31 July 2019 \$m	31 July 2018 \$m
Non-current assets			
Intangible assets	10	2,057	2,705
Property, plant and equipment	12	283	420
Financial assets – other investments	16	23	23
Retirement benefit assets	8	573	690
Deferred tax assets	6	140	237
Trade and other receivables	14	64	75
Financial derivatives	19	57	65
		3,197	4,215
Current assets			
Inventories	13	510	612
Current tax receivable	6	14	49
Trade and other receivables	14	933	963
Cash and cash equivalents	17	353	941
Financial derivatives	19	4	9
Assets held for distribution to owners	27	1,484	
		3,298	2,574
Total assets		6,495	6,789
Current liabilities			
Financial liabilities			
– borrowings	17	(11)	(266)
– financial derivatives	19	(7)	(6)
Provisions for liabilities and charges	22	(80)	(100)
Trade and other payables	15	(695)	(795)
Current tax payable	6	(69)	(94)
Liabilities held for distribution to owners	27	(259)	
		(1,121)	(1,261)
Non-current liabilities			
Financial liabilities			
– borrowings	17	(1,831)	(1,847)
– financial derivatives	19	(1)	(8)
Provisions for liabilities and charges	22	(349)	(344)
Retirement benefit obligations	8	(186)	(190)
Current tax payable	6	(9)	
Deferred tax liabilities	6	(55)	(101)
Trade and other payables	15	(36)	(35)
		(2,467)	(2,525)
Total liabilities		(3,588)	(3,786)
Net assets		2,907	3,003
Shareholders' equity			
Share capital	23	181	194
Share premium account		440	469
Capital redemption reserve	25	7	8
Revaluation reserve	25	1	2
Merger reserve	25	287	308
Retained earnings		2,434	2,398
Hedge reserve	25	(468)	(397)
Total shareholders' equity		2,882	2,982
Non-controlling interest equity		25	21
Total equity		2,907	3,003

UNAUDITED SUPPLEMENTARY CONSOLIDATED STATEMENT OF CHANGES IN EQUITY – US DOLLAR TRANSLATION

	Notes	Share capital and share premium \$m	Other reserves \$m	Retained earnings \$m	Hedge reserve \$m	Equity shareholders' funds \$m	Non- controlling interest \$m	Total equity \$m
At 31 July 2018		663	318	2,398	(397)	2,982	21	3,003
Profit for the year				289		289	2	291
Other comprehensive income:								
Exchange (losses)/gains		(44)	(23)	63	33	29	1	30
Actuarial gains on retirement benefits and tax				(81)		(81)		(81)
Fair value gains/(losses) and related tax				2	(104)	(102)		(102)
Total comprehensive income for the year		(44)	(23)	273	(71)	135	3	138
Transactions relating to ownership interests:								
Exercises of share options	23	2				2		2
Purchase of own shares	25			(24)		(24)		(24)
Dividends:								
– equity shareholders	24			(230)		(230)		(230)
– non-controlling interests							(1)	(1)
Receipt of capital from non-controlling interest							2	2
Share-based payment	9			17		17		17
At 31 July 2019		621	295	2,434	(468)	2,882	25	2,907
	Notes	Share capital and share premium \$m	Other reserves \$m	Retained earnings \$m	Hedge reserve \$m	Equity shareholders' funds \$m	Non- controlling interest \$m	Total equity \$m
At 31 July 2017		664	320	2,155	(383)	2,756	19	2,775
Profit for the year				372		372	3	375
Other comprehensive income:								
Exchange (losses)/gains		(5)	(2)	(13)	2	(18)		(18)
Actuarial gains on retirement benefits and tax				116		116		116
Fair value gains/(losses) and related tax				1	(16)	(15)		(15)
Total comprehensive income for the year		(5)	(2)	476	(14)	455	3	458
Transactions relating to ownership interests:								
Exercises of share options	23	4				4		4
Purchase of own shares	25			(20)		(20)		(20)
Dividends:								
– equity shareholders	24			(232)		(232)		(232)
– non-controlling interests							(1)	(1)
Share-based payment	9			19		19		19
At 31 July 2018		663	318	2,398	(397)	2,982	21	3,003

UNAUDITED SUPPLEMENTARY CONSOLIDATED CASH-FLOW STATEMENT – US DOLLAR TRANSLATION

	Notes	Year ended 31 July 2019 \$m	Year ended 31 July 2018 \$m
Net cash inflow from operating activities	29	445	546
Cash-flows from investing activities			
Expenditure on capitalised development		(35)	(35)
Expenditure on other intangible assets	10	(15)	(16)
Purchases of property, plant and equipment	12	(102)	(92)
Disposals of property, plant and equipment		5	5
Investment in financial assets	16	3	(1)
Acquisition of businesses	26	(357)	(96)
Disposals of businesses – continuing operations	28		39
Disposals of businesses – discontinued operations	27	39	
Tax paid on disposal of business – discontinued operations			(10)
Net cash-flow used in investing activities		(472)	(196)
Cash-flows from financing activities			
Proceeds from exercise of share options	23	3	4
Purchase of own shares	25	(24)	(21)
Settlement of cash settled options		(3)	(1)
Dividends paid to equity shareholders	24	(230)	(232)
Cash inflow from matured derivative financial instruments			5
Reduction and repayment of borrowings	17	(250)	(182)
Net cash-flow used in financing activities		(504)	(427)
Net decrease in cash and cash equivalents		(531)	(77)
Cash and cash equivalents at beginning of year		941	1,030
Cash held in disposal group		(33)	
Exchange differences		(24)	(12)
Cash and cash equivalents at end of year	17	353	941
Cash and cash equivalents at end of year comprise:			
– cash at bank and in hand		187	377
– short-term deposits		166	564
		353	941

Reconciliation of net cash-flow to movement in net debt

	Notes	Year ended 31 July 2019 \$m	Year ended 31 July 2018 \$m
Net debt at start of year	17	(1,178)	(1,275)
Net (decrease)/increase in cash and cash equivalents		(531)	(77)
Net cash held in disposal group		(29)	
Reduction and repayment of borrowings		250	182
Movement in net debt resulting from cash-flows		(310)	105
Capitalisation, interest accruals and unwind of capitalisation fees		1	3
Movement from fair value hedging		(59)	1
Exchange differences		56	(12)
Movement in net debt in the year		(312)	97
Net debt at end of year	17	(1,490)	(1,178)

UNAUDITED GROUP US DOLLAR FINANCIAL RECORD 2015-2019

The headline income statement metrics shown below for the years ended 31 July 2018, 2017, 2016 and 2015 have been represented to show the results of Smiths Medical as a discontinued operation.

		Year ended 31 July 2019 \$m	Year ended 31 July 2018 restated* \$m	Year ended 31 July 2017 \$m	Year ended 31 July 2016 \$m	Year ended 31 July 2015 \$m
Income statement metrics – headline*						
Continuing operations	Revenue	3,218	3,139	2,952	3,036	3,219
	Headline operating profit	550	523	450	428	492
	Headline profit before tax	484	449	375	343	411
Discontinued operations	Revenue	1,126	1,172	1,206	1,279	1,306
	Headline operating profit	189	210	246	255	234
	Headline profit before tax	185	208	243	254	234
Income statement metrics – statutory**						
Revenue		3,218	3,139	4,158	4,315	4,525
Operating profit		420	461	855	567	616
Profit before taxation		391	386	762	506	509
Profit for the year		291	375	715	382	388
Balance sheet metrics***						
Net debt		(1,462)	(1,172)	(1,275)	(1,294)	(1,278)
Shareholders' equity		2,882	2,982	2,756	2,178	2,219
Average capital employed		4,852	4,903	4,800	4,864	4,994
Ratios***						
Headline operating profit: revenue (%)		17.0	17.0	18.0	17.3	17.6
Headline effective tax rate (%)		25.9	25.8	26.5	25.0	25.5
Return on capital employed (%)		14.4	14.6	16.2	15.3	16.0
Return on shareholders' funds (%)		12.1	12.5	14.2	14.6	15.3
Cash-flow metrics***						
Headline operating cash		611	725	881	760	756
Headline operating cash conversion (%)		83	99	118	102	95
Free cash-flow		301	407	469	356	247
Free cash-flow per share (c)		76.1	102.9	118.6	89.4	62.6
Earnings per share***						
Headline earnings per share (c)		124.7	122.3	123.6	124.6	134.5
Dividends and dividend cover***						
Cents per share (c)		59.1	60.1	54.8	61.5	64.0
Headline dividend cover		2.1	2.0	2.3	2.0	2.1
Number of employees (000s)***						
United States of America		7.2	7.1	7.7	7.9	8.4
Rest of World		14.8	14.6	14.2	14.1	14.9
		22.0	21.7	21.9	22.0	23.3

* The headline income statement metrics in the above five year record have been presented to reflect the reclassification of the Smiths Medical business as a discontinued operation and the Group's current accounting policy of including restructuring and pension administration costs within headline profit. The discontinued operations comparatives for the year ended 31 July 2018 have also been restated for the adoption of IFRS 15.

** The statutory income statement metrics are presented based on continuing operations for both the current and comparative year. The year ended 31 July 2017 and prior years are presented as originally published.

*** Balance sheet metrics, ratios, cash-flow metrics, earnings per share, dividend cover and number of employees are presented based on both continuing and discontinued operations for all years.

COMPANY BALANCE SHEET

	Notes	31 July 2019 £m	31 July 2018 £m
Non-current assets			
Tangible assets	2	1	
Investments and advances	3	3,519	3,247
Financial assets	4	6	6
Retirement benefit assets	11	469	526
Debtors	6	1	1
Financial derivatives	9	45	49
Total non-current assets		4,040	3,830
Current assets			
Debtors	6	67	63
Cash at bank and on deposit	8	90	347
Financial derivatives	9	4	2
Total current assets		161	412
Current liabilities			
Creditors	7	(76)	(331)
Financial derivatives	9	(2)	
Net current assets		83	81
Total assets less current liabilities		4,123	3,911
Non-current liabilities			
Borrowings	8	(1,461)	(1,405)
Provisions for liabilities and charges	10	(2)	(2)
Retirement benefit liabilities	11	(61)	(59)
Deferred tax liabilities	5		(8)
Financial derivatives	9	(2)	(6)
Total non-current liabilities		(1,526)	(1,480)
Net assets		2,597	2,431
Capital and reserves			
Called up share capital	12	148	148
Share premium account	12	360	358
Capital redemption reserve	12	6	6
Other reserves	12	181	181
Profit and loss account	12	1,902	1,738
Shareholders' equity		2,597	2,431

The accounts on pages 200 to 207 were approved by the Board of Directors on 19 September 2019 and were signed on its behalf by:

Andy Reynolds Smith
CHIEF EXECUTIVE

John Shipsey
CHIEF FINANCIAL OFFICER

Smiths Group plc – registered number 137013

COMPANY STATEMENT OF CHANGES IN EQUITY

	Share capital £m	Share premium £m	Capital redemption reserve £m	Other reserves £m	Retained profit £m	Shareholders' equity £m
At 31 July 2018	148	358	6	181	1,738	2,431
Profit for the year					403	403
Other comprehensive income:						
Actuarial loss on retirement benefits					(66)	(66)
Taxation recognised on retirement benefits					11	11
Total comprehensive income					348	348
Transactions with owners:						
Exercise of share options			2			2
Purchase of own shares					(19)	(19)
Dividends paid to equity shareholders					(178)	(178)
Share-based payment					13	13
Total transactions with owners recognised in equity		2			(184)	(182)
At 31 July 2019	148	360	6	181	1,902	2,597
	Share capital £m	Share premium £m	Capital redemption reserve £m	Other reserves £m	Retained profit £m	Shareholders' equity £m
At 31 July 2017	148	355	6	181	1,818	2,508
Profit for the year					7	7
Other comprehensive income:						
Actuarial gain on retirement benefits					103	103
Taxation recognised on retirement benefits					(17)	(17)
Total comprehensive income					93	93
Transactions with owners:						
Exercise of share options			3			3
Purchase of own shares					(15)	(15)
Dividends paid to equity shareholders					(172)	(172)
Share-based payment					14	14
Total transactions with owners recognised in equity		3			(173)	(170)
At 31 July 2018	148	358	6	181	1,738	2,431

COMPANY ACCOUNTING POLICIES

Basis of preparation

The accounts have been prepared in accordance with the Companies Act 2006 and Financial Reporting Standard 101, "Reduced Disclosure Framework" (FRS 101).

These accounts have been prepared on a going concern basis and under the historical cost convention modified to include revaluation of certain financial instruments, share options and pension assets and liabilities held at fair value.

As permitted by Section 408(3) of the Companies Act 2006, the Company's income statement and statement of comprehensive income have not been presented. As permitted by Section 408(2), information about the Company's employee numbers and costs is not presented.

Exemptions from the requirements of IFRS applied in accordance with FRS 101

The following exemptions from the requirements of IFRS have been applied in the preparation of these financial statements, in accordance with FRS 101:

- Paragraphs 45(b) and 46 to 52 of IFRS 2, 'Share-based payment' (details of the number and weighted-average exercise prices of share options, and how the fair value of goods or services received was determined)
- IFRS 7, 'Financial Instruments: Disclosures'
- Paragraphs 91 to 99 of IFRS 13, 'Fair value measurement' (disclosure of valuation techniques and inputs used for fair value measurement of assets and liabilities).
- Paragraph 38 of IAS 1, 'Presentation of financial statements' comparative information requirements in respect of:
 - paragraph 79(a)(iv) of IAS 1;
 - paragraph 73(e) of IAS 16 'Property, plant and equipment';
- The following paragraphs of IAS 1, 'Presentation of financial statements':
 - 10(d) (statement of cash flows),
 - 16 (statement of compliance with all IFRS),
 - 38A (requirement for minimum of two primary statements, including cash flow statements),
 - 38B-D (additional comparative information),
 - 111 (cash flow statement information), and
 - 134-136 (capital management disclosures)
- IAS 7, 'Statement of cash flows'
- Paragraph 30 and 31 of IAS 8 'Accounting policies, changes in accounting estimates and errors' (requirement for the disclosure of information when an entity has not applied a new IFRS that has been issued but is not yet effective)
- Paragraph 17 of IAS 24, 'Related party disclosures' (key management compensation)
- The requirements in IAS 24, 'Related party disclosures' to disclose related party transactions entered into between two or more members of a group.

New accounting standards effective for the financial year ending 31 July 2019

On 1 August 2018, the Company and Group adopted IFRS 9: Financial Instruments. There was no material impact on adoption of this new standard, further details on the impact of IFRS 9 on the Group processes and disclosures is included within the Group accounting policies on page 145.

Significant judgements, key assumptions and estimates

The preparation of the accounts in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the accounts and the reported amounts of revenues and expenses during the reporting period. Actual results may differ from these estimates. The key estimates and assumptions used in these parent company financial statements are set out below.

Taxation

The Company has recognised deferred tax assets of £68m (FY2018: £63m) relating to revenue losses brought forward. The recognition of these assets is dependent on the ability to recover them against the unwind of other tax positions and forecast UK taxable profits of the tax group. The treatment of these assets is reviewed regularly. Further detail on the Company's deferred taxation position is included in note 5.

Retirement benefits

The financial statements include costs in relation to, and provision for, retirement benefit obligations. The costs and the present value of any related pension assets and liabilities depend on such factors as life expectancy of the members, the returns that plan assets generate and the discount rate used to calculate the present value of the liabilities. The Company uses previous experience and independent actuarial advice to select the values of critical estimates. The estimates, and the effect of variances in key estimates, are disclosed in note 8 to the consolidated accounts.

At 31 July 2019 there is a retirement benefit asset of £469m (FY2018: £525m) which arises from the rights of the employers to recover the surplus at the end of the life of the scheme. If the pension schemes were wound up while they still had members, the schemes would need to buy out the benefits of all members. The buyouts would cost significantly more than the present value of the scheme liabilities calculated in accordance with IAS 19: Employee benefits.

Foreign currencies

Foreign currency transactions are recorded at the exchange rate ruling on the date of transaction. Foreign exchange gains and losses resulting from the settlement of such transactions, and from the retranslation at year-end exchange rates of monetary assets and liabilities denominated in foreign currencies, are recognised in the profit and loss account.

Operating leases

Payments made under operating leases are charged to the profit and loss account as incurred over the term of the lease.

Where a leasehold property is vacant or sub-let under terms such that the rental income is insufficient to meet all outgoings, provision is made for the anticipated future shortfall up to termination of the lease.

Property, plant and equipment

Depreciation is provided at rates estimated to write off the relevant assets by equal annual amounts over their expected useful lives. In general, the rates used are: Freehold and long leasehold property – 2%; Short leasehold property – over the period of the lease; Plant, machinery, etc. – 10% to 20%; Fixtures, fittings, tools and other equipment – 10% to 33%.

Investments in shares in Group companies

The Company's investments in shares in Group companies are stated at cost less provision for impairment. Any impairment is charged to the profit and loss account as it arises.

Financial instruments

The policies disclosed in the Group accounting policies on pages 141 to 146 for recognition, measurement and presentation of financial instruments are applied in the Company accounts.

Taxation

Deferred tax is provided using the balance sheet liability method. A deferred tax asset is recognised where it is probable that future taxable income will be sufficient to utilise the available relief.

Deferred tax is provided on temporary differences arising on investments in subsidiaries, except where the timing of the reversal of the temporary difference is controlled by the Company and it is probable that the temporary difference will not reverse in the foreseeable future.

Provisions

Provisions for disposal indemnities, restructuring costs, vacant leasehold property and legal claims are recognised when: the Company has a legal or constructive obligation as a result of a past event; it is probable that an outflow of resources will be required to settle the obligation; and the amount has been reliably estimated. Provisions are not recognised for future operating losses.

Provisions are discounted where the time value of money is material.

Post-retirement benefits

The Company has both defined benefit and defined contribution plans.

For defined benefit plans the liability for each scheme recognised in the balance sheet is the present value of the defined benefit obligation at the balance sheet date less the fair value of plan assets. The defined benefit obligation is calculated annually by independent actuaries using the projected unit credit method. The present value of the defined benefit obligation is determined by discounting the estimated future cash outflows using interest rates of AA corporate bonds that are denominated in the currency in which the benefits will be paid, and that have terms to maturity approximating to the terms of the related pension liability. Actuarial gains and losses arising from experience adjustments and changes in actuarial assumptions are recognised in full when they occur and presented in the statement of other comprehensive income.

For defined contribution plans, the Company pays contributions to publicly or privately administered pension insurance plans on a mandatory, contractual or voluntary basis. Contributions are expensed as incurred.

The Company also has post-retirement healthcare schemes that are accounted for on a similar basis to the defined benefit plans.

Share-based payment

The Company operates a number of equity-settled and cash-settled share-based compensation plans.

The fair value of the shares or share options granted is recognised over the vesting period to reflect the value of the employee services received. The charge relating to grants to employees of the Company is recognised as an expense in the profit and loss account and the charge for grants to employees of other group companies is recognised as an investment in the relevant subsidiary.

The fair value of options granted, excluding the impact of any non-market vesting conditions, is calculated using established option pricing models, principally binomial models. The probability of meeting non-market vesting conditions, which include profitability targets, is used to estimate the number of share options that are likely to vest.

For cash-settled share-based payment schemes, a liability is recognised based on the fair value of the payment earned by the balance sheet date. For equity-settled share-based payment schemes, the corresponding credit is recognised directly in reserves.

Dividends

Dividends are recognised as a liability in the period in which they are authorised. The interim dividend is recognised when it is paid and the final dividend is recognised when it has been approved by shareholders at the Annual General Meeting.

NOTES TO THE COMPANY ACCOUNTS

1 AUDIT FEE

The audit fee for the Parent Company was £0.1m (FY2018: £0.1m).

2 TANGIBLE ASSETS

	Plant and equipment £m
Cost or valuation	
At 31 July 2018 and 31 July 2019	3
Depreciation	
At 31 July 2018	2
Charge for the year	(1)
At 31 July 2019	3
Net book value at 31 July 2019	
Net book value at 31 July 2018	1

Plant and equipment comprises plant, machinery, fixtures, fittings, tools and equipment, including computer hardware.

3 INVESTMENTS AND ADVANCES

	Shares in subsidiary undertakings £m	Loans due from subsidiaries £m	Total £m
Cost or valuation			
At 31 July 2018	2,414	844	3,258
Exchange adjustments		76	76
Contribution through share options	8		8
Disposals	(8)		(8)
Increase in advances due from subsidiaries		191	191
At 31 July 2019	2,414	1,111	3,525
Provision for impairment			
At 31 July 2018 and 31 July 2019	5	1	6
Net book value at 31 July 2019	2,409	1,110	3,519
Net book value at 31 July 2018	2,404	843	3,247

Loans due to subsidiaries are offset against loans due from subsidiaries to the extent that there is a legal right of set off and an intention to settle the balances net. At 31 July 2019 £2,540m of loans payable are offset against loans receivable (FY2018: £2,323m). The Company has large offsetting loan balances because it uses loans to reduce its foreign currency exposures and separately monitor net cash generated from trading activities.

The Company's subsidiaries are largely held according to business lines by the following holding companies, which are incorporated in England:

Smiths Group International Holdings Limited
Smiths Detection Group Limited
John Crane Group Limited
Flex-Tek Group (UK) Limited
Smiths Interconnect Group Limited
Smiths Medical Group Limited

The principal subsidiaries and their countries of incorporation are:

England

Smiths Detection – Watford Ltd
Smiths Medical International Limited
John Crane UK Limited

Other

Smiths Heimann GmbH (Germany)
Smiths Detection (Asia-Pacific) Pte Ltd (Singapore)
Smiths Medical Japan Limited (Japan)
John Crane Middle East FZE (UAE)
John Crane Technology (Tianjin) Co Limited (China)
John Crane Saudi Arabia Ltd (Saudi Arabia)
John Crane Canada Inc (Canada)

United States

Smiths Detection, Inc.
Smiths Medical ASD, Inc.
John Crane, Inc.
Titeflex Corporation
Flexible Technologies, Inc.
Tutco, LLC.
Smiths Interconnect Americas, Inc
Smiths Interconnect, Inc
Kreisler Manufacturing Corp
Smiths Tubular Systems – Laconia Inc

Of the companies above, Smiths Group International Holdings Limited is 100% owned directly by the Company. The others are 100% owned through intermediate holding companies. Shareholdings are of ordinary shares or common stock. All of the above subsidiaries operate in their country of incorporation.

See pages 208 to 216 for a complete list of subsidiary undertakings.

4 FINANCIAL ASSETS

At 31 July 2019 £6m (FY2018: £6m) was held on deposit with banks as security for liabilities or letters of credit.

5 DEFERRED TAX ASSETS AND LIABILITIES

The Company has recognised the following deferred tax assets and liabilities:

	Share-based payment £m	Retirement benefit obligations £m	Losses carried forward £m	Other £m	Total £m
At 31 July 2018	3	(75)	63	1	(8)
(Charge)/credit to income statement	(2)	(6)	5	1	(2)
Charge to equity	(1)	11			10
At 31 July 2019	(70)		68	2	

The Company is part of a UK tax group including all its UK-based subsidiaries. The Company has recognised deferred tax assets of £68m (FY2018: £63m) relating to revenue losses brought forward. The recognition of these assets is dependent on the ability to recover them against the unwind of other tax positions and forecast UK taxable profits of the tax group. The treatment of these assets is reviewed regularly.

As at 31 July 2019 the Company has unrecognised deferred tax assets relating to share based payments of £3m (FY2018: £nil).

6 DEBTORS

	31 July 2019 £m	31 July 2018 £m
Amounts falling due after one year		
Other receivables	1	1
Amounts falling due within one year		
Amounts owed by subsidiaries – repayable on demand	57	56
Other receivables	10	7
Debtors falling due within one year	67	63

7 CREDITORS

	31 July 2019 £m	31 July 2018 £m
Amounts falling due within one year		
Term loans due within one year (note 8)		190
Amounts owed to subsidiaries	42	113
Other creditors	20	18
Accruals and deferred income	14	10
	76	331

8 BORROWINGS AND NET DEBT

	31 July 2019 £m	31 July 2018 £m
Cash at bank	6	12
Short-term deposits	84	335
Cash and cash equivalents	90	347
Term loans due within one year (note 7)		(190)
Term loans due after more than one year	(1,461)	(1,405)
Borrowings	(1,461)	(1,595)
Net debt	(1,371)	(1,248)

8 BORROWINGS AND NET DEBT CONTINUED

Term loans

The currency and coupons for the term loans are disclosed in note 17 of the Group accounts.

	31 July 2019 £m	31 July 2018 £m
Less than one year		190
Between three and four years	868	
Between four and five years		831
Greater than five years	593	574
Smiths Group plc term loans	1,461	1,595

See the liquidity risk disclosures in note 18 in the Group accounts for information on the cash and borrowing facilities available to the Group. The Company can borrow an additional \$800m under the US\$800m multi-currency revolving credit facility, which matures in November 2023.

9 DERIVATIVES

The tables below set out the nominal amount and fair value of derivative contracts held by the Company:

	Contract or underlying nominal amount £m	At 31 July 2019		
		Assets £m	Liabilities £m	Fair value Net £m
Foreign exchange contracts (not hedge accounted)	347	4	(3)	1
Cross currency swaps (fair value and net investment hedges)	613	45		45
Interest rate swaps (fair value hedges)	123		(1)	(1)
Total financial derivatives	1,083	49	(4)	45
Balance sheet entries				
Non-current		45	(2)	43
Current		4	(2)	2
Total financial derivatives		49	(4)	45

	Contract or underlying nominal amount £m	At 31 July 2018		
		Assets £m	Liabilities £m	Fair value Net £m
Foreign exchange contracts (not hedge accounted)	179	2		2
Currency swaps (net investment hedges)	110			
Cross currency swaps (fair value and net investment hedges)	570	49		49
Interest rate swaps (fair value hedges)	114		(6)	(6)
Total financial derivatives	973	51	(6)	45
Balance sheet entries				
Non-current		49	(6)	43
Current		2		2
Total financial derivatives		51	(6)	45

Derivatives, including forward exchange contracts, currency swaps, interest rate instruments and embedded derivatives are level 2 fair value instruments and are valued at the net present value of the future cash-flows calculated using market data at the balance sheet date (principally exchange rates and yield curves).

The charge/credit to the income statement arising from change in fair value in the year was £1m (FY2018: £10m)

10 PROVISIONS FOR LIABILITIES AND CHARGES

	At 31 July 2018 £m	Charged against profit £m	Utilisation £m	At 31 July 2019 £m
Disposals	2			2
		2		2

The closing disposal provision relates to warranties and other obligations in respect of a past disposal and is expected to be utilised within the next five years.

11 POST-RETIREMENT BENEFITS

The Company is the principal employer for the two major defined benefit plans in the UK. The Company is accounting for all the UK defined benefit schemes (funded and unfunded) and virtually all of the post-retirement healthcare schemes.

The retirement benefit assets and liabilities comprise:

	31 July 2019 £m	31 July 2018 £m
Market value of scheme assets	4,106	3,867
Present value of funded scheme liabilities	(3,637)	(3,342)
Surplus	469	525
Unfunded pension plans	(56)	(53)
Post-retirement healthcare	(5)	(5)
Present value of unfunded obligations	(61)	(58)
Net pension asset	408	467
Retirement benefit assets	469	526
Retirement benefit liabilities	(61)	(59)
Net pension asset	408	467

See the disclosures for UK schemes in note 8 to the consolidated accounts for the circumstances of the major schemes, risk management, principal assumptions, assets and liabilities and the funding position of the two major schemes.

12 SHARE CAPITAL AND RESERVES

Share capital

	Number of shares	Issued capital £m	Consideration £m
Ordinary shares of 37.5p each			
At 31 July 2018	395,761,227	148	
Exercise of share options	195,544		2
Total share capital at 31 July 2019	395,956,781	148	

At 31 July 2019, all of the issued share capital was in free issue. All issued shares are fully paid.

See note 9 to the consolidated accounts for information about share schemes, including total shares under options and options exercisable at the balance sheet date.

During the year, the Company received £2m (FY2018: £3m) on the issue of shares in respect of the exercise of options awarded under various share option schemes.

Smiths Industries Employee Benefit Trust

The retained earnings include the purchase of Smiths Group plc shares by the Smiths Industries Employee Benefit Trust, and the issue of these shares upon the exercise of share options. The consideration paid was £19m (FY2018: £15m) and £2m (FY2018: £nil) was received as a result of the issue of shares. At 31 July 2019 the Trust held 53,058 (FY2018: 766) ordinary shares.

Distributable profits

The Company's profit and loss reserve of £1,902m (FY2018: £1,738m) includes £960m (FY2018: £838m) of distributable profits. See note 25 in the Group accounts for a discussion of capital management and the factors the Board consider when proposing dividends.

Other reserves

Other reserves arose from the cancellation of the share premium arising from an equity-funded acquisition in the year ended 30 July 1988.

13 CONTINGENT LIABILITIES

The Company has provided guarantees and arranged letter of credit facilities to support the Group's pension plans. The current amount outstanding under letters of credit is £54m (FY2018: £54m).

The Company has guaranteed the US\$800m revolving credit facility available to a subsidiary.

14 POST BALANCE SHEET EVENT

The directors propose a final dividend of 31.80p per share (totalling approximately £126m) for the year ended 31 July 2019. The dividend will be submitted for formal approval at the Annual General Meeting to be held on 13 November 2019.

These financial statements do not reflect this dividend payable, which will be accounted for in shareholders' equity as an appropriation of retained earnings in the year ending 31 July 2020. During the year ended 31 July 2019, a final dividend of 30.75p per share (totalling £122m) was paid in respect of the dividends declared for the year ended 31 July 2018.

SUBSIDIARY UNDERTAKINGS

A full list of the Group's related undertakings as at 31 July 2019 is provided below. The entities are grouped by the country in which they are incorporated and details of their registered office address, classes(es) of shares and ownership is disclosed. Related undertakings includes subsidiaries, associated undertakings, joint ventures and associates.

Name	Security	Direct (%)	Total (%)
UNITED KINGDOM			
1 Sheldon Square, Paddington, London, W2 6TT			
Smiths Detection Group Limited	Ordinary £1	100	100
Smiths Detection Investments Limited	Ordinary £1	100	100
Smiths Detection Limited	Ordinary £1	100	100
Smiths Detection United Kingdom Limited	Ordinary £1	100	100
Smiths Group Finance EU Limited	Ordinary €1	100	100
Smiths Group Finance US Limited	Ordinary US\$1	100	100
Smiths Heimann Limited	Ordinary £1	100	100
11-12 St James's Square, London, SW1Y 4LB			
Air Log Limited	Ordinary 1p	100	100
EIS Group Plc	Ordinary 25p	100	100
Flex-Tek Group (UK) Limited	Ordinary £1	100	100
Flightspares Limited	Ordinary 10p	100	100
Francis Shaw And Company (Manchester) Limited	Ordinary £1	100	100
Francis Shaw P L C	37% 2nd Pref Ordinary 10p; 5.25% Cum Pref £1; Dif 20p; Ordinary 10p	100	100
Graseby Limited	Ordinary 25p	100	100
Kontak Manufacturing Company Limited	Ordinary £1	100	100
Pyzotec Limited	Ordinary £1	75	75
Roof Units (Group) Limited	Ordinary 10p	100	100
Sedding (No.3) Limited	Ordinary £1	100	100
S.I. Pension Trustees Limited	Ordinary £1	100	100
SI Properties Limited	Ordinary 25p	100	100
SITI 1 Limited	Common US\$1	100	100
Smiths Aerospace Components Tysley Limited	Ordinary £1	100	100
Smiths Aerospace Gloucester Limited	Ordinary 25p; Ordinary A 25p	100	100
Smiths Finance Limited	Ordinary £1; Red US\$1	100	100
Smiths Group Innovation Limited	Ordinary £1	100	100
Smiths Group International Holdings Limited	Ordinary £1	100	100
Smiths Industries Limited	7% Non Cum Pref; Ordinary £1	100	100
Smiths Medical 2020 Limited	Ordinary £1	100	100
Smiths Medical Distribution Limited	Ordinary £1	100	100
Smiths Medical Limited	Ordinary £1	99	99
Smiths Nominees Limited	Ordinary £1	100	100
Smiths Wolverhampton Limited	Ordinary 25p	100	100
TI Group Limited	Ordinary 25p	100	100
TI Guarantee Company Limited	Limited By Guarantee	100	100
TI Interest Limited	Ordinary A £1; Ordinary B £1; Floating Rate Cum Red Pref C £1	100	100
Tigrup No. 7 Limited	Ordinary £1	100	100
Tigrup No. 14 Limited	Ordinary 20p	100	100
XD Communications Limited	Ordinary £1	100	100
XDG Limited	Ordinary 50p	100	100
29 Dunsinane Avenue, Dundee, DD2 3QF			
Flexible Ducting, Limited	Ordinary £1	100	100
Trak Microwave Limited	Ordinary £1	100	100
52 Grayshill Road, Westfield Industrial Area, Cumbernauld, G68 9HG			
Ashfield Medical Systems Limited	Ordinary £1	100	100
54 Hagley Road, Edgbaston, Birmingham, B16 8PE			
CVE Trustee Limited	Ordinary £1	50	100
Smiths Pensions Limited	Ordinary £1	99	100
TI Pension Trustee Limited	Limited By Guarantee	100	100
1500 Eureka Park, Lower Pemberton, Ashford, Kent, TN25 4BF			
Graseby Medical Limited	Ordinary £1	100	100
Medex Medical Limited	Ordinary £1	100	100

Name	Security	Direct (%)	Total (%)
Pneupac Limited	Ordinary 50p	100	100
SI Overseas Holdings Limited	Ordinary £1	100	100
Smiths Medical Group Limited	Ordinary A £1; Ordinary B £1; Ordinary C £1	100	100
Smiths Medical International Limited	Ordinary £1; Pref €2	100	100
Abercanaid, Merthyr Tydfil, Mid Glamorgan, CF48 1UX			
Amnitech Hose Limited	Ordinary 1p	100	100
Amnitech Limited	Ordinary £1	100	100
Buckingham House, 361-366 Buckingham Avenue, Slough, Berkshire, SL1 4LU			
Flexibox International Limited	Ordinary £1	100	100
Flexibox Limited	Ordinary £1	100	100
John Crane Group Limited	Ordinary £1	100	100
John Crane Investments Limited	Ordinary £1	100	100
John Crane UK Limited	Ordinary £1	100	100
OIE Services Limited	Ordinary £1	100	100
Project Sugar Limited	Ordinary £1	100	100
Building 7, Croxley Business Park, Hatters Lane, Watford, WD18 8PA			
Smiths Business Information Services Limited	Ordinary £10	100	100
Centurion Court, North Esplanade, West Aberdeen, AB11 5QH			
John Crane Asset Management Solutions Limited	Ordinary £1	100	100
Century House, Maylands Avenue, Hemel Hempstead, Hertfordshire, HP2 7DE			
Smiths Detection-Watford Limited	Ordinary £1	100	100
Unit 130 Centennial Park, Elstree, Hertfordshire, WD6 3TJ			
Hypertac Limited	Ordinary £1	100	100
Smiths Industries Industrial Group Limited	Ordinary £1	100	100
Smiths Interconnect Group Limited	Ordinary £1	100	100
Unit 3 & 4, Illuma House, Gelders Hall Road, Shepshed, Leicestershire, LE12 9NH			
Gastite Systems Limited	Ordinary £1	100	100
ANGOLA			
Rue Kwamme Nkrumah, Torres Impor-Africa, 3 Andar, Apt A, Luanda			
John Crane (Angola) Prestacao De Services Ltd	Ordinary AOA 1	100	100
ARGENTINA			
Av. Leandro N. Alem 1110, 13 Floor, Baker Mackenzie Office, Buenos Aires			
John Crane Argentina SA	Common \$1 ARS	100	100
TI Group Automotive Systems (Argentina) SA	Ordinary \$1 ARS	100	100
AUSTRALIA			
549 – 551, Somerville Road, Sunshine, Melbourne, VIC 3020			
Flexibox Pty Limited	Ordinary AUS\$	100	100
John Crane Australia Pty Limited	Ordinary AUS\$1	100	100
Botany Grove Estate Unit 5, 14A Baker Street, Botany, NSW 2019			
Smiths Detection (Australia) Pty Ltd	Ordinary AUD\$1	100	100
Suite 2.03, 97 Waterloo Road, Macquarie Park, NSW 2113			
Smiths Medical Australasia Pty Ltd	Ordinary	100	100
AUSTRIA			
Campus 21, Europaring, A 03 5 02, Brunn Am Gebirge, A-2345			
Smiths Medical Osterreich GmbH	Ordinary €1	100	100
AZERBAIJAN REPUBLIC			
32, Dostluq Street, Salyan Highway PO Box AZ1023, Baku			
John Crane Baku LLC	Ordinary US\$10	100	100
BELGIUM			
Pegasuslaan 5, Diegem, 1831			
Smiths Medical Belgium NV	Registered Shares	100	100
Glasstraat 37, Antwerpen, 2170			
John Crane Belgium NV	Ordinary	100	100

Name	Security	Direct (%)	Total (%)
BRAZIL			
Rua George OHM, 205-5 Andar-Conj. 51 E 52 Torre B, Cidade Moncoes – CEP 04576-020, São Paulo			
Smiths Medical Do Brasil Produtos Hospitalares LTDA	Ordinary R\$1	100	100
Rua Tabapoã, 422, 10th floor, conj. 101, Itaim Bibi, 04533-001			
Smiths Detection Brasil Comérico De Equipamentos LTDA	Common R\$1	100	100
Industrial District of The City of Rio Claro, State of São Paulo, AV. Brasil Number 4.700, CEP 13505-600			
Smiths Brasil LTDA	Ordinary R\$1	100	100
CANADA			
301, Gough Road, Markham, Ontario, L3R 4Y8			
Smiths Medical Canada Ltd	Common	100	100
423, Green North Road, Stoney Creek, Ontario, L8E 3A1			
John Crane Canada Inc	Common CAD\$1	100	100
3700, Stock Exchange Tower, P.O. Box 242, 800 Place Victoria, Montreal, PQ, H4Z 1E9			
Smiths Detection Montreal Inc.	Class A Shares; Class B Shares	100	100
4610, Eastgate Parkway, Unit 3, Mississauga, Ontario, L4W 3W6			
Flexible Technologies (Canada) Ltd.	Ordinary \$1	100	100
CHILE			
Americo Vespucio 2542, Complejo Empresarial El Cortijo, Conchali, Santiago			
John Crane Chile SA	Ordinary 1 Peso	100	100
CHINA			
No. 7, Factory Building, Maqiao Industrial Square, Changshu Economic Development Zone, Changshu, Jiangsu			
Changshu Flex-Tek Thermal Fluid Systems Manufacturer Co. Ltd	US\$520,800	100	100
No.9, No. 1, Haitai Huake Road, Huayuan Industrial District (Outside The Ring), Binhai Hi-Tech, Industrial Park, Tianjin			
John Crane Technology (Tianjin) Co Limited	Ordinary US\$1	100	100
No. 14 Unit, No. 78, XingLin Road, Suzhou Industrial Park, Suzhou 215026			
Antares Advanced Test Technologies (Suzhou) Co. Ltd	Ordinary \$1	100	100
No. 26, The 3rd Avenue, Economic & Technological Development Area, Hangzhou			
Smiths Medical Instrument (Zhejiang) Co. Ltd	Ordinary CNY1	100	100
No. 120, Sanjiang Avenue, Economic Development Zone, Mianyang, Sichuan Province			
Huafeng Smiths Interconnect (Sichuan) Co., Ltd	Ordinary RMB1	60	60
Room 923B, No 55, Xili Road, Shanghai, (China) Pilot Free Trade Zone			
SMO Detection Equipment (Shanghai) Co., Ltd	Ordinary US\$1	100	100
Room 1668, No. 14F Floor 3 Datong Building, Huanghe Avenue, Nankai District, Tianjin			
John Crane China Co Limited	Ordinary CNY1	100	100
Unit 2805, Tower 3, Jing An Kerry Centre, 1228 Middle Yan An Road, Shanghai, 200040			
Smiths Medical (Shanghai) Co., Ltd.	Ordinary US\$	100	100
Unit 3018, South Tower, Beijing Kerry Centre, 1, Guanghua Road, Chaoyang District, Beijing			
Smiths Medical (Beijing) Co. Ltd	Ordinary US\$1	100	100
COLOMBIA			
Calle 46A No 82-54 Int 14, Parque Empresarial San Cayetano, Bogota			
John Crane Colombia SA	Ordinary COP\$1	100	100
COSTA RICA			
33rd St. Number 777 Barrio Francisco Peralta, Central Avenue & 8th, San Jose			
Smiths Interconnect Sociedad Anonima	Ordinary US\$1	100	100
CZECH REPUBLIC			
Jana Sigmunda 78, Lutin, 78349			
John Crane A.S.	Ordinary CZK 1M	100	100
Olomoucka 306, Hranice I-Mesto, Hranice, 75301			
Smiths Medical Czech Republic A.S	Ordinary CZK 100,000	100	100

Name	Security	Direct (%)	Total (%)
DENMARK			
Orestads Boulevard 73, 2300 Kobenhavn S			
Smiths Medical Danmark ApS	DKK 100 Shares	100	100
DOMINICAN REPUBLIC			
Calle El Recodo, #2 Bella Vista, Santa Domingo			
John Crane Dominicana SA	Ordinary DP\$1	100	100
EGYPT			
139, Mogamaa El Masanea Street, El Amireya, Cairo			
John Crane Egypt LLC	Ordinary EGP 1	100	100
John Crane Egypt Sealing Systems LLC	Ordinary EGP 100	99	99
Nile City Towers, North Tower, 22nd Floor, Ramlet Boulaq, Nile Cournich, Cairo			
Detection Technologies Egypt	Quotas	100	100
FINLAND			
PO Box 10, Punasillantie 15, Muurame, 40950			
John Crane Safematic Oy	Ordinary €16.82	100	100
FRANCE			
3/5 Rue Du Pont Des Halles, Batiment A, Rungis, 94150			
Smiths Medical France S.A.S.	€7.7 Shares	100	100
22, Avenue Maurice Chevalier, 77833 Ozoir-La-Ferriere, Paris			
Titeflex Europe S.A.S.	Ordinary \$39	100	100
31 Rue Isidore Maille, Saint-Aubin-Les-Elbeuf, 76410			
Hypertac S.A.	Ordinary €76	100	100
36 Rue Charles Heller, Vitry Sur Seine, F-94400			
Smiths Heimann S.A.S.	€1 Shares	100	100
114, Rue Jules Ferry, B.p.35, Deville-Les-Rouen, 76250			
John Crane France S.A.S.	Ordinary €286	100	100
T I S A (France)	Ordinary €4.9	100	100
GERMANY			
Am Zirkus 2, Berlin, 10117			
John Crane Filtration Technologies GmbH	Ordinary €1	100	100
Bretonischer Ring 3, Grasbrunn, 85630			
Smiths Group Deutschland GmbH	€1,491,400 Shares; €3,478,400 Shares; €995,500 Shares	100	100
Smiths Medical Deutschland GmbH	€1,000 Shares; €27,000 Shares; €5,000 Shares; €500 Shares	100	100
Gewerbestraße 15 a, Graben, 86836			
Gastite Systems Deutschland GmbH	Ordinary €1	100	100
Im Herzen 4, Wiesbaden, 65205			
Smiths Detection GmbH	€ 25,000 Share; €183,100 Share; €791,900 Share	100	100
Smiths Heimann GmbH	Ordinary	100	100
Neckarweg 3, Vellmar, 34246			
Herkules Holding GmbH	Ordinary €1	100	100
Seebach GmbH	Ordinary €1	100	100
Reepschläger Str., 10B, Lubeck, 23556			
Flexschlauch Produktions GmbH	DM 11,000; DM 380,000; DM 9,000	100	100
Tolzer Strasse, 15 82031, Grunwald			
Zamor KG	Ordinary shares €1	48	48
Ulrichsberger Strasse 17, Deggendorf, 94469			
Hypertac GmbH	Ordinary €1	100	100
Werner-Von-Siemens – Str.6, Fulda, 36041			
John Crane GmbH	Ordinary €1	100	100
GREECE			
3 Stratigou Tobre Street, Municipality Of Agia Paraskevi, Athens, 153 42			
John Crane Hellas – Engineered Sealing Systems Monoprosopi EPE	Ordinary €1	100	100

Name	Security	Direct (%)	Total (%)
GUERNSEY			
Level 5, Mill Court, La Charroterie, St Peter Port, GY1 1EJ			
Smiths Group Insurance Limited	Ordinary £1	100	100
HONG KONG			
Suite 1106-8, 11/F Tai Yau Building, No 181 Johnston Road, Wanchai			
Smiths Detection Hong Kong Limited	Ordinary 1 HKD	100	100
Smiths Interconnect Group (HK) Limited	Ordinary US\$1	100	100
Smiths Interconnect Hong Kong Co Limited	Ordinary US\$1	100	100
Smiths Medical (Hong Kong) Limited	Ordinary 1 HKD	100	100
HUNGARY			
2040 Budaors, Gyar U. 2			
John Crane Hungary Kft	Ordinary €1	100	100
INDIA			
508/509, 5th Floor, Western Edge li, Western Express Highway, Borivali East, Mumbai, 400066			
Smiths Medical India Private Limited	Ordinary INR 1	100	100
D-196 Okhla Industrial Area, Phase-1, New Dehli, 110020			
Plenty India Limited	Ordinary Shares	100	100
No 11, 1st Phase, Peenya, Industrial Area, Bangalore, 560058			
John Crane Sealing Systems India Private Limited	Ordinary INR 10	100	100
Smiths Interconnect India Private Limited	Ordinary INR 10	100	100
No 38, Kiadb Industrial Area, Bangalor, 561203			
STS Titeflex India Pvt Ltd	Ordinary INR 100	100	100
Shirwal, Maharashtra 412801			
Seebach Filter Solutions India Pvt Ltd	Ordinary INR 10	90	90
Vardhman Crown Mall, Unit No. 300 3rd Floor, Sector 19 Dwarka, New Delhi 110075			
Smiths Detection Systems Private Limited	Class A Equity Shares INR 10; Class B Equity Shares INR 10	100	100
INDONESIA			
Cilandak Commercial Estate Bldg 401A, Jl. Kko Cilandak, Jakarta, 12560			
PT John Crane Indonesia	Ordinary IDR 1,000	99	99
IRELAND			
Suite 3, One Earlsfort Centre, Earlsfort Terrace, Dublin 2			
Graseby Medical Ireland Limited	Ordinary €1.269738	100	100
Smiths Detection Ireland Limited	Ordinary €1.25; Ordinary B €1.269738; Ordinary D €1.25; Series C €1.25	100	100
T53/54, Shannon Industrial Estate, Shannon, Co. Clare			
John Crane (Ireland) Limited	Ordinary €1	100	100
ITALY			
Via Da Bissone 7A, Genova, 16153			
Hypertac SpA	Ordinary €5	100	100
Via Della Stazione, 2, 04013 Latina Scalzo, Latina			
Smiths Medical Italia srl	Ordinary €1	100	100
Via Giotto 3, Muggio, 20835			
John Crane Italia SpA	Ordinary €5.16	100	100
Smiths Detection Italia srl	Quota Value of Shares	100	100
Smiths Group Italia Srl	Ordinary €1	100	100
JAPAN			
7-1-1, Akasaka, Minato-Ku, Tokyo			
Smiths Medical Japan Ltd	Common Stock	100	100
2222, Kamitoyama Ritto City, Ritto-Shi, Shiga-Ken			
John Crane Japan Inc	Ordinary JYP 1,000	70	70
Metro City Kamiyacho 3F, 5-1-5, Toranomon, Minato-ku, Tokyo			
Smiths Detection Japan Gk	Cash Contribution	100	100

Name	Security	Direct (%)	Total (%)
KAZAKHSTAN			
Atyrau Region, Gatyrau, Station K Arabathan, House Production Site 14, 060000			
John Crane Kazakhstan	Ordinary KZT	100	100
KOREA, REPUBLIC OF			
Migeundong, Westgatetower 15F, 70 Chungjeong-Ro, Seodaemun-Gu, Seoul			
John Crane Korea Co Ltd	Ordinary Kwon 5,000	100	100
MALAYSIA			
207, Jalan Tun Razak, Suite 13.03, 13th Floor, Menara Tan & Tan, Kuala Lumpur, 50400			
John Crane Malaysia Sdn Bhd	Ordinary RM1	100	100
Suite 13.03, 13th Floor, Menara Tan & Tan, 207 Jalan Tun Razak, 50400, Kuala Lumpur			
Flexible Ducting Malaysia Sdn Bhd	Ordinary RM1	100	100
Smiths Detection Malaysia Sdn Bhd	Ordinary RM1	100	100
MEXICO			
679, Poniente 152, Vallejo Delegacion Azcapotzalco, Mexico City, 2300 Industrias John Crane Mexico S.A. de C.V.	Series A MXN 1; Series B MXN 1	100	100
Av. Primero De Mayo Lote 3 Edificio 1B, Prologis Park, Reynosa, 88780 Tutco De Mexico S de RL de CV	Ordinary \$1.00	100	100
Ave Calidad No. 4, Parque Industrial, Internacional Tijuana, Tijuana, B.C., 22425			
Smiths Healthcare Manufacturing, S.A. de C.V.	Series B 10 Pesos; Series B-1 Pesos 10	100	100
Carretera Ciudad Victoria Matamoros, Km.173+600, Solonia San Fernando Centro, Tamaulipas, San Fernando, CP 87600			
John Crane Sociedad De Responsabilidad Limitada De Capital Variable	Ordinary MXN \$1	100	100
Carretera Libre Antiguo Camino Tijuana 20221-B, Fideicomiso el Florido, Tijuana, Baja California, 22234			
Smiths Interconnect Mexico S. de RL de C.v.	Equity Quotas MEX \$2,500	100	100
Paseo De La Reforma 505, Col, Cuauhtemoc, 6500, Ciudad De Mexico			
Smiths Detection Mexico S. de RL de C.v.	PS US\$1; PS US\$2,999	100	100
NETHERLANDS			
Abraham van Stolkweg 118, Rotterdam, 3041 JA Amnitec BV	Ordinary €1	100	100
Bergen 9 – 17, Barendrecht, Zuid, 2993LR John Crane Holland BV	Ordinary €1	100	100
Smiths Detection Netherlands BV	Ordinary €1	100	100
Buckingham House, 361-366 Buckingham Avenue, Slough, Berkshire, SL1 4LU, England			
Smiths Group Holdings Netherlands BV	Ordinary €1	100	100
Hydrograaf 25, PO Box 442, 6900 Ak Zevenaar, Duiven, 6921 RS Indufil BV	Ordinary €1	100	100
Jagersbosstraat 28, 5241JT Rosmalen Smiths Medical Nederland B.V.	Shares NLG 100	100	100
NEW ZEALAND			
Quigg Partners, Level 7, 36 Brandon Street, Wellington, 6011 Smiths Detection New Zealand Limited	Ordinary	100	100
PERU			
Av. Guillermo Dansey 2124, Urbanizacion Industrial Conde, Lima John Crane Peru SAC	Common Shares PEN 1	100	100
POLAND			
Warszawska 153, Bielsko – Biala, 43 – 300 John Crane Poland Sp Z O.O.	Ordinary 50 PLN	100	100
PORTUGAL			
Avenida Engenheiro Duarte Pacheco, Amoreiras, Torre 2, 15º A, Campo De Ourique, Lisboa, 1070-102 Smiths Medical (Portugal), Unipessoal Lda	€505,000 Share	100	100

Name	Security	Direct (%)	Total (%)
PUERTO RICO			
654 Plaza, Suite #933, 654 Munoz Rivera Ave, San Juan, 00918			
John Crane Caribe Ltd	Common Share US\$1	100	100
RUSSIAN FEDERATION			
104 Oktyabrskayanab., Building 25, Litera AJ, Premises 4-H, Saint-Petersburg, 193079			
Smiths Heimann Rus LLC	Ordinary RUB 1	100	100
B.savinsky Per, D.11, Moscow, 119435			
LLC John Crane Rus	Ordinary RUR 1	100	100
SAUDI ARABIA			
Dammam Industrial City, Dammam, 3243			
John Crane Saudi Arabia Ltd	Ordinary ZAR 1	100	100
PO Box 11525, Riyadh			
Smiths Detection Saudi Arabia Ltd	1,000 Saudi Riyals Shares	100	100
SINGAPORE			
80 Raffles Place, Uob Plaza 1, #32-01, 048624			
John Crane Singapore Pte Limited	Ordinary S\$1	100	100
Smiths Medical Singapore Pte. Limited	Ordinary US\$1	100	100
20, Pasir Panjang Road, #13-26 Mapletree Business City, 117439			
Smiths Connectors Asia Pte. Ltd.	Ordinary S\$1	100	100
Smiths Detection (Asia Pacific) Pte. Ltd	Ordinary S\$1	100	100
SLOVAKIA			
Dvorakovo nabrezie 10, Bratislava-mestska cast Stare Mesto, 811 02			
John Crane Slovakia SRO	Ordinary €1	100	100
SOUTH AFRICA			
2, Jansen Road, Nuffield Industrial Sites, Springs Gauteng, 1559			
Flexibox (Pty) Limited	Ordinary SAR 1	100	100
John Crane Pty Ltd	Ordinary ZAR 1	100	100
SPAIN			
Av Diagonal, Num.635 P.1, Barcelona, 08028			
Smiths Medical Espana S.L.	Shares €1	100	100
Cemento 1, Torrejon De Ardoz, Madrid			
John Crane Iberica SA	Ordinary €6.010121	100	100
SWEDEN			
Knivsta, 74180			
Habia Teknofluor AB	SEK100 Shares	100	100
Teknofluor Holding AB	SEK100 Shares	100	100
Box 1143, 164 22 Kista			
Smiths Medical Sverige AB	SEK100 Shares	100	100
Faltspatsgatan 4, Se-421 30 Vastra Frolunda			
John Crane Sverige AB	Ordinary SEK 100	100	100
SWITZERLAND			
Freulerstrasse 4, Birsfelden, 4127			
John Crane (Switzerland) AG	Ordinary 1 CHF	100	100
Zurichstrasse 33, Adliswil, 8134			
Smiths Medical Schweiz AG	Shares of CHF 10	100	100
TAIWAN			
324-4, Fong-Jen Road, Renwu District, Kaohsiung City 814			
John Crane Taiwan Co Ltd.	Ordinary T\$1	100	100
THAILAND			
9/311, 31st Floor, Um Tower, Ramkhamhaeng Road, Suanluang District, Bangkok			
John Crane (Thailand) Limited	Ordinary THB 1; Pref THB 25	100	100
99/3 Moo 5, Kingkaew Road, Tambol Rajatheva, Amphoe Bangplee, Samutprakarn Province, 10540			
Smiths Detection (Thailand) Limited	Pref THB 100; Ordinary THB 100	100	100

Name	Security	Direct (%)	Total (%)
TUNISIA			
Zone Industrielle Route De Khniss, Monastir, 5000			
Smiths Connectors Tunisia SARL	Ordinary 100 DT		100
TURKEY			
Istanbul Sariyer, Huzur Mahallesi, Ahmet Bayman Caddessi, Dis, Reklamcılık Apt No:17-19/1			
John Crane Endustriyel Sizdirmazlik Sistemleri Ltd	Ordinary TRY 25		100
UNITED ARAB EMIRATES			
Building B10, Industrial Mussaffah, M44, Sector 15, Abu Dhabi			
Smiths Detection Security Systems LLC	AED 1,500		49
Dubai Airport Free Zone, PO Box 48225, Building No. 8WA (West Side), 401, Dubai			
Smiths Detection Middle East FZE	AED 1,000,000 Share		100
S20113, Jebel Ali Free Zone, 61040			
John Crane Middle East FZE	Ordinary AED 1		100
UNITED STATES			
51 Growth Road, Laconia, NH, 03246			
Scotia Acquisition Co	Common Stock of US\$0.01		100
Scotia Real Estate LLC	Limited Liability Company Interests		100
116, Pine Street, 3rd Floor, Suite 320, Harrisburg, PA 17101			
Tutco, LLC	Ordinary US\$1		100
180 Van Riper Avenue, Elmwood Park, NJ 07407			
Kreisler Industrial Corp	Common Stock		100
Kreisler Manufacturing Corp	Common Stock of US\$0.001		100
51 Growth Road, Laconia, NH 03246			
Lakes Region Tubular Products Inc.	Common Stock		100
208 S. Lasalle Street, Suite 814, Chicago, IL, 60604			
John Crane International Inc.	Common Shares		100
5200, Upper Metro Place, Dublin, OH, 43017			
Medex Cardio-Pulmonary, Inc	Common Stock of US\$0.01		100
815 Forestwood Drive, Romeoville, IL 60446			
United Flexible, Inc.	Common Stock of US\$0.001		100
US Hose Corp	Common Stock		100
1219 Stewart Plaza, Dunbar, WV, 25064			
Seebach Filtration USA, Inc.	Ordinary US\$25		100
2801 Red Dog Lane, Knoxville, TN 37914			
Fulton Bellows LLC	Limited Liability Company Interests		100
Corporation Service Company, 251 Little Falls Drive, Wilmington, DE, 19808			
MDII Investments LLC	Ordinary		100
Smiths Detection US Holdings, LLC	Limited Liability Company Interests		100
Corporation Service Company, 2711 Centerville Rd, Suite 400, Wilmington, DE, 19808			
United Flexible Technologies, Inc.	Common Stock of US\$0.001		100
The Corporation Trust Company, 1209 Orange Street, Wilmington, DE, 19801			
Flexible Technologies, Inc	Ordinary Shares US\$0.01		100
Flex-Tek Group (US) LLC	Ordinary		100
John Crane Inc	Common US\$0.01; Preferred US\$0.10		100
John Crane Group, LLC	Ordinary US\$0.01		100
John Crane Production Solutions Inc	Ordinary US\$0.01		100
Powercam-Houdaille, Inc.	Common Shares US\$1		100
Smiths Business Information Services, Inc.	Ordinary US\$0.01		100
Smiths Detection International, LLC	Equity Interests		100
Smiths Detection US, LLC	Ordinary US\$1		100
Smiths Group Services Corp.	Common Stock US\$0.01		100
Smiths Interconnect Americas, Inc.	Common Stock US\$0.01		100
Smiths Interconnect, Inc.	Common Stock US\$10		100
Smiths US Innovation LLC	Ordinary		100

Name	Security	Direct (%)	Total (%)
CT Corporation System, 9 Capitol Street, Concord, NH 03301 Smiths Tubular Systems-Laconia, Inc	Ordinary Shares US\$1	100	
CT Corporation System, 155 Federal Street, Suite 700, Boston, MA 02110 Titeflex Commercial, Inc.	Ordinary US\$0.01	100	
One Corporate Center, Hartford, CT 06103-3220 Titeflex Corporation	Ordinary US\$1	100	
Registered Agent Solutions, Inc., 1679 Dupont Highway, Suite 100, Dover DE, 19901 Smiths Medical ASD Inc.	Common Stock \$1	100	
The Corporation Trust Company of Nevada, 701 S Carson Street, Suite 200, Carson City, NV, 89701 Smiths Detection Inc	Common Stock of \$0.0001	100	
VENEZUELA			
Carretera Vía A Perijá, Km 8 ½, Avenida 50, Local N° 185-72, Zona Industrial El Silencio, Maracaibo, 4001 John Crane Venezuela CA	Class A BSF1; Class B BSF1; Common BSF1	100	
ASSOCIATES			
GERMANY			
Steinmühlenweg 5, 65439 Florsheim am Main / Wicker STI Security Training International GmbH	Ordinary Shares	34	
RUSSIAN FEDERATION			
28, Academica Vedeneeva Street, Perm, Permskiy Region, 614038 LLC John Crane Iskra	Ordinary RUR 1	50	

Smiths Interconnect Canada Inc. was incorporated on 13 September 2019. Smiths Group plc indirectly owns the entire issued share capital and the new company will be consolidated as a subsidiary from the date of incorporation.

Overseas branches

The Company does not operate through any branches. Some Group subsidiary companies have established branch operations outside the UK.

SHAREHOLDER INFORMATION

FINANCIAL CALENDAR

	2019	2020 (provisional)
Announcement of FY2019 Results	20 September	
Final dividend ex-dividend date	17 October	
Final dividend record date	18 October	
Last DRIP election date	1 November	
Annual General Meeting	13 November	
Final dividend payment date	15 November	
Announcement of FY2020 Interim Results		31 March
Interim dividend ex-dividend date		9 April
Interim dividend record date		14 April
Last DRIP election date		24 April
Interim dividend payment date		11 May
FY2020 financial year end		31 July
Announcement of FY2020 Results		September

Registered Office

Smiths Group plc
4th Floor
11-12 St James's Square
London SW1Y 4LB, UK
020 7004 1600

Incorporated in England
Company No. 137013
www.smiths.com

Registrars

Our share register is maintained by Equiniti.
If you have any questions about your Smiths shares, please contact Equiniti by:

Visiting: www.shareview.co.uk.

Telephoning:

T: 0371 384 2943 (in the UK)
T: +44 (0)121 415 7047 (outside the UK)
Textel: 0870 384 2255
Lines open 8:30am to 5:30pm (UK time), Monday to Friday (excluding public holidays in England and Wales)

Writing to: Equiniti Limited, Aspect House, Spencer Road, Lancing, West Sussex, BN99 6DA

Equiniti offer the Shareview portfolio service to investors, visit www.shareview.co.uk to register for an account. Through Shareview you can access information about your investments, including balance movements and indicative share prices, as well as practical help about transferring your shares or updating your personal details.

Dividends

From November 2019 Smiths will no longer be issuing dividend cheques. In order to have future dividends paid directly to your bank or building society account please contact Equiniti for a copy of the Bank Mandate Form, or register your nominated bank or building society account by visiting www.shareview.co.uk. By registering your account all future dividends will be paid securely by direct credit on the dividend payment date.

Alternatively, Smiths offers a Dividend Reinvestment Plan. For more information please visit our website or contact Equiniti.

Ordinary shares

The market value of an ordinary share of the Company on 31 March 1982 for the purposes of capital gains tax was 136.875p (taking into account the sub-division of 50p shares into 25p shares on 14 January 1985 and the subdivision and consolidation of 25p shares into 37.5p shares on 18 June 2007).

ANNUAL GENERAL MEETING (AGM)

The 2019 Smiths Group plc AGM will be held at 10:30am on Wednesday, 13 November 2019 at Linklaters LLP, One Silk Street, London, EC2Y 8HQ. The Notice of AGM can be found in a separate document which is sent out at least 20 working days before the AGM and made available on our website. If you are in any doubt as to what action you should take in relation to the resolutions being proposed at the AGM, you are recommended to consult your stockbroker, bank manager, solicitor, accountant or other independent professional adviser authorised under the Financial Services and Markets Act 2000. For those shareholders unable to attend the AGM, the meeting will be webcast and may be viewed online by registering on our website.

VOTING AT THE AGM

The Company provides electronic proxy voting for the AGM. Shareholders who are unable to attend the AGM in person are encouraged to vote their shares by appointing a proxy and issuing voting instructions. Electronic and paper proxy appointments and voting instructions must be received by the Company's Registrar not later than 48 hours before the AGM is held in order to be valid. Shareholders who are not CREST members can appoint a proxy and vote online by visiting www.sharevote.co.uk. CREST members, CREST personal members and other CREST-sponsored members should consult the CREST Manual or their sponsor or voting service provider for instructions on electronic proxy appointment and voting.

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www.smiths.com

LSE: SMIN

ADR: SMGZY



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go to www.smiths.com/investors

