

Stronger H2 performance; good momentum

Pioneers of progress – improving our world through smarter engineering

HIGHLIGHTS

- **Strengthening topline**
 - Underlying revenue (2)% for the full year, flat in the second half, and growth in Q4
 - Good order book momentum
 - Primary focus on organic growth, complemented by disciplined M&A; acquisition of Royal Metal delivering ahead of plan
- **Strong profit conversion and earnings growth**
 - Operating profit up +7% and operating profit margin +140bps; EPS +8%
 - Margin improvement across all divisions, accelerating in the second half
 - Restructuring programme completed; committed savings delivered ahead of schedule
- **Another year of excellent cash generation**
 - Operating cash conversion of 125%. Free cash-flow of £383m
- **Delivering the successful separation of Smiths Medical**
 - Sale to ICU Medical Inc represents enterprise value of \$2.7bn on announcement, with potential upside from equity consideration and earnout
 - Expected completion H1 CY2022
- **Positioned for accelerated growth in core industrial technology business**
 - Market leading industrial technology businesses with shared purpose and operating model
 - Enhanced focus and execution pace to support delivery of accelerating growth
 - Well positioned for long-term trends of safety, sustainability and digitisation
 - Proposed final dividend of 26.0p. Full year dividend increased by +8%
 - Update on strategy at capital markets event on 17-18 November 2021

Headline ¹	FY2021	FY2020	Reported	Underlying ²
Smiths continuing operations³				
Revenue	£2,406m	£2,548m	(6)%	(2)%
Operating profit	£372m	£327m	+14%	+7%
Total Group⁴				
Profit for the year (after tax)	£370m	£338m	+9%	+8%
Basic EPS	93.1p	84.8p	+10%	+8%
Free cash-flow ⁵	£383m	£273m	+40%	

Statutory	FY2021	FY2020	Reported
Smiths continuing operations³			
Revenue	£2,406m	£2,548m	(6)%
Operating profit	£326m	£241m	+35%
Total Group⁴			
Profit for the year (after tax)	£285m	£267m	+7%
Basic EPS	71.7p	66.9p	+7%
Dividend per share	37.7p	35.0p	+8%

OUTLOOK

- Well positioned as markets recover, with good order book momentum
- Economic uncertainty and supply chain challenges continue
- Group revenue growth, expected to return to around pre-COVID levels during the year
- Further operational efficiency and good cash generation
- Increasingly confident about Smiths' future prospects and ability to deliver excellent, sustainable value for all stakeholders

Paul Keel, Group Chief Executive, commented:

“The Group’s robust performance in FY2021 is testament to the qualities that attracted me to Smiths when I joined in May. Smiths has high quality businesses with strong fundamentals and is well positioned in markets with near-term upside and attractive long-term growth drivers.

Further improvement centres on accelerating our growth and consistently delivering results, underpinned by our focus on continuous operational excellence and investment in our people and culture.

An important milestone for the Group was announcing the sale of Smiths Medical. In doing so, we fulfilled a commitment to simplify our business and focus on our higher-performing industrial technology core, whilst delivering significant returns to our shareholders.

This is an exciting time for Smiths. We are building good momentum and are positioned for growth in our core industrial technology business. Smiths is pointed in the right direction and our focus now is squarely on acceleration - acceleration of delivery, acceleration of growth, and acceleration of value creation. We look forward to sharing more details of our plans and ambitions at our capital markets event in November.”

Statutory reporting

Statutory reporting takes account of all items excluded from headline performance.

See accounting policies for an explanation of the presentation of results and note 3 to the financial statements for an analysis of non-headline items.

Definitions

The following definitions are applied throughout the financial report:

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

² Underlying modifies headline performance to exclude the effects of foreign exchange, acquisitions, restructuring costs and write-downs, and include depreciation and amortisation of discontinued operations.

³ Continuing operations exclude Smiths Medical which is accounted for as ‘Discontinued operations – businesses held for sale’. Discontinued operations are defined in note 28 to the financial statements.

⁴ Total Group comprises continuing operations and discontinued operations.

⁵ Alternative Performance Measures (“APMs”) are defined in note 30 to the financial statements.

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Presentation

The management presentation via webcast will begin at 08.30 (UK time) today at <https://smiths.com/investors/results-reports-and-presentations>, with a recording available from 13.00 (UK time).

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This document contains certain statements that are forward-looking statements. They appear in a number of places throughout this document and include statements regarding the intentions, beliefs and/or current expectations of Smiths Group plc (the "Company") and its subsidiaries (together, the "Group") and those of their respective officers, directors and employees concerning, amongst other things, the results of operations, financial condition, liquidity, prospects, growth, strategies, and the businesses operated by the Group. By their nature, these statements involve uncertainty since future events and circumstances can cause results and developments to differ materially from those anticipated. The forward-looking statements reflect knowledge and information available at the date of preparation of this document and, unless otherwise required by applicable law, the Company undertakes no obligation to update or revise these forward-looking statements. Nothing in this document should be construed as a profit forecast. The Company and its directors accept no liability to third parties. This document contains brands that are trademarks and are registered and/or otherwise protected in accordance with applicable law.

Results overview

SMITHS (CONTINUING OPERATIONS)

The commentary below refers to continuing operations (excluding Smiths Medical), unless otherwise stated.

£m	FY2020	Foreign exchange	Lower restructuring & write-downs	Acquisitions	Underlying movement	FY2021
Revenue	2,548	(123)	-	35	(54)	2,406
Headline operating profit	327	(20)	32	9	24	372
Headline operating profit margin	12.8%					15.5%

Revenue

Group revenue for continuing operations was down £(54)m or (2)%, on an underlying basis. The trend improved throughout the year, with first half underlying decline of (5)%, flat in the second half, and a return to growth in the final quarter. The Group's performance was underpinned by its market-leading positions and high proportion of revenue derived from aftermarket activities.

Underlying revenue growth	H1	H2	FY2021
John Crane	(10)%	0%	(5)%
Smiths Detection	(6)%	(8)%	(7)%
Flex-Tek	(1)%	+13%	+6%
Smiths Interconnect	+11%	+3%	+7%
Continuing operations	(5)%	0%	(2)%

Revenue declined (6)% on a reported basis, to £2,406m (FY2020: £2,548m). This included £(123)m of adverse foreign exchange translation, and +£35m from the acquisitions of Royal Metal Products LLC ("Royal Metal") by Flex-Tek in February 2021 and PathSensors Inc by Smiths Detection in August 2020.

Operating profit and margin

The Group delivered strong profit conversion, with headline operating profit up +£24m or +7% on an underlying basis. Headline operating profit increased +14% on a reported basis, to £372m (FY2020: £327m). This included £(20)m of adverse foreign exchange translation, +£32m from lower year-on-year restructuring costs and write-downs, and +£9m from acquisitions.

Operating margin	H1 Reported	H1 Underlying YOY mvmt	H2 Reported	H2 Underlying YOY mvmt	FY Reported	FY Underlying YOY mvmt
John Crane	19.8%	(130)bps	23.4%	+270bps	21.6%	+80bps
Smiths Detection	12.6%	(240)bps	14.9%	+370bps	13.7%	+70bps
Flex-Tek	18.5%	+20bps	19.7%	+220bps	19.1%	+110bps
Smiths Interconnect	11.2%	+560bps	10.9%	+350bps	11.2%	+450bps
Continuing operations	14.4%	(20)bps	16.4%	+290bps	15.5%	+140bps

Headline operating profit margin increased +140bps on an underlying basis, reflecting the benefits of the Group's strategic restructuring programme and disciplined cost control. Headline operating profit margin increased +270bps on a reported basis to 15.5%.

The £(46)m difference between headline operating profit of £372m and statutory operating profit of £326m is non-headline items as defined in note 3 of the financial statements. The largest constituents relate to amortisation of acquired intangible assets, asbestos litigation in John Crane, Inc and subrogation claims in Titeflex Corporation. Statutory operating profit of £326m was £85m higher than last year (FY2020: £241m), reflecting higher headline profit and lower non-headline charges.

Finance costs

Headline finance costs of £(40)m (FY2020: £(49)m) were £9m lower than last year. This reflects the benefit of lower interest rates. Statutory finance costs were £(86)m (FY2020: £(108)m), mainly due to a £(50)m foreign exchange loss on an intercompany loan with Smiths Medical (FY2020: £(62)m); the matching credit in discontinued operations nets out to zero in Total Group earnings.

Taxation

The Total Group headline effective tax rate was 27% (FY2020: 26%). The headline tax charge for the full year of £(96)m (FY2020: £(79)m) represents an effective tax rate of 29% for continuing operations (FY2020: 28%). The increase in rate is mainly attributable to profit mix. The equivalent effective tax rate for continuing operations in FY2022 is currently expected to be in the range of 26-28%.

A non-headline tax credit of £13m (FY2020: £13m) on non-headline losses resulted in a statutory effective tax rate of 35% (FY2020: 50%). Please refer to notes 3 and 6 of the financial statements for further details.

Organic investment

Technology and innovation remain at the forefront of Smiths strategy and are key to driving future growth. To support this, the Group continues to invest in R&D and consistently seeks the best value from its investments. The income statement cost of R&D of £(83)m was marginally below prior year (FY2020: £(89)m). The cash cost decreased to £(94)m or 3.9% of sales (FY2020: £(119)m or 4.7%). We are focused on measuring the effectiveness of our investment in innovation and the Vitality Index⁵, which measures the percentage of total revenue derived from products launched in the last three years, remained stable at 20% (FY2020: 20%).

Investment in capex of £(62)m (FY2020: £(67)m) has been protected and represents 1.2x depreciation and amortisation (FY2020: 1.2x).

Portfolio

The Group continues to enhance its strategic positioning through disciplined M&A. In February 2021, the Group acquired Royal Metal, a leading manufacturer of residential and light commercial HVAC products for \$107m. Royal Metal is being successfully integrated into Flex-Tek. The acquisition complements the organic growth that Flex-Tek is already driving through the development of innovative air distribution products that support improved

energy efficiency and indoor air quality. For more information, please see note 27 of the financial statements.

Our ESG approach

At the heart of all that we have achieved this year and how we will be successful in the future is our purpose. We are pioneers of progress – improving our world through smarter engineering. Smarter engineering means helping to solve the toughest problems, many of which concern our environment, for ourselves, our customers, and our communities.

We are helping our customers meet their environmental targets by developing products and services targeted at climate risk, energy transition and other environmental needs. For example, John Crane’s long experience of controlling leaks enables it to play a leading role in customer efficiency including decarbonisation through its methane initiative; and Flex-Tek has developed new electric air heaters that improve efficiency and reduce the carbon footprint of aircraft in flight. We are also focused on making our products more sustainable through attention to raw materials, supply chain, durability, repairability, circularity and end-of-life outcomes. This work is being pioneered at Smiths Detection which has implemented and is iterating for Smiths an optimum way to integrate the assessments into our stage-gate NPI process.

We continue proactively to manage reductions in the environmental impact of our operations and manufacturing processes. We first implemented environmental targets in 2007. Since then, we have reduced GHG emissions in our operations by 60%, water usage by 53% and non-recyclable waste by 63%. Around 60% of our electricity now comes from renewable sources, and we are currently assessing a promising list of locations for onsite renewable energy installation.

Alongside all of this, we recently committed to Net Zero GHG Emissions from operations by 2040, with a roadmap to achieve it ([as published on our website](#)). It shows the path which we will take from the present day to achieve Net Zero Scope 1 and 2 emissions from operations by 2040 and, furthermore, our ambition to achieve Net Zero Scope 1, 2 and 3 emissions by 2050. Action examples on the roadmap include:

- Signed up to the Science Based Targets initiative (SBTi) and the United Nations Race to Zero campaign
- Incorporated ESG targets into our long-term incentive compensation
- Established a Science, Sustainability and Excellence Committee of the Board
- Achieve Zero emissions from all company vehicles
- Procure 100% electricity in operations from renewable sources (on-site and off-site)
- Ensure all waste is recycled or disposed of by zero carbon methods

SMITHS MEDICAL (DISCONTINUED OPERATIONS)

On 8 September 2021, the Group announced the sale of Smiths Medical to ICU Medical, Inc. (“ICU Medical”) at an enterprise value of \$2.7bn and an equity value of \$2.4bn after adjustments for debt, liabilities and working capital.

At closing, the Group expects to receive \$1.85bn in cash proceeds and 2.5m new ICU Medical shares, valued at \$0.5bn at the time of announcement. The Group will receive an additional \$0.1bn in cash, contingent on the future share price performance of ICU Medical.

Completion and receipt of initial cash proceeds is expected in the first half of calendar year 2022, subject to approval by Smiths' shareholders and customary regulatory approvals. The sale of Smiths Medical simplifies and positions Smiths for focused growth in our core industrial technology business and will enable a substantial return of capital to shareholders.

Headline profit after tax of £134m increased +5% on an underlying basis, reflecting restructuring actions and cost discipline. On a reported basis, headline profit after tax was down (4)% due to £(5)m of adverse foreign exchange and £(5)m higher restructuring costs.

Consistent with accounting standards for discontinued operations, depreciation and amortisation are not included in reported results for Smiths Medical. Depreciation and amortisation of £45m (FY2020: £45m) have, however, been included in the calculation of underlying measures.

The difference between statutory and headline profit after tax is £(6)m, which includes £(18)m of separation costs, £(61)m from the impairment of capitalised development costs and related assets, +£50m of foreign exchange gain on the intercompany loan with Smiths continuing group and +£23m of tax credit on these non-headline items.

Further detail on Smiths Medical's performance can be found in the divisional section later in the release.

TOTAL GROUP

The commentary below refers to Total Group, unless otherwise stated.

Restructuring costs

The Group announced in FY2020 a strategic restructuring programme in support of its goal to deliver operating margins of 18-20%.

£m	FY2021 Restructuring P&L costs	Total Restructuring P&L costs	FY2021 Cash outflow	Total Cash outflow
John Crane	(4)	(18)	(8)	(12)
Smiths Detection	(6)	(20)	(10)	(12)
Flex-Tek	-	(0)	-	(0)
Smiths Interconnect	(10)	(12)	(5)	(6)
Centre	(1)	(2)	(1)	(2)
Continuing operations	(21)	(52)	(24)	(32)
Smiths Medical	(9)	(13)	(0)	(4)
Total Group	(30)	(65)	(24)	(36)

In FY2020 Flex-Tek recorded £(2)m of restructuring for its commercial aerospace business which was accounted for in the non-headline integration costs of the United Flexible acquisition and the Group incurred £24m of write-downs which were included in headline operating profit (FY2021 – nil) in addition to the restructuring charges referenced above.

The total cost of the programme was £(65)m; £(35)m in FY2020 and £(30)m in FY2021, with no further charges expected. The full annualised benefits of the programme are expected to be £70m from FY2022 onwards. These benefits are being delivered ahead of schedule, with £47m delivered in FY2021 for the Group (Continuing Operations: £40m; Smiths Medical:

£7m). There are a further £23m of benefits to come in FY2022 (Continuing Operations: £15m; Smiths Medical: £8m).

Profit after tax and EPS

Headline profit after tax increased by +9% on a reported basis. Headline basic EPS was up +8% on an underlying basis and +10% on a reported basis, driven by the strong operational performance. Statutory profit after tax increased by +7% to £285m (FY2020: £267m). Statutory basic EPS was also up +7% to 71.7p (FY2020: 66.9p).

Cash-flow

The Group delivered another year of impressive cash generation. Headline operating cash-flow⁵ was £630m (FY2020: £575m). Operating headline cash conversion was 125% (FY2020: 123%), or 122% excluding restructuring costs (FY2020: 112%).

Free cash-flow of £383m (FY2020: £273m) increased by £110m, underpinned by tight management of both operating and non-operating cash-flows. Free cash-flow as a percentage of operating profit has now been added as a key performance measure to our long-term incentive programmes, to ensure closer alignment with shareholder interests.

Statutory net cash inflow from operating activities was £535m (FY2020: £429m). See note 29 to the financial statements for a reconciliation of headline operating cash-flow to statutory cash-flow.

Debt

Net debt⁵ at 31 July 2021 was £1,018m, a decrease of £(123)m in the period. Headline EBITDA⁵ excluding restructuring costs for Total Group was £665m. Net debt to EBITDA was 1.5x (FY2020: 1.7x), 1.6x including restructuring costs (FY2020: 1.9x).

Gross debt⁵ was £1,546m (FY2020: £1,609m). There are no covenants associated with this debt. The weighted average maturity was 3.2 years, with the next maturity due in October 2022. Cash balances increased to £453m (FY2020: £386m).

An \$800m (c.£576m at the period-end exchange rate) revolving credit facility (“RCF”) remains undrawn and matures in November 2024. The only financial covenant relates to interest cover, under which EBITDA must be greater than or equal to 3 times net interest. Taking cash and the RCF together, total liquidity was over £1bn at the end of the period.

High cash conversion and a conservative balance sheet are the foundations of our strong financial framework, ensuring we are well positioned to deliver sustainable, long-term shareholder value.

Pensions

The net accounting pension surplus increased to £413m (FY2020: £372m).

Formal triennial valuations for the two main UK schemes (SIPS and TIGPS) were concluded in 2021. These showed a surplus existed for both on the Technical Provisions basis as at their respective valuation dates (31 March 2020 for SIPS and 5 April 2020 for TIGPS); and the funding on that basis for both has since improved.

Given the strength of the funding positions, cash contributions to these schemes (previously £12m per annum to each scheme) are stopping in the first quarter of FY2022, and the current expectation is that they will not recommence.

The two main UK pension schemes and the US pension plan are well positioned to withstand a volatile market environment. They are well hedged against changes in interest and inflation rates. Approximately 90% of their assets are invested in third-party annuities, government bonds, investment grade credit or cash, with no remaining equity investments. As at 31 July 2021, over 40% of the UK liabilities had been de-risked through the purchase of annuities from third party insurers.

The Group and the UK Trustees continue to work together to achieve full buy-out funding for both schemes.

Pension contributions for the year were £(30)m (FY2020: £(33)m). For FY2022, we expect total cash contributions to halve to around £(15)m (including funded US schemes, unfunded schemes and post-retirement healthcare plans).

Dividend

The Group maintains a progressive dividend policy, aiming to increase dividends in line with long-term underlying growth in earnings and cash-flow, with the objective of maintaining a minimum dividend cover⁵ of around 2 times. The 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 conditions and future investment plans.

Reflecting the Group's strong performance and financial position, the Board is recommending a final dividend of 26.0p, bringing the total dividend for the year to 37.7p, a year-on-year increase of 8% (FY2020: 35.0p). The final dividend will be paid on 19 November 2021 to shareholders on the register at close of business on 22 October 2021.

The Company offers a Dividend Reinvestment Plan (DRIP) - see our website for details. To participate in the DRIP, shareholders must submit their election notice to be received by 5 November 2021 ("the Election Date"). Elections received after the Election Date will apply to dividends paid after 19 November 2021. Purchases under the DRIP are made on, or as soon as practicable after, the dividend payment date and at prevailing market prices.

Return on Capital Employed (ROCE)⁵

ROCE increased +140bps to 13.2% (FY2020: 11.8%). This reflects higher profitability during the period and continued working capital discipline. For further detail of its calculation, please refer to note 30 to the financial statements.

Foreign exchange

The results of overseas operations are translated into sterling at average exchange rates. Net assets are translated at period-end rates. The Group is exposed to foreign exchange movements, mainly the US Dollar and the Euro. 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 2021 (12 months)	31 July 2020 (12 months)	31 July 2021	31 July 2020
USD	1.36	1.26	1.39	1.31
EUR	1.13	1.14	1.17	1.11

Outlook

Following a resilient performance in FY2021, the Group has entered FY2022 with good order book momentum. While levels of recovery in our end markets differ and economic uncertainty and supply chain challenges continue, Group underlying revenue growth rates are expected to return, in aggregate, to around pre-COVID levels with further operational efficiency benefits and good cash generation during the year.

We are increasingly confident about Smiths' future prospects and our ability to deliver significant value for all our stakeholders.

Business review

JOHN CRANE

John Crane is a leading provider of mission-critical engineered solutions for global energy and process industries, supporting improved efficiency and emission reductions. c.59% of revenue is derived from the energy sector (downstream and midstream oil & gas and power generation, including renewable and sustainable sources of energy). c.41% comes from other process industries (including chemical, pharmaceutical, mining, water treatment, and pulp & paper). 68% of John Crane revenue comes from aftermarket sales. John Crane represents 36% of continuing Group revenue.

	FY2021 £m	FY2020 £m	FY Reported growth	H1 Underlying growth	H2 Underlying growth	FY Underlying growth
Revenue	865	955	(9)%	(10)%	-	(5)%
Original Equipment	273	314	(13)%	(14)%	(5)%	(10)%
Aftermarket	592	641	(8)%	(9)%	+3%	(3)%
Energy	510	597	(15)%	(16)%	(4)%	(10)%
Industrials	355	358	(1)%	(1)%	+8%	+3%
Headline operating profit	187	187	0%	(16)%	+13%	(1)%
Headline operating profit margin	21.6%	19.6%	+200bps	(130)bps	+270bps	+80bps
Statutory operating profit	184	154	+20%			
Return on capital employed	20.0%	19.0%	+100bps			
R&D cash costs as % of sales	2.1%	1.9%	+20bps			

Revenue

£m	FY2020 reported	Foreign exchange	Acquisitions & disposals	Underlying movement	FY2021 reported
Revenue	955	(45)	-	(45)	865

John Crane's market-leading position and the strength of its global service network underpinned its performance, despite challenges in the energy market and COVID-19 disruptions. Underlying revenue was down (5)%. There was a strong improvement in H2 revenues, which improved to flat year-on-year, versus (10)% in H1. On a reported basis, full year revenue was down (9)%, as foreign exchange had a £(45)m adverse impact.

Activity levels in both of John Crane's market segments began to strengthen in H2 with good momentum generated in Q4. Underlying revenue from John Crane's Energy segment was (10)% for the year, with early signs of recovery supporting an improvement to (4)% in H2, versus (16)% in H1. Underlying revenue from Industrial activities was up +3% year over year, having returned to +8% growth in H2 versus a (1)% decline in H1.

Aftermarket represents 68% of John Crane's revenue (FY2020: 67%). Underlying aftermarket revenue was (3)% for the year, having returned to growth in the second half, up +3%. This was reflected in the strengthening order book, which was up +5% in the second half. John Crane's large installed base and leading service offering, position it well to meet pent-up demand for aftermarket repairs, maintenance and upgrades. Customers are increasingly focused on improving the efficiency of their plants and refineries. This is driving further interest in John Crane's unique digital solutions, including John Crane Sense™, which monitors the condition and effectiveness of equipment and helps to minimise downtime.

Underlying revenue from Original Equipment (“OE”) was (10)% for the year, with an improved H2 performance down only (5)%, versus (14)% in H1. The rate of new orders continues to improve and the OE order book was back at flat in the second half. John Crane secured multiple new contracts during the period including with Aramco in Saudi Arabia, Petrobras in Brazil, Sempra Costa Azul LNG in Mexico, and Assiut Hydrocracking Complex in Egypt. These contracts draw on John Crane’s core capabilities of supporting customers’ enhanced efficiency, performance and sustainability in a variety of markets. They are examples of where John Crane’s leading technology, asset management capabilities and global footprint drive competitive advantage and ensure it is well positioned to capture growth opportunities as markets recover and evolve.

Operating profit

£m	FY2020 reported	Foreign exchange	Acquisitions & disposals	Lower restructuring & write-downs	Underlying movement	FY2021 reported
Headline operating profit	187	(10)	-	13	(3)	187
Headline operating profit margin	19.6%					21.6%

Headline operating profit of £187m decreased by (1)% on an underlying basis, reflecting lower volumes which were partially offset by improved aftermarket activity in the second half. Headline operating profit was flat on a reported basis, with £(10)m of adverse foreign exchange offset by the year-on-year impact of restructuring charges. John Crane’s restructuring focused on enhancing its flexibility to withstand the cyclicity of its end markets and improve efficiency.

Headline operating margin was 21.6%, up +200bps on a reported basis and +80bps on an underlying basis. The difference between statutory and headline operating profit includes the net cost in relation to the provision for John Crane, Inc. asbestos litigation.

ROCE

ROCE was up +100bps at 20.0%, due to lower restructuring charges and a reduction in working capital.

R&D

Cash R&D expenditure represented 2.1% of sales, +20bps higher than last year. John Crane’s innovation is primarily focused on enhancing efficiency, performance and sustainability by using materials science advancements, coatings and additive manufacturing. John Crane is also leveraging the Group’s digital expertise to support the development of predictive diagnostic platforms and other innovative digital technologies.

John Crane sealing solutions are designed to keep process fluids within systems and out of the environment. To support our customers in their environmental sustainability journeys, John Crane introduced multiple new technologies. These include a new dry gas seal that eliminates all methane emissions, seal gas recovery systems that take compressor gas leakage out of the flare and inject it back into productive use, enhanced coatings for LNG applications, and for traditionally water intensive industries such as pulp & paper and mining, dynamic lift seals that save an average of one million gallons of water per year when installed.

SMITHS DETECTION

Smiths Detection is a global leader in the detection and identification of threats and contraband, supporting safety, security and freedom of movement. It produces equipment for customers in the Aviation market and Other Security Systems for ports & borders, defence and urban security markets. 46% of Smiths Detection's sales are derived from the aftermarket. Smiths Detection represents 30% of continuing Group revenue.

	FY2021	FY2020	FY	H1	H2	FY
	£m	£m	Reported growth	Underlying growth	Underlying growth	Underlying growth
Revenue	721	806	(11)%	(6)%	(8)%	(7)%
Original Equipment	390	447	(13)%	(6)%	(13)%	(10)%
Aftermarket	331	359	(8)%	(6)%	(1)%	(4)%
Aviation	546	577	(5)%	+4%	(6)%	(2)%
Other Security Systems	175	229	(24)%	(27)%	(13)%	(21)%
Headline operating profit	99	82	+21%	(21)%	+18%	(2)%
Headline operating profit margin	13.7%	10.2%	+350bps	(240)bps	+370bps	+70bps
Statutory operating profit	77	57	+35%			
Return on capital employed	9.7%	7.2%	+250bps			
R&D cash costs as % of sales	7.4%	9.2%	(180)bps			

Revenue

£m	FY2020 reported	Foreign exchange	Acquisitions & disposals	Underlying movement	FY2021 reported
Revenue	806	(33)	2	(54)	721

The strength of Smiths Detection's market position and its leading technology drove a resilient performance against the impact of COVID-19 on its end-markets, with revenue down (7)% on an underlying basis. Revenue was down (11)% on a reported basis, including £(33)m of adverse foreign exchange translation and +£2m contribution from PathSensors Inc, a leading bio-technology solutions and environmental-testing company acquired in August 2020.

Original Equipment ("OE") represented 54% of FY2021 revenues. Smiths Detection entered COVID-19 with a record OE order book. Delivery of these orders has mitigated the impact of subsequently lower tender activity in both Aviation and Other Security Systems. However, underlying OE revenues were still down (10)% for the year and (13)% in the second half.

Both Aviation and Other Security Systems derived over 45% of their revenues from aftermarket services. The underlying trend in aftermarket revenues improved throughout the year, from (6)% in the first half to (1)% in the second, resulting in a full year decline of (4)%.

Revenue from Aviation decreased (2)% on an underlying basis. The good growth reported in the first half tapered off following successful completion of some large contracts including the computed tomography ("CT") hold baggage systems for AENA in Spain and CT cabin baggage screening systems for the TSA in the US. Revenue from Other Security Systems declined by (21)% on an underlying basis. This performance reflects a sharp slowdown in urban security markets due to the pandemic.

Despite a slower rate of new tenders, Smiths Detection continues to secure new contracts and order intake has stabilised. In Aviation, Smiths Detection won the contract to supply CT cabin baggage systems throughout Heathrow Airport, as well as for Milan Airports Malpensa and Linate, Kuwait International Airport and Hamad International Airport (“HIA”) in Qatar. Smiths Detection has also been awarded several contracts in hold baggage, including with the TSA, Incheon and Sheremetyevo airports. HIA and Narita Airport placed orders for ultraviolet light kits, capable of destroying up to 99.9% of microorganisms present on baggage trays at the security checkpoint. This new technology supports heightened hygiene standards which will be important as airports seek to restore the confidence of travellers and staff during and after the COVID-19 pandemic.

In Other Security Systems, Smiths Detection secured contracts with the U.S. and French customs agencies and the Hellenic police for mobile x-ray inspection systems. It also won contracts to supply systems to stadiums featuring our digital iCMORE automatic threat detection technology, enhancing arena security and reducing the need for hands-on searches, and contracts for the supply of equipment to the US Department of Defence.

Following the successful integration of PathSensors Inc which brought additional capability in the areas of environment monitoring, food safety and mail screening, Smiths Detection has developed the capability to detect all major airborne COVID-19 variants.

Operating profit

£m	FY2020 reported	Foreign exchange	Acquisitions & disposals	Lower restructuring & write- downs	Underlying movement	FY2021 reported
Headline operating profit	82	(3)	(1)	23	(2)	99
Headline operating profit margin	10.2%					13.7%

Smiths Detection maintained good profit conversion with headline operating profit down only (2)% on an underlying basis, despite lower volumes. Headline operating profit of £99m was up +21% on a reported basis, including +£23m year-on-year impact of lower restructuring costs and write-downs, and £(3)m adverse foreign exchange translation. Headline operating profit margin was 13.7%, up +350bps on a reported basis and +70bps on an underlying basis. The difference between statutory and headline operating profit primarily reflects amortisation of acquired intangibles.

ROCE

ROCE increased by +250bps to 9.7%, with lower restructuring and write-down charges this year and a reduction in working capital.

R&D

Cash R&D expenditure was 7.4% of sales, (180)bps lower than last year following the completion of some customer-funded projects. Smiths Detection continued 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 digital solutions to strengthen our aftermarket proposition to make people and infrastructure safer. Certain programmes are co-funded by strategic customers seeking next-generation solutions to security challenges.

FLEX-TEK

Flex-Tek provides innovative components to heat and move fluids and gases for aerospace and industrial applications that support energy efficiency and improved air quality. 81% of Flex-Tek's revenue is derived from Industrials and 19% from the Aerospace sector. 53% of Flex-Tek's revenue comes from aftermarket sales. Flex-Tek represents 21% of continuing Group revenue.

	FY2021 £m	FY2020 £m	FY Reported growth	H1 Underlying growth	H2 Underlying growth	FY Underlying growth
Revenue	508	478	+6%	(1)%	+13%	+6%
Industrials	409	345	+19%	+14%	+17%	+15%
Aerospace	99	133	(26)%	(35)%	+2%	(20)%
Headline operating profit	97	83	+17%	+0%	+28%	+13%
Headline operating profit margin	19.1%	17.3%	+180bps	+20bps	+220bps	+110bps
Statutory operating profit	83	52	+60%			
Return on capital employed	21.6%	17.5%	+410bps			
R&D cash costs as % of sales	0.5%	0.5%	-			

Revenue

£m	FY2020 reported	Foreign exchange	Acquisitions & disposals	Underlying movement	FY2021 reported
Revenue	478	(29)	33	26	508

Flex-Tek's revenue increased +6% on an underlying basis, as strong revenue growth in Industrials more than offset the downturn in Aerospace. Revenue grew +6% on a reported basis, including £(29)m adverse foreign exchange translation and +£33m from acquisitions.

Revenue from Flex-Tek's Industrial segment was up +15% on an underlying basis. Strong growth throughout the year was driven by demand for its construction related products in the US, particularly for HVAC applications, where Flex-Tek continued to outperform the underlying market. Other drivers included good growth of its industrial heat applications.

Underlying revenue from Flex-Tek's Aerospace segment was down (20)% for the year, but up +2% in the second half. This was a result of improving market conditions, as well as market share gains and increased content on existing platforms.

Operating profit

£m	FY2020 reported	Foreign exchange	Acquisitions & disposals	Underlying movement	FY2021 reported
Headline operating profit	83	(5)	10	9	97
Headline operating profit margin	17.3%				19.1%

Headline operating profit increased +13% on an underlying basis, reflecting improved volumes and strengthened margins. Headline operating profit was up +17% at £97m on a reported basis, including £(5)m adverse foreign exchange translation and +£10m from acquisitions. Headline operating profit margin was up +180bps to 19.1%, on a reported basis. The difference between statutory and headline operating profit is due to amortisation of acquired intangible assets and provision for Titeflex Corporation subrogation claims.

In February 2021, the Group acquired Royal Metal, a leading manufacturer of residential and light commercial HVAC products for \$107m. Royal Metal is being successfully integrated into Flex-Tek. The acquisition complements the organic growth that Flex-Tek is already driving through the development of innovative air distribution products that support improved energy efficiency and indoor air quality. For more information, see note 27 of the financial statements.

ROCE

ROCE increased +410bps to 21.6% reflecting the improved profitability.

R&D

Cash R&D expenditure remained consistent at 0.5% of sales. R&D is focused on developing new products for the construction market, and an expanded product offering in aerospace.

SMITHS INTERCONNECT

Smiths Interconnect designs solutions for high-speed, secure connectivity in demanding applications for various end markets including defence, semiconductor test, medical, space, commercial aerospace, and rail. Smiths Interconnect represents 13% of continuing Group revenue.

	FY2021 £m	FY2020 £m	FY Reported growth	H1 Underlying growth	H2 Underlying growth	FY Underlying growth
Revenue	312	309	+1%	+11%	+3%	+7%
Headline operating profit	35	26	+35%	+109%	+30%	+54%
Headline operating profit margin	11.2%	8.4%	+280bps	+560bps	+350bps	+450bps
Statutory operating profit	34	23	+48%			
Return on capital employed	8.8%	6.4%	+240bps			
R&D cash costs as % of sales	6.3%	7.7%	(140)bps			

Revenue

£m	FY2020 reported	Foreign exchange	Acquisitions & disposals	Underlying movement	FY2021 reported
Revenue	309	(16)	-	19	312

Smiths Interconnect delivered a strong performance with revenue up +7% on an underlying basis, reflecting continued good momentum supported by a growing orderbook. Revenue in the second half was up +3% compared to +11% in the first half, due to the strong Q4 performance in the prior year. Revenue increased by +1% on a reported basis, including £(16)m adverse foreign exchange translation.

This strong performance reflects high growth in the semiconductor test business, as customers increased capacity for the production of graphics chips and other microprocessors to support demand for laptops, data centres and games consoles, as well as new customer wins. There was also growth in the space and defence market segments from specific projects and satellite programmes. This growth was partly offset by a slight decline in the industrials market, driven in part by the timing of medical orders.

During the year, Smiths Interconnect received significant orders for its space-qualified products for space exploration projects and commercial satellite constellations. Smiths Interconnect is proud that its high-performance connectors are onboard NASA's six-wheeled science rover, Perseverance, which landed safely on Mars to search for traces of microbial life.

Operating profit

£m	FY2020 reported	Foreign exchange	Acquisitions & disposals	Lower restructuring & write- downs	Underlying movement	FY2021 reported
Headline operating profit	26	(2)	-	(5)	16	35
Headline operating profit margin	8.4%					11.2%

Headline operating profit increased +54% on an underlying basis, reflecting strong volumes and the benefits of restructuring actions. Headline operating profit was up +35% to £35m on a reported basis, including £(5)m of higher year-on-year restructuring costs to optimise the

operational footprint. Headline operating profit margin was 11.2%, up +280bps on a reported basis and +450bps on an underlying basis. The difference between statutory and headline operating profit reflects the amortisation of acquired intangibles.

ROCE

ROCE increased +240bps to 8.8%, driven by higher profitability.

R&D

Cash R&D expenditure decreased to 6.3% of sales (FY2020: 7.7%). R&D is focused on bringing to market new products that improve connectivity and product integrity in demanding operating environments. Product launches included the new Joule 20 test socket for semiconductor test customers; new attenuators for space applications; and advanced connectors for the medical market.

SMITHS MEDICAL - DISCONTINUED OPERATIONS

Smiths Medical supplies quality, cost-effective medical devices and consumables vital to patient care globally. Its portfolio incorporates established brands, with strong positions in select segments of the Infusion Systems, Vascular Access, and Vital Care markets. 81% of Smiths Medical's sales are from consumable and disposable products.

	FY2021	FY2020	FY Reported	H1	H2	FY
	£m	£m	growth	Underlying growth	Underlying growth	Underlying growth
Revenue	849	918	(8)%	+0%	(7)%	(3)%
Headline operating profit	177	184	(4)%	+2%	+5%	+4%
Headline operating profit margin	20.8%	20.1%	+70bps	+30bps	+190bps	+110bps
Headline profit after tax	134	139	(4)%	+5%	+5%	+5%
Statutory profit after tax	128	200	(36)%			
Return on capital employed	13.3%	13.8%	(50)bps			
R&D cash costs as % of sales	5.6%	5.9%	(30)bps			

Consistent with accounting standards for discontinued operations, depreciation and amortisation are not included in reported results for Smiths Medical. Depreciation and amortisation of £45m (FY2020: £45m) have, however, been included in the calculation of underlying measures.

Agreed sale of Smiths Medical

On 8 September 2021, the Group announced the sale of Smiths Medical to ICU Medical, Inc. ("ICU Medical") at an enterprise value of \$2.7bn and an equity value of \$2.4bn after adjustments for debt, liabilities and working capital.

At closing, the Group expects to receive \$1.85bn in cash proceeds and 2.5m new ICU Medical shares, valued at \$0.5bn at the time of announcement. The Group will receive an additional \$0.1bn in cash, contingent on the future share price performance of ICU Medical.

Completion and receipt of initial cash proceeds is expected in the first half calendar year 2022, subject to approval by Smiths' shareholders and customary regulatory approvals. The sale of Smiths Medical simplifies and positions Smiths for focused growth in its core industrial technology business and will enable a significant return of capital to shareholders.

Revenue

£m	FY2020 reported	Foreign exchange	Acquisitions & disposals	Underlying movement	FY2021 reported
Revenue	918	(39)	-	(30)	849

Smiths Medical delivered revenue of £849m, down (3)% on an underlying basis. Excluding the one-off, nil-margin revenue generated in the second half of FY2020 from participation in the Ventilator Challenge UK, revenue was flat against the prior year. Revenue was down (8)% on a reported basis, including £(39)m of adverse foreign exchange translation.

Operating profit

£m	FY2020 reported	Foreign exchange	Higher restructuring	Depreciation & amortisation	Underlying movement	FY2021 reported
Headline operating profit	184	(7)	(5)		5	177
Headline operating profit margin	20.1%					20.8%

Headline operating profit of £177m was up +4% on an underlying basis, reflecting restructuring actions and cost discipline. Headline operating profit was down (4)% on a reported basis, due to £(7)m of adverse foreign exchange and £(5)m of higher year-on-year restructuring costs. Headline operating profit margin of 20.8% was up +110bps on an underlying basis, and +70bps on a reported basis.

Headline profit after tax of £134m increased +5% on an underlying basis, due to growth in operating profit. On a reported basis headline profit after tax was down (4)%, including the adverse foreign exchange and restructuring costs.

The difference between statutory and headline profit after tax is £(6)m, which includes £(18)m of separation costs, £(61)m of non-cash impairment charges, +£50m of foreign exchange on the intercompany loan with Smiths continuing group and +£23m of tax credit on these non-headline items. The non-cash impairment charges comprise £52m of capitalised development costs, £5m of specific inventory and £4m of attributable fixed assets, relating mostly to the Intellifuse Large Volume Pump (“LVP”).

In April 2021, Smiths Medical invested in Ivenix Inc., the owner of an FDA approved LVP and entered into an agreement to be the exclusive distributor of the Ivenix LVP. The investment and distribution agreement meant Smiths Medical prioritised commercialisation of the Ivenix LVP and the development of the Intellifuse LVP was put on hold. This change has given rise to the impairment charges disclosed above, with the entire value of the Intellifuse LVP having been impaired.

In June 2020, Smiths Medical initiated a Class I recall of certain Medfusion® 3500 and 4000 syringe pumps with specific firmware versions, due to a software error. Following the recall, the US Food and Drug Administration (the “FDA”) undertook an inspection at Smiths Medical’s Minneapolis site and issued its observations in April 2021. Smiths Medical is undertaking remediation actions, and is committing significant resources, to address each of the FDA’s observations and to strengthen its quality systems. Smiths Medical is aiming to complete the outstanding remediation actions by the end of 2023.

ROCE

ROCE declined (50)bps to 13.3%.

R&D

Cash R&D expenditure was 5.6% of sales, down (30)bps year-on-year. Smiths Medical continues to invest in the development of innovative, commercially focused products across the portfolio to support long-term, sustainable growth. Product launches included:

- PharmGuard software enhancements for the CADD™ Solis Infusion Pump
- Comprehensive pain management solutions with new dedicated connectors
- A new endotracheal tube

CONSOLIDATED INCOME STATEMENT

	Notes	Year ended 31 July 2021			Year ended 31 July 2020 - represented*		
		Headline £m	Non- headline (note 3) £m	Total £m	Headline £m	Non- headline (note 3) £m	Total £m
CONTINUING OPERATIONS							
Revenue	1	2,406	–	2,406	2,548	–	2,548
Operating costs		(2,034)	(46)	(2,080)	(2,221)	(86)	(2,307)
OPERATING PROFIT/(LOSS)	2	372	(46)	326	327	(86)	241
Interest receivable	4	9	–	9	6	–	6
Interest payable	4	(49)	–	(49)	(55)	–	(55)
Other financing gains/(losses)	4	–	(52)	(52)	–	(66)	(66)
Other finance income – retirement benefits	4	–	6	6	–	7	7
Finance costs	4	(40)	(46)	(86)	(49)	(59)	(108)
Continuing operations – profit/(loss) before taxation		332	(92)	240	278	(145)	133
Taxation	6	(96)	13	(83)	(79)	13	(66)
Continuing operations – profit/(loss) for the year		236	(79)	157	199	(132)	67
Discontinued operations							
Profit from discontinued operations	28	134	(6)	128	139	61	200
PROFIT/(LOSS) FOR THE YEAR		370	(85)	285	338	(71)	267
Profit/(loss) for the year attributable to:							
Smiths Group shareholders – continuing operations		235	(79)	156	197	(132)	65
Smiths Group shareholders – discontinued operations		134	(6)	128	139	61	200
Non-controlling interests		1	–	1	2	–	2
		370	(85)	285	338	(71)	267
EARNINGS PER SHARE							
	5						
Basic				71.7p			66.9p
Basic – continuing				39.4p			16.4p
Diluted				71.3p			66.4p
Diluted – continuing				39.1p			16.3p

* Results in the comparatives for the period ended 31 July 2020 have been represented to show operating costs on the face of the income statement; see note 2 'Operating costs' for further details.

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

	Notes	Year ended 31 July 2021 £m	Year ended 31 July 2020 £m
PROFIT FOR THE YEAR		285	267
Other comprehensive income:			
Re-measurement of retirement benefits assets and obligations	8	13	19
Taxation thereon	6	(6)	(2)
Other comprehensive income and expenditure which will not be reclassified to the consolidated income statement		7	17
Other comprehensive income which will be reclassified and reclassifications:			
Exchange losses		(166)	(205)
Fair value gains and reclassification adjustments:			
– on financial asset at fair value through other comprehensive income		4	2
– deferred in the period on cash-flow and net investment hedges		82	73
– reclassified to income statement on cash-flow and net investment hedges		2	(2)
Total other comprehensive income		(71)	(115)
Total comprehensive income		214	152
Attributable to:			
Smiths Group shareholders		214	151
Non-controlling interests		–	1
		214	152
Total comprehensive income attributable to Smiths Group shareholders arising from:			
Continuing operations		152	59
Discontinued operations		62	92
		214	151

CONSOLIDATED BALANCE SHEET

	Notes	31 July 2021 £m	31 July 2020 £m
NON-CURRENT ASSETS			
Intangible assets	10	1,498	1,564
Property, plant and equipment	12	212	218
Right of use assets	13	108	94
Financial assets – other investments	17	11	19
Retirement benefit assets	8	546	516
Deferred tax assets	6	92	102
Trade and other receivables	15	59	52
Financial derivatives	20	75	82
		2,601	2,647
CURRENT ASSETS			
Inventories	14	381	446
Current tax receivable	6	75	46
Trade and other receivables	15	630	627
Cash and cash equivalents	18	405	366
Financial derivatives	20	2	2
Assets held for sale*	28	1,243	1,279
		2,736	2,766
TOTAL ASSETS		5,337	5,413
CURRENT LIABILITIES			
Financial liabilities:			
– borrowings	18	(9)	(10)
– lease liabilities	18	(27)	(31)
– financial derivatives	20	(3)	(4)
Provisions	23	(46)	(55)
Trade and other payables	16	(530)	(527)
Current tax payable	6	(89)	(79)
Liabilities held for sale*	28	(283)	(295)
		(987)	(1,001)
NON-CURRENT LIABILITIES			
Financial liabilities:			
– borrowings	18	(1,372)	(1,455)
– lease liabilities	18	(94)	(65)
Provisions	23	(241)	(276)
Retirement benefit obligations	8	(128)	(139)
Corporation tax payable	6	(5)	(5)
Deferred tax liabilities	6	(28)	(27)
Trade and other payables	16	(59)	(51)
		(1,927)	(2,018)
TOTAL LIABILITIES		(2,914)	(3,019)
NET ASSETS		2,423	2,394
SHAREHOLDERS' EQUITY			
Share capital	24	149	149
Share premium account		363	361
Capital redemption reserve	26	6	6
Revaluation reserve	26	1	1
Merger reserve	26	235	235
Cumulative translation adjustments		509	674
Retained earnings		1,367	1,259
Hedge reserve	26	(228)	(312)
Total shareholders' equity		2,402	2,373
Non-controlling interest equity	26	21	21
TOTAL EQUITY		2,423	2,394

* Assets and liabilities held for sale were previously classified as held for distribution to owners, see note 28 for further details.

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

	Notes	Share capital and share premium £m	Other reserves £m	Cumulative translation adjustments £m	Retained earnings £m	Hedge reserve £m	Equity shareholders' funds £m	Non-controlling interest £m	Total equity £m
At 31 July 2020		510	242	674	1,259	(312)	2,373	21	2,394
Profit for the year		–	–	–	284	–	284	1	285
Other comprehensive income:									
– re-measurement of retirement benefits after tax		–	–	–	7	–	7	–	7
– exchange losses net of recycling		–	–	(165)	–	–	(165)	(1)	(166)
– fair value gains and related tax		–	–	–	4	84	88	–	88
Total comprehensive income for the year		–	–	(165)	295	84	214	–	214

Transactions relating to ownership interests:

Exercises of share options	24	2	–	–	–	–	2	–	2
Receipt of capital from non-controlling interest		–	–	–	–	–	–	1	1
Purchase of own shares	26	–	–	–	(16)	–	(16)	–	(16)
Dividends:									
– equity shareholders	25	–	–	–	(185)	–	(185)	–	(185)
– non-controlling interest		–	–	–	–	–	–	(1)	(1)
Share-based payment	9	–	–	–	14	–	14	–	14
At 31 July 2021		512	242	509	1,367	(228)	2,402	21	2,423

	Notes	Share capital and share premium £m	Other reserves £m	Cumulative translation adjustments £m	Retained earnings £m	Hedge reserve £m	Equity shareholders' funds £m	Non-controlling interest £m	Total equity £m
At 31 July 2019		508	242	878	1,115	(383)	2,360	21	2,381
Impact of adopting IFRS 16		–	–	–	(1)	–	(1)	–	(1)
Impact of adopting IFRIC 23		–	–	–	(4)	–	(4)	–	(4)
Profit for the year		–	–	–	265	–	265	2	267
Other comprehensive income:									
– re-measurement of retirement benefits after tax		–	–	–	17	–	17	–	17
– exchange losses net of recycling		–	–	(204)	–	–	(204)	(1)	(205)
– fair value gains and related tax		–	–	–	2	71	73	–	73
Total comprehensive income for the year		–	–	(204)	284	71	151	1	152

Transactions relating to ownership interests:

Exercises of share options	24	2	–	–	–	–	2	–	2
Purchase of own shares	26	–	–	–	(18)	–	(18)	–	(18)
Dividends:									
– equity shareholders	25	–	–	–	(126)	–	(126)	–	(126)
– non-controlling interest		–	–	–	–	–	–	(1)	(1)
Share-based payment	9	–	–	–	9	–	9	–	9
At 31 July 2020		510	242	674	1,259	(312)	2,373	21	2,394

CONSOLIDATED CASH-FLOW STATEMENT

	Notes	Year ended 31 July 2021 £m	Year ended 31 July 2020 £m
Net cash inflow from operating activities	29	535	429
Cash-flows from investing activities			
Expenditure on capitalised development		(27)	(35)
Expenditure on other intangible assets		(12)	(14)
Purchases of property, plant and equipment		(78)	(61)
Disposals of property, plant and equipment		2	1
Capital returned by other investments		7	–
Acquisition of businesses	27	(83)	(24)
Acquisition of businesses – discontinued operations		–	(12)
Investment in financial asset – discontinued operations		(14)	–
Disposal of businesses – discontinued operations		–	1
Net cash-flow used in investing activities		(205)	(144)
Cash-flows from financing activities			
Proceeds from exercise of share options	24	2	2
Purchase of own shares	26	(16)	(18)
Dividends paid to equity shareholders	25	(185)	(126)
Payment of lease liabilities		(44)	(47)
Cash inflow from matured derivative financial instruments		4	1
Net cash-flow used in financing activities		(239)	(188)
Net increase in cash and cash equivalents		91	97
Cash and cash equivalents at beginning of year		366	289
Movement in net cash held in disposal group		(28)	6
Foreign exchange rate movements		(24)	(26)
Cash and cash equivalents at end of year	18	405	366
Cash and cash equivalents at end of year comprise:			
– cash at bank and in hand		219	173
– short-term deposits		186	193
		405	366

ACCOUNTING POLICIES

Basis of preparation

The financial information set out above does not constitute the Company's statutory accounts for the financial years ended 31 July 2021 or 2020, but are derived from those accounts. Statutory accounts for 2020 have been delivered to the Registrar of Companies and those for 2021 will be delivered following the Company's Annual General Meeting. Those accounts have been reported on by the company's auditor; the report of the auditor was (i) unqualified, (ii) did not include a reference to any matters to which the auditor drew attention by way of emphasis without qualifying their report, and (iii) did not contain a statement under section 498 (2) or (3) of the Companies Act 2006.

These accounts have been prepared in accordance with International Accounting Standards in conformity with the requirements of the Companies Act 2006. The consolidated financial statements have been prepared 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.

Going concern

The Directors are satisfied that the Group has adequate resources to continue to operate for a period not less than 12 months from the date of approval of the financial statements and that there are no material uncertainties around their assessment. Accordingly, the Directors continue to adopt the going concern basis of accounting.

In concluding that the going concern basis is appropriate, the Directors have modelled the impact of a severe but plausible downside scenario based on another significant global wave of COVID-19 in the winter of FY2022, whereby the Group experiences:

(i) Demand decline:

a significant revenue decline in FY2022 due to a series of full country lockdowns, resulting in a 17% year-on-year fall in revenue for FY2022. The revenue decline and assumed customer defaults result in a -74% year-on-year reduction in headline operating profit. The assumed revenue decline is driven by a drop in demand in John Crane and Detection due to customer circumstances, weak demand in Flex-Tek and a reduction in Interconnect revenues due to a market slowdown and supply disruptions; and

a further period of continued dampened demand for 12 months with a slow recovery beginning towards the end of FY2022 and into the first half of FY2023.

(ii) Supply chain disruption and deterioration in working capital:

supply chain disruptions with plant closures across most sites for a full two months (November and December 2021);

with ongoing supply chain disruption due to both ability of suppliers to continue to service and availability of freight forwarding to ship supplies; and

a deterioration in working capital from an inventory build up during the shutdown period, delays in customer receipts and an increase in customer defaults.

This scenario assumes no mitigating actions and no further restructuring. The downside case is deemed to be very cautious, given that trading has been resilient throughout the pandemic. The Group has also demonstrated the ability to continue operations with government approvals during the pandemic; in the few instances where they did occur, plant closures were short-lived (days not weeks).

Throughout this severe but plausible downside scenario, the Group continues to have significant liquidity headroom on existing facilities and against the RCF financial covenant.

Other factors considered by the Board as part of their going concern assessment included the inherent uncertainties in cash flow forecasts. Based on the above, the Directors have concluded that the Group is well placed to manage its financing and other business risks satisfactorily, and they have a reasonable expectation that the Group will have adequate resources to continue in operation for at least 12 months from the signing date of these financial statements. They therefore consider it appropriate to adopt the going concern basis of accounting in preparing the financial statements.

Key estimates and significant judgements

The preparation of the accounts in conformity with generally accepted accounting principles requires management to make estimates and judgements 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

Impairment reviews of 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 asset or 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.

Critical estimates, and the effect of variances in these estimates, are disclosed in note 11 and note 28.

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 for critical estimates. A portion of UK pension liabilities are insured via bulk annuity policies which broadly match the scheme obligation to identified groups of pensioners. These assets are valued by an external qualified actuary at the actuarial valuation of the corresponding liability, reflecting this matching relationship.

The Group's principal defined benefit pension plans are in the UK and the US and these have been closed so that no future benefits are accrued. Critical estimates for these plans, and the effect of variances in these estimates, are disclosed in note 8.

Provisions for liabilities and charges

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 £212m (FY2020: £231m) 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. 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 will be incurred.

In quantifying the expected costs JCI takes account of the advice of an expert in asbestos liability estimation. The following estimates 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 23 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 23 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 £47m (FY2020: £66m) has been made for the costs which the Group is expected to incur in respect of these claims. In preparing the provision calculation, key estimates have been made about the impact of safe installation initiatives on the level of future claims. See note 23 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 £144m (FY2020: £128m) relating to losses and £65m (FY2020: £75m) relating to the John Crane, Inc. and Titeflex Corporation litigation provisions. The recognition of assets pertaining to these items requires management to make significant estimates as to the likelihood of realisation of these deferred tax assets and the phasing and attribution of future taxable profits. This is based on a number of factors, which management use 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.

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 and Smiths Interconnect have 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.

The Group enters into certain contracts for agreed fees that are performed across more than one accounting period and revenue is recognised over time. Estimates are required at the balance sheet date when determining the stage of completion of the contract activity. This assessment requires the expected total costs of the contract and the remaining costs to complete the contract to be estimated.

At 31 July 2021, the Group held contracts with a total value of £166m (2020: £153m), of which £99m (2020: £101m) had been delivered and £67m (2020: £52m) remains fully or partially unsatisfied. £43m of the unsatisfied amount is expected to be recognised in the coming year, with the remainder being recognised within 3 years. A 5% increase in the remaining cost to complete the contracts would have reduced Group operating profit in the current year by less than £2m (2020: less than £2m).

Significant judgements made in applying accounting policies

Business combinations

On the acquisition of a business, the Group has to make judgements on the identification of specific intangible assets which are recognised separately from goodwill and then amortised over their estimated useful lives. These include items such as brand names and customer lists, to which value is first attributed at the time of acquisition. The capitalisation of these assets and the related amortisation charges are based on judgments about the value and economic life of such items.

Where acquisitions are significant, appropriate advice is sought from professional advisers before making such allocations.

Where the Group has a contractual option to acquire a business in the future, management have applied judgement in determining whether it has substantive voting rights in the business and whether the business should be accounted for as a subsidiary or associate. In applying these judgements, management have reviewed whether the option and any related legal / commercial agreements provide the Group with power or significant influence over the business and have assessed whether there are any barriers that prevent the Group from exercising these rights.

Retirement benefits

At 31 July 2021 the Group has recognised a retirement benefit asset of £546m (FY2020: £516m), 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. There is judgement required in determining whether an unconditional right of refund exists based on the provisions of the relevant trust deed and rules. Having taken legal advice with regards to the rights of the Group under the relevant Trust deed and rules, it has been determined that the surplus is recoverable by the Group and therefore can be recognised. In particular, in the ordinary course of business, the Trustees of the UK schemes do not have a unilateral power to terminate and wind-up the schemes or augment benefits. 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 carrying value of the scheme liabilities within these financial statements which are 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 commercial viability (the ability to generate probable future economic benefits).

The assessment of technical feasibility and future commercial viability of development projects requires significant judgement and the use of assumptions. Key judgements made in the assessment of future commercial viability include:

Scope of work to achieve regulatory clearance (where required) – including the level of testing evidence and documentation;

Competitor activity – including the impact of potential competitor product launches on the market place and customer demand; and

Launch timeline – including time and resource required to establish and support the commercial launch of a new product.

Taxation

As stated in the previous section 'Sources of estimation uncertainty', the Group has recognised deferred tax assets of £144m (FY2020: £128m) relating to losses and £65m (FY2020: £75m) relating to the John Crane, Inc. and Titeflex Corporation litigation provisions. The decision to recognise deferred tax assets requires judgement in determining whether the Group will be able to utilise historical tax losses in future periods. It has been concluded that there are sufficient taxable profits in future periods to support recognition.

The Group has also applied judgement in the decisions made to recognise provisions against uncertain tax positions; please see note 6 for further details.

Presentation of the Smiths Medical demerger/sale

Previously in the Group's FY2019 and FY2020 Annual Reports, the Smiths Medical business was classified as discontinued and held for distribution to owners, as the Group was committed to pursue a demerger of Smiths Medical, whilst in parallel continuing to evaluate all opportunities for value maximisation.

Following the Board decision in July 2021 to sell Smiths Medical rather than continue with a demerger, judgement is required to determine the most appropriate financial reporting presentation of the division and its performance.

In FY2021 the results of Smiths Medical have been presented as profit from discontinued operations and the Smiths Medical assets and liabilities reported as assets and liabilities held for sale. The key judgement for this classification is that the following conditions were met at the balance sheet date:

Management is committed to the plan to sell the business and an active programme to locate a buyer and complete the plan must have been initiated;

The disposal group must be actively marketed for sale at a price that is reasonable in relation to its current fair value;

Shareholder and regulatory approval is highly probable and the plan is unlikely to be significantly changed or withdrawn; and

Sale is expected to be completed within 12 months from the date of classification.

On 8 September 2021, the Group announced the sale of Smiths Medical to ICU Medical, Inc. ("ICU Medical"); see note 31 for further details. The sale is conditional upon the approval of Smiths shareholders and the receipt of customary regulatory approvals.

The IFRS 5 requirement above for the expected completion of the transaction within 12 months of the date of classification was not achieved in FY2021. ICU Medical has provided Smiths with strong contractual commitments to secure the customary regulatory approvals by 8 March 2022 (the "Long Stop Date"). However, it is recognised that in certain limited circumstances, the Long Stop Date may be extended to 8 March 2023.

Smiths management have determined that the realistic expectation is that it will take six to nine months to complete the customary regulatory approvals for the sale to ICU Medical. Therefore management believe that the criteria for classification of Smiths Medical as discontinued and held for sale continue to be met.

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. In addition, the Group reports underlying growth rates for sales and profit measures.

See note 1 for disclosures of headline operating profit and note 30 for more information about the alternative performance measures ('APMs') used by the Group.

Judgement is required in determining which items should be included as non-headline. The amortisation/impairment of acquired intangibles, 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.

Calculating underlying growth also requires judgement. Underlying growth excludes the effects of: foreign exchange; acquisitions and disposals; restructuring charges; impairment of capitalised development costs; and COVID related balance sheet write-downs in the prior year.

Significant accounting policies

Basis of consolidation

The Group's consolidated accounts include the financial statements of Smiths Group plc (the 'Company'), all entities controlled by the Company (its subsidiaries) and the Group's share of the results of its associates.

The Company controls an entity when it (i) has power over the entity; (ii) is exposed or has rights to variable returns from its involvement with the entity; and (iii) has the ability to affect those returns through its power over the entity. The Group reassesses whether or not it controls a subsidiary if facts and circumstances indicate that there are changes to one or more of these three elements of control. Subsidiaries are fully consolidated from the date on which control is obtained by the Company to the date that control ceases.

Where the Group loses control of a subsidiary, the assets and liabilities are derecognised along with any related non-controlling interest and other components of equity. Any resulting gain or loss is recognised in the income statement. Any interest retained in the former subsidiary is measured at fair value when control is lost.

The non-controlling interests in the Group balance sheet represent the share of net assets of subsidiary undertakings held outside the Group. The movement in the year comprises the profit attributable to such interests together with any dividends paid, movements in respect of corporate transactions and related exchange differences.

Interests in associates are accounted for using the equity method. They are initially recognised at cost, which includes transaction costs. Subsequent to initial recognition, the Group financial statements include the Group's share of the profit or loss and other comprehensive income of equity-accounted investees, until the date on which significant influence ceases.

All intercompany transactions, balances, and gains and losses on transactions between Group companies are eliminated on consolidation.

Foreign currencies

The Company's presentational currency and functional 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 foreign exchange rate movements are recognised as a separate component of equity.

On consolidation, foreign exchange rate movements 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 foreign exchange rate movements is recognised in the income statement as part of the gain or loss on sale.

Foreign exchange rate movements 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:

(i) Sale of goods recognised at a point in time - 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 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. However for some generic products, 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 and are distinct within the context of the contract.

For contracts that pass control of the product to the customer only on completion of installation services, revenue is recognised upon completion of the installation.

An obligation to replace or repair 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 imply 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.

(ii) Sale of goods recognised over time - 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 imply 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.

(iii) Services recognised over time - 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 is recognised as follows:

Installation, commissioning and testing services (when neither linked to the supply of product nor subject to acceptance) are recognised rateably as the services are provided;

Training services are recognised on completion of the training course;

Software hosting & maintenance services are recognised rateably over the life of the contract;

Product repair services, where the product is returned to Smiths premises for remedial action, are recognised when the product is returned to the customer and they regain control of the asset;

On-site ad hoc product repair services are recognised rateably as the services are performed;

Long-term product repair and maintenance contracts are recognised rateably over the contract term; and

Extended service warranties are recognised rateably over the contract term.

Invoicing for services depends 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, are accounted for under the revenue recognised over time basis, using an input method.

For fixed-price contracts, revenue is 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 is applied cumulatively with any over/under recognition being adjusted in the current period.

For cost-plus contracts, revenue is recognised based upon costs incurred to date plus any agreed margin.

For both fixed-price and cost-plus contracts, invoicing is normally 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

The Group recognises right of use assets at the commencement date of the lease. Right of use assets are measured at cost including the amount of lease liabilities recognised and initial direct costs incurred, less any incentives granted by the lessor. Right of use assets are depreciated over the shorter of the lease term and the useful life of the right of use assets, unless there is a transfer of ownership or purchase option which is reasonably certain to be exercised at the end of the lease term, in which case depreciation is charged over the useful life of the underlying asset. Right of use assets are subject to impairment.

Leases of buildings typically have lease terms between 1 and 6 years, while plant and machinery generally have lease terms between 1 and 3 years. The Group also has certain leases of machinery with lease terms of 12 months or less and leases of office equipment with low value (typically below £5,000). The Group applies the 'short-term lease' and 'lease of low-value assets'

recognition exemptions for these leases and recognises the lease payments associated with these leases as an expense on a straight-line basis over the lease term.

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. Tax positions taken are then 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.

The Group operates and is subject to taxation in many countries. Tax legislation is different in each country, is often complex and is subject to interpretation by management and government authorities. These matters of judgement give rise to the need to create provisions for uncertain tax positions which are recognised when it is considered more likely than not that there will be a future outflow of funds to a taxing authority. Provisions are made against individual exposures and take into account the specific circumstances of each case, including the strength of technical arguments, recent case law decisions or rulings on similar issues and relevant external advice.

The amounts are measured using one of the following methods, depending on which of the methods the Directors expect will better reflect the amount the Group will pay to the tax authority:

The single best estimate method is used where there is a single outcome that is more likely than not to occur. This will happen, for example, where the tax outcome is binary or the range of possible outcomes is very limited;

Alternatively, a probability weighted expected value is used where, on the balance of probabilities, there will be a payment to the tax authority but there are a number of possible outcomes. In this case, a probability is assigned to each of the outcomes and the amount provided is the sum of these risk-weighted amounts. In assessing provisions against uncertain tax positions, management uses in-house tax experts, professional firms and previous experience of the taxing authority to evaluate the risk.

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

Pensions and similar benefits (principally healthcare) are accounted for under IAS 19. The retirement benefit obligation in respect of the defined benefit plans is the liability (the present value of all expected future obligations) less the fair value of the plan assets.

The income statement expense is allocated between current service costs, reflecting the increase in liability due to any benefit accrued by employees in the current period, any past service costs/credits and settlement losses or gains which are recognised immediately, and the scheme administration costs.

Actuarial gains and losses are recognised in the statement of comprehensive income in the year in which they arise. These comprise the impact on the liabilities of changes in demographic and financial assumptions compared with the start of the year, actual experience being different to assumptions and the return on plan assets being above or below the amount included in the net pension interest cost.

Payments to defined contribution schemes are charged as an income statement expense as they fall due.

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.

The 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. The 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 the product is ready for sale. 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 are 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% per annum
Short leasehold property	over the period of the lease
Plant, machinery, etc.	10% to 20% per annum
Fixtures, fittings, tools and other equipment	10% to 33% per annum

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.

The net realisable value of inventories is the estimated selling price in the ordinary course of business, less applicable variable selling expenses. Provisions are made for any slow-moving, obsolete or defective inventories.

Trade and other receivables

Trade receivables and contract assets 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 it will not be possible to collect all amounts due according to the original payment terms. Expected credit losses are determined using historical write-offs as a basis, with a default risk multiplier applied to reflect country risk premium. The Group applies the IFRS 9 simplified lifetime expected credit loss approach for trade receivables and contract assets which do not contain a significant financing component.

Provisions

Provisions are recognised when the Group has a present obligation (legal or constructive) as a result of a past event, 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.

Provisions for warranties and product liability, disposal indemnities, restructuring costs, property dilapidations 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 sale

Businesses classified as held for sale 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 sale.

Businesses are classified as held for sale if their carrying amount will be settled principally through a sale rather than through continuing use and the following criteria are met:

The business must be a separate major line of business, available for immediate sale in its present condition;

Management is committed to the plan to sell the business and an active programme to locate a buyer and complete the plan must have been initiated;

The disposal group must be actively marketed for sale at a price that is reasonable in relation to its current fair value;

Shareholder and regulatory approval is highly probable and the plan is unlikely to be significantly changed or withdrawn; and

Sale is expected to be completed within 12 months of the balance sheet date.

The assets and liabilities of businesses held for sale are presented as separate lines on the balance sheet.

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 sale; 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.

In accordance with IAS 21, gains and losses on intragroup monetary assets and liabilities are not eliminated. Therefore foreign exchange rate movements on intercompany loans with discontinued operations are presented on the income statement as non-headline finance cost items.

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, and 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 are measured at FVPL.

Unlisted investments are measured at FVOCI.

Financial assets are derecognised when the right to receive cash-flows from the assets has expired, or has been transferred, and the Group 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. Changes in the hedging instrument are 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 are 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 example, 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 21 for information on the methods which 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 2021

The accounting policies adopted in the preparation of these consolidated financial statements are consistent with those followed in the previous financial year, except for the adoption of the following amendments to the accounting standards issued by the International Accounting Standards Board:

Amendments to IFRS 9, IAS 39 and IFRS 7 - Interest rate benchmark reform (phase 1)

The amendment provides temporary relief from applying specific hedge accounting requirements to hedging relationships directly affected by interbank offered rate (IBOR) reform. The reliefs have the effect that IBOR reform should not generally cause hedge accounting to terminate. The expectations are that the cash flows in relation to hedging relationships will not be altered by the reform and the derivative instruments used in hedge accounting will still provide a close approximation to the extent of the managed risk exposures.

New standards and interpretations not yet adopted

No other new standards, new interpretations or amendments to standards or interpretations have been published which are expected to have a significant impact on the Group's financial statements.

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 are 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 the divisional results and operating assets to monitor the divisional position. See note 3 and note 30 for an explanation of which items are excluded from headline measures.

The Smiths Medical business is classified as a discontinued operation and the segmental information of the Smiths Medical division is disclosed in note 28.

Intersegment sales and transfers are charged at arm's length prices.

Segment trading performance

	Year ended 31 July 2021					
	John Crane £m	Smiths Detection £m	Flex-Tek £m	Smiths Interconnect £m	Corporate costs £m	Total £m
Revenue	865	721	508	312	–	2,406
Divisional headline operating profit	187	99	97	35	–	418
Corporate headline operating costs	–	–	–	–	(46)	(46)
Headline operating profit/(loss)	187	99	97	35	(46)	372
Items excluded from headline measures (note 3)	(3)	(22)	(14)	(1)	(6)	(46)
Operating profit/(loss)	184	77	83	34	(52)	326

	Year ended 31 July 2020					
	John Crane £m	Smiths Detection £m	Flex-Tek £m	Smiths Interconnect £m	Corporate costs £m	Total £m
Revenue	955	806	478	309	–	2,548
Divisional headline operating profit	187	82	83	26	–	378
Corporate headline operating costs	–	–	–	–	(51)	(51)
Headline operating profit/(loss)	187	82	83	26	(51)	327
Items excluded from headline measures (note 3)	(33)	(25)	(31)	(3)	6	(86)
Operating profit/(loss)	154	57	52	23	(45)	241

Operating profit is stated after charging the following items:

	Year ended 31 July 2021					
	John Crane £m	Smiths Detection £m	Flex-Tek £m	Smiths Interconnect £m	Corporate and non- headline £m	Total £m
Depreciation – property, plant and equipment	15	12	6	6	1	40
Depreciation – right of use assets	14	7	4	5	2	32
Amortisation of capitalised development costs	–	7	–	–	–	7
Amortisation of software, patents and intellectual property	3	1	–	2	1	7
Amortisation of acquired intangibles	–	–	–	–	53	53
Share-based payment	3	2	1	1	6	13
Strategic restructuring costs	4	6	–	10	1	21

	Year ended 31 July 2020					
	John Crane £m	Smiths Detection £m	Flex-Tek £m	Smiths Interconnect £m	Corporate and non-headline £m	Total £m
Depreciation – property, plant and equipment	15	12	7	6	1	41
Depreciation – right of use assets	15	7	4	5	2	33
Amortisation of capitalised development costs	–	6	–	–	–	6
Amortisation of software, patents and intellectual property	4	–	–	2	1	7
Amortisation of acquired intangibles	–	–	–	–	57	57
Share-based payment	3	2	1	1	3	10
Strategic restructuring costs	14	14	–	2	1	31
Impairment of capitalised development costs	–	12	–	–	–	12
Balance sheet write-downs – trade receivables	4	5	–	3	–	12

The corporate and non-headline column comprises central information technology, human resources and headquarters costs and non-headline expenses (see note 3).

Segment assets and liabilities

Segment assets

	31 July 2021					
	John Crane £m	Smiths Detection £m	Flex-Tek £m	Smiths Interconnect £m	Corporate and non- headline £m	Total £m
Property, plant, equipment, right of use assets, development projects, other intangibles and investments	152	117	75	44	18	406
Inventory, trade and other receivables	356	417	160	127	10	1,070
Segment assets	508	534	235	171	28	1,476

31 July 2020

	John Crane £m	Smiths Detection £m	Flex-Tek £m	Smiths Interconnect £m	Corporate and non-headline £m	Total £m
Property, plant, equipment, development projects, other intangibles and investments	143	125	64	49	26	407
Inventory, trade and other receivables	395	438	144	136	11	1,124
Segment assets	538	563	208	185	37	1,531

Non-headline assets comprise receivables relating to non-headline items, acquisitions and disposals. Further details of the assets held for sale are disclosed in note 28.

Segment liabilities

31 July 2021

	John Crane £m	Smiths Detection £m	Flex-Tek £m	Smiths Interconnect £m	Corporate and non-headline £m	Total £m
Divisional liabilities	(137)	(276)	(66)	(61)	–	(540)
Corporate and non-headline liabilities	–	–	–	–	(336)	(336)
Segment liabilities	(137)	(276)	(66)	(61)	(336)	(876)

31 July 2020

	John Crane £m	Smiths Detection £m	Flex-Tek £m	Smiths Interconnect £m	Corporate and non-headline £m	Total £m
Divisional liabilities	(142)	(288)	(60)	(55)	–	(545)
Corporate and non-headline liabilities	–	–	–	–	(364)	(364)
Segment liabilities	(142)	(288)	(60)	(55)	(364)	(909)

Non-headline liabilities comprise provisions and accruals relating to non-headline items, acquisitions and disposals. Further details of the liabilities held for sale are disclosed in note 28.

Reconciliation of segment assets and liabilities to statutory assets and liabilities

	Assets		Liabilities	
	31 July 2021 £m	31 July 2020 £m	31 July 2021 £m	31 July 2020 £m
Segment assets and liabilities	1,476	1,531	(876)	(909)
Goodwill and acquired intangibles	1,423	1,489	–	–
Derivatives	77	84	(3)	(4)
Current and deferred tax	167	148	(122)	(111)
Retirement benefit assets and obligations	546	516	(128)	(139)
Cash and borrowings	405	366	(1,502)	(1,561)
Assets and liabilities held for sale	1,243	1,279	(283)	(295)
Statutory assets and liabilities	5,337	5,413	(2,914)	(3,019)

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 2021	19	23	9	9	2	62
Capital expenditure year ended 31 July 2020	18	29	8	8	3	66

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 (FY2020: £787m) and eliminate retirement benefit assets and obligations 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 uses to calculate divisional return on capital employed, is:

	31 July 2021					Total £m
	John Crane £m	Smiths Detection £m	Flex-Tek £m	Smiths Interconnect £m		
Average divisional capital employed	937	1,018	449	395		2,799
Average capital employed – business held for sale						1,335
Average corporate capital employed						31
Average total capital employed						4,165

	31 July 2020					Total £m
	John Crane £m	Smiths Detection £m	Flex-Tek £m	Smiths Interconnect £m		
Average divisional capital employed	989	1,144	474	405		3,012
Average capital employed – business held for sale						1,335
Average corporate capital employed						(32)
Average total capital employed						4,315

The Smiths Medical division has been accounted for as a business held for sale. Further details of the segmental assets and liabilities of the Smiths Medical division are disclosed in note 28.

Analysis of revenue

The revenue for the main product and service lines for each division is:

John Crane	Original equipment £m	Aftermarket £m	Total £m
Revenue year ended 31 July 2021	273	592	865
Revenue year ended 31 July 2020	314	641	955

Smiths Detection	Aviation £m	Other security systems £m	Total £m
Revenue year ended 31 July 2021	546	175	721
Revenue year ended 31 July 2020	577	229	806

Flex-Tek	Aerospace £m	Industrials £m	Total £m
Revenue year ended 31 July 2021	99	409	508
Revenue year ended 31 July 2020	133	345	478

Smiths Interconnect	Components, Connectors & Subsystems £m	Total £m
Revenue year ended 31 July 2021		312
Revenue year ended 31 July 2020		309

Aftermarket sales contributed £1,198m (FY2020: £1,250m) of Group revenue: John Crane aftermarket sales were £592m (FY2020: £641m); Smiths Detection aftermarket sales were £331m (FY2020: £359m); Flex-Tek aftermarket sales were £270m (FY2020: £244m); and Smiths Interconnect aftermarket sales were £5m (FY2020: £6m).

The Group's statutory revenue is analysed as follows:

	Year ended 31 July 2021 £m	Year ended 31 July 2020 Restated* £m
Sale of goods recognised at a point in time	1,723	1,865
Sale of goods recognised over time	94	52
Services recognised over time	589	631
	2,406	2,548

* Following a review of the Group's revenue disclosures, the comparative period ended 31 July 2020 has been adjusted to reclassify £162m of repairs revenue from 'Sale of goods recognised at a point in time' to 'Services recognised over time'. This reclassification has no impact on total revenue, profit or net assets recorded in the comparative period ended 31 July 2020.

Analysis by geographical areas

The Group's revenue by destination and non-current operating assets by location are shown below:

	Revenue		Intangible assets, right of use assets and property, plant and equipment	
	Year ended 31 July 2021 £m	Year ended 31 July 2020 £m	31 July 2021 £m	31 July 2020 £m
Americas	1,244	1,263	1,195	1,231
Europe	522	580	512	553
Asia-Pacific	390	460	70	72
Rest of the World	250	245	41	20
	2,406	2,548	1,818	1,876

Revenue by destination attributable to the United Kingdom was £69m (FY2020: £85m). Revenue earned in the United States of America was material, totalling £1,047m (FY2020: £1,068m). Revenue by destination has been selected as the basis for attributing revenue to geographical areas as this was the geographic attribution of revenue used by management to review - business performance.

Non-current assets located in the United Kingdom total £110m (FY2020: £88m). Significant non-current assets were held in the United States of America £1,138m (FY2020: £1,177m) and Germany £350m (FY2020: £383m).

2 OPERATING COSTS

The Group's operating costs for continuing operations are analysed as follows:

	Year ended 31 July 2021			Year ended 31 July 2020		
	Headline £m	Non-headline (note 3) £m	Total £m	Headline £m	Non-headline (note 3) £m	Total £m
Cost of sales - direct materials, labour, production and distribution overheads	1,491	–	1,491	1,598	–	1,598
Selling costs	188	–	188	231	–	231
Administrative expenses	355	46	401	392	86	478
Headline operating costs	2,034	46	2,080	2,221	86	2,307

Income statement representation

Following a review of the Group's external and internal reporting requirements, management have decided to present the consolidated income statement in a revised format disclosing operating costs on the face of the income statement instead of cost of sales, sales and distribution costs and administrative expenses separately.

The results in the comparatives for the period ended 31 July 2020 have been represented accordingly. Management consider that the revised income statement presentation provides users of the financial statements with more accessible, reliable and relevant information about the Group's financial performance.

Operating profit is stated after charging:

	Year ended 31 July 2021 £m	Year ended 31 July 2020 £m
Research and development expense	76	83
Depreciation of property, plant and equipment	40	41
Depreciation of right of use assets	32	33
Amortisation of intangible assets	67	70
Strategic restructuring programme and write-downs	21	55

Research and development (R&D) cash costs were £94m (FY2020: £119m) comprising £76m (FY2020: £83m) of R&D expensed to the income statement, £8m (FY2020: £16m) of capitalised costs and £10m (FY2020: £20m) of customer funded R&D.

Administrative expenses include £1m (FY2020: £1m) in respect of lease payments for short term and low value leases which were not included within right of use assets and lease liabilities.

Strategic restructuring programme and write-downs

The Group has continued to incur restructuring costs for the strategic restructuring programme announced in FY2020. The table below shows the analysis of the costs recognised in continuing operations for the restructuring programme and asset write-downs and the calculation basis for headline operating profit excluding restructuring and write-downs:

	Year ended 31 July 2021 £m	Year ended 31 July 2020 £m
Restructuring costs – severance costs and footprint rationalisation	21	31
Impairment of capitalised development costs	–	12
Balance sheet write-downs – trade receivables	–	12
Total strategic restructuring costs and write-downs	21	55
Operating profit – see note 30 for definition	326	241
Non-headline operating profit items – see note 3	46	86
Strategic restructuring costs and write-downs – see above	21	55
Headline operating profit excluding restructuring and write-downs	393	382

Auditors' remuneration

The following fees were paid or are payable to the company's auditors, KPMG LLP and other firms in the KPMG network, for the year ended 31 July 2021.

	Year ended 31 July 2021 £m	Year ended 31 July 2020 £m
Audit services		
Fees payable to the Company's auditors for the audit of the Company's annual financial statements	2.3	2.3
Fees payable to the Company's auditors and its associates for other services:		
– the audit of the Company's subsidiaries	4.2	3.6
	6.5	5.9
All other services	0.9	0.5

Other services comprise audit-related assurance services £0.4m (FY2020: £0.3m) and fees for reporting accountant services in connection with a class 1 disposal £0.5m (FY2020: £0.2m). Total fees for non audit services comprise 13% (FY2020: 9%) of audit fees. Audit-related assurance services include the review of the Interim Report.

In the current year, the Group has additionally agreed £1.6m of additional fees with the Group auditors relating to the audit of the prior year financial statements.

3 NON-STATUTORY PROFIT MEASURES

Headline profit measures

The Group has identified and defined a 'headline' measure of performance which is not impacted by material non-recurring items or items considered non-operational/trading in nature. This non-GAAP measure of profit is not intended to be a substitute for any IFRS measures of performance, but is a key measure used by management to understand and manage 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 were as follows:

	Notes	Year ended 31 July 2021 £m	Year ended 31 July 2020 £m
Post-acquisition integration costs and fair value adjustment unwind			
Integration programme costs		(1)	(4)
Unwind of acquisition balance sheet fair value uplift		(1)	–
Acquisition and disposal related transaction costs and provision releases			
Business acquisition/disposal costs		(1)	(3)
Legacy pension scheme arrangements			
Guaranteed Minimum Pension (GMP) equalisation	8	(6)	–
Settlement gain on retirement benefit schemes	8	–	7
Non-headline litigation provision movements			
Movement in provision held against Titeflex Corporation subrogation claims	23	13	(1)
Provision for John Crane, Inc. asbestos litigation	23	(6)	(31)
Cost recovery for John Crane, Inc. asbestos litigation		9	3
Other items			
Amortisation of acquired intangible assets	10	(53)	(57)
Non-headline items in operating profit – continuing operations		(46)	(86)

Post-acquisition integration costs and fair value adjustment unwind

The £1m (FY2020: £4m) of integration programme costs principally related to defined projects for the integration of United Flexible into the existing Flex-Tek business. Integration programme costs included the direct costs of organisational change, site rationalisation and entity closure costs. The United Flexible integration programme concluded in the current year. Integration costs were recognised as non-headline items because they were considered material and bear no relation to the ongoing performance of the acquired businesses.

The impact of unwinding the acquisition balance sheet fair value adjustments required by IFRS 3 'Business combinations' was recognised as non-headline as the charge did not relate to trading activity. The £1m (FY2020: £nil) charge was due to the unwind of fair value uplifts on the acquisition of Royal Metal Products.

Acquisition and disposal related transaction costs and provision releases

The £1m of business acquisition/disposal costs (FY2020: £3m) represented incremental transaction costs primarily on the acquisition of Royal Metal Products. These costs did not include the cost of employees working on transactions and were reported as non-headline because they were dependent on the level of acquisition and disposal activity in the year. In the prior year these costs represented incremental transaction costs on the acquisition of Reflex Photonics and additional payments due on the acquisition of United Flexible following COVID-19 related changes to the US tax code.

Legacy pension scheme arrangements

In the current year past service costs of £6m (FY2020: £nil) were recognised following a further ruling from the UK High Court on GMP equalisation. The prior period settlement gain of £7m was principally due to changes to the Group's US post-retirement healthcare plans as a result of the US Patient Protection and Affordable Care Act. These items were reported as non-headline as they were non-recurring and related to legacy pension liabilities.

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:

The £13m credit (FY2020: £1m charge) recognised by Titeflex Corporation in respect of changes to the estimated cost of future claims was principally due to a reduction in the estimate of the number of future claims and a movement in the discount rate following an increase in US treasury bond yields. See note 22 for further details; and

The £6m charge (FY2020: £31m charge) recognised for John Crane, Inc. asbestos litigation provision was principally due to an increased provision for legal defence costs, partially offset by discount rate movements following an increase in US treasury bond yields. The costs recovered via insurer settlements in the current year were £9m (FY2020: £3m). See note 22 for further details.

Other items

Acquired intangible asset amortisation costs of £53m (FY2020: £57m) were recognised in the current year. This was considered to be a non-headline item on the basis that these charges resulted from acquisition accounting and were non-operational in nature.

Non-headline finance costs items

The non-headline items included in finance costs for continuing operations were as follows:

	Notes	Year ended 31 July 2021 £m	Year ended 31 July 2020 £m
Unwind of discount on provisions	23	(2)	(5)
Other finance income – retirement benefits	8	6	7
Foreign exchange loss on intercompany loan with discontinued operations		(50)	(62)
Other financing gains		–	1
Non-headline items in finance costs – continuing operations		(46)	(59)
Continuing operations – non-headline loss before taxation		(92)	(145)

The financing elements of non-headline legacy liabilities, including the £2m (FY2020: £5m) unwind of discount on provisions, were 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 £6m (FY2020: £7m) of financing credits relating to retirement benefits. These were excluded from headline finance costs because the ongoing costs and credits are a legacy of previous employee pension arrangements.

Foreign exchange gains or losses on intercompany financing between Smiths Medical and the continuing group were recognised on the face of the income statement as a non-headline item due to the classification of the Smiths Medical division as a discontinued operation. The £50m foreign exchange loss in continuing operations (FY2020: £62m) matches the foreign exchange gain in discontinued operations. This was excluded from headline net finance costs as these fair value movements were non-operational in nature and were purely a consequence of the presentational requirements for discontinued operations.

Other financing gains in the current year was £nil (FY2020: £1m); note 4 provides a further breakdown of this balance. Other financing gains represent fair value movements on financial instruments, foreign exchange movements on borrowings and other financing activities which the Group excluded from headline net finance costs. 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.

Non-headline taxation items

The non-headline items included in taxation for continuing operations were as follows:

	Notes	Year ended 31 July 2021 £m	Year ended 31 July 2020 £m
Tax on non-headline loss	6	9	15
US deferred tax asset derecognition	6	–	(5)
UK deferred tax asset re-recognition	6	4	3
Non-headline items in taxation – continuing operations		13	13
Continuing operations – non-headline loss for the year		(79)	(132)

US deferred tax asset derecognition

In FY2020 £5m of tax losses were derecognised following changes in US tax legislation which affected the Group's ability to utilise the losses. The losses equated to non-headline amortisation of intangibles and their derecognition was therefore treated as non-headline. No further derecognition adjustments were made in FY2021.

UK deferred tax asset re-recognition

In FY2019 £36m of deferred tax was derecognised following the decision to separate Smiths Medical which reduces the Group's profitability in the UK. In FY2021 £4m (FY2020: £3m) of deferred tax was re-recognised due to movements in UK pension schemes and deferred tax thereon, including the change in future UK tax rate (from 19% to 25%) applied thereon. These movements were reported as non-headline because the prior year charge was reported as non-headline. The £4m was offset by a £6m deferred tax charge in equity.

Non-headline items for discontinued operations

The non-headline items for discontinued operations were as follows:

	Notes	Year ended 31 July 2021 £m	Year ended 31 July 2020 £m
Acquisition and disposal related transaction costs and provision releases			
Medical separation costs		(18)	(23)
Other items			
Impairment of capitalised development costs and related assets		(61)	–
Non-headline finance costs items			
Foreign exchange gain on intercompany loan with parent		50	62
Non-headline taxation items			
Tax on non-headline loss	28	23	22
Non-headline items in profit from discontinued operations		(6)	61
Profit for the year – non-headline items for continuing and discontinued operations		(85)	(71)

Medical separation costs amounted to £18m (FY2020: £23m); this represents the incremental costs incurred by the Group to demerge/sell the Smiths Medical business. These costs have been reported as non-headline as they were both material and non-recurring.

The intangible asset impairment assessments performed for FY2021 have identified a non-cash impairment charge of £61m (FY2020: £nil) for capitalised development costs and related programme assets; see note 28 for further details. The quantum of this impairment charge was material; therefore it has been separately disclosed as a non-headline item.

The £50m foreign exchange gain on intercompany loan with parent (FY2020: £62m) matches the foreign exchange loss in continuing operations. This was excluded from headline net finance costs as these fair value movements were non-operational in nature and were purely a consequence of the presentational requirements for discontinued operations.

4 NET FINANCE COSTS

	Notes	Year ended 31 July 2021 £m	Year ended 31 July 2020 £m
Interest receivable		9	6
Interest payable:			
– bank loans and overdrafts, including associated fees		(7)	(8)
– other loans		(39)	(43)
– interest on leases		(3)	(4)
Interest payable		(49)	(55)
Headline net finance costs		(40)	(49)
Other financing gains/(losses):			
– valuation movements on fair value hedged debt		22	10
– valuation movements on fair value derivatives		(25)	(4)
– foreign exchange and ineffectiveness on net investment hedges		3	(1)
– retranslation of foreign currency bank balances		(3)	(3)
– other items including counterparty credit risk adjustments and non-hedge accounted derivatives		3	(1)
Other financing gains	3	–	1
Foreign exchange gain on intercompany loan with discontinued operations	3	(50)	(62)
Unwind of discount on provisions	3	(2)	(5)
Net interest income on retirement benefit obligations	8	6	7
Non-headline finance cost items		(46)	(59)
Net finance costs		(86)	(108)

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 2021 £m	Year ended 31 July 2020 £m
Profit attributable to equity shareholders for the year:		
– continuing	156	65
– discontinued	128	200
Total	284	265
Average number of shares in issue during the year (note 24)	396,350,586	396,193,310
Statutory earnings per share total – basic	71.7p	66.9p
Statutory earnings per share total – diluted	71.3p	66.4p
Statutory earnings per share continuing operations – basic	39.4p	16.4p
Statutory earnings per share continuing operations – diluted	39.1p	16.3p

Diluted earnings per share are calculated by dividing the profit attributable to ordinary shareholders by 398,576,502 (FY2020: 398,814,030) ordinary shares, being the average number of ordinary shares in issue during the year adjusted by the dilutive effect of employee share schemes. Zero options (FY2020: zero) were excluded from this calculation because their effect was anti-dilutive.

A reconciliation of statutory and headline earnings per share is as follows:

	Year ended 31 July 2021			Year ended 31 July 2020		
	£m	Basic EPS (p)	Diluted EPS (p)	£m	Basic EPS (p)	Diluted EPS (p)
Total profit attributable to equity shareholders of the Parent Company	284	71.7	71.3	265	66.9	66.4
Exclude: Non-headline items (note 3)	85			71		
Headline earnings per share	369	93.1	92.6	336	84.8	84.2
Profit from continuing operations attributable to equity shareholders of the Parent Company	156	39.4	39.1	65	16.4	16.3
Exclude: Non-headline items (note 3)	79			132		
Headline earnings per share – continuing operations	235	59.3	59.0	197	49.7	49.4

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 2021 £m	Year ended 31 July 2020 £m
The taxation charge in the consolidated income statement for the year comprises:		
Continuing operations		
– current income tax charge	71	77
– current tax adjustments in respect of prior periods	7	2
Current taxation	78	79
Deferred taxation	5	(13)
Total taxation expense – continuing operations	83	66
Discontinued operations		
– current income tax charge	17	11
– deferred taxation	2	8
Total taxation expense – discontinued operations	19	19
Total taxation expense in the consolidated income statement	102	85

	Year ended 31 July 2021 £m	Year ended 31 July 2020 £m
Tax on items charged/(credited) to equity		
Deferred tax:		
– retirement benefit schemes	6	2
– foreign exchange	(5)	(3)
– share-based payment	(1)	1
	–	–

Of the net £6m (FY2020: £2m) charge to equity for retirement benefits, a £6m (FY2020: £3m) charge related to UK retirement schemes.

Current taxation liabilities

	Current tax £m
At 31 July 2019	(51)
Charge to income statement	(79)
Business acquired (note 27)	(3)
Tax paid	95
At 31 July 2020	(38)
Current tax receivable	46
Current tax payable within one year	(79)
Corporation tax payable after more than one year	(5)
At 31 July 2020	(38)
Foreign exchange gain	1
Charge to income statement	(78)
Tax paid	96
At 31 July 2021	(19)
Current tax receivable	75
Current tax payable within one year	(89)
Corporation tax payable after more than one year	(5)
At 31 July 2021	(19)

Taxation liabilities included provisions of £34m (FY2020: £29m), the majority of which related to the risk of challenge to the geographic allocation of profits by tax authorities.

In addition to the risks provided for, the Group faces a variety of other tax risks, which result from operating in a complex global environment, including the ongoing reform of both international and domestic tax rules, new and ongoing tax audits in the Group's larger markets and the challenge to fulfil ongoing tax compliance filing and transfer pricing obligations given the scale and diversity of the Group's global operations.

The Group anticipates that a number of tax audits are likely to conclude in the next 12 to 24 months. Due to the uncertainty associated with such tax items, it is possible that the conclusion of open tax matters may result in a final outcome that varies significantly from the amounts noted above.

Reconciliation of the tax charge

The headline tax charge for the year of £96m (FY2020: £79m) represented an effective rate of 28.9% (FY2020: 28.3%). The headline effective tax rate for the Total Group including discontinued operations was 27.1% (FY2020: 26.2%). The tax charge on the profit for the year for continuing operations was different from the standard rate of corporation tax in the UK of 19.0% (FY2020: 19.0%). The difference is reconciled as follows:

	Year ended 31 July 2021 £m	Year ended 31 July 2020 £m
Profit before taxation	240	133
Notional taxation expense at UK corporate rate of 19.0% (FY2020: 19.0%)	46	25
Different tax rates on non-UK profits and losses	16	10
Non-deductible expenses and other charges	30	16
Tax credits and non-taxable income	(8)	7
Non-headline re-recognition of UK deferred tax asset	(4)	(3)
Other adjustments to unrecognised deferred tax	(4)	(6)
Non-headline derecognition of US deferred tax asset	–	5
Tax on Smiths Medical consolidation adjustments	8	11
Prior year true-up	(1)	1
Tax on continuing operations	83	66
Tax on discontinued operations	19	19
Total taxation expense in the consolidated income statement	102	85
Comprising:		
Taxation on headline profit	96	79
Non-headline taxation items:		
– Tax on non-headline loss	(9)	(15)
– Re-recognition of UK deferred tax asset	(4)	(3)
– Derecognition of US deferred tax asset	–	5
Taxation on non-headline items	(13)	(13)
Taxation on discontinued operations	19	19
Total taxation expense in the consolidated income statement	102	85

The head office of Smiths Group is domiciled in the UK; so the tax charge has been reconciled to UK tax rates.

Deferred taxation assets/(liabilities)

	Property, plant, equipment and intangible assets £m	Employment benefits £m	Losses carried forward £m	Provisions £m	Other £m	Total £m
At 31 July 2019	(84)	(48)	106	91	5	70
Charge to income statement – continuing operations	6	(12)	21	–	(2)	13
Credit to equity	–	(3)	3	–	–	–
Foreign exchange rate movements	4	(3)	(2)	(5)	(2)	(8)
At 31 July 2020	(74)	(66)	128	86	1	75
Deferred tax assets	(5)	(75)	106	63	13	102
Deferred tax liabilities	(69)	9	22	23	(12)	(27)
At 31 July 2020	(74)	(66)	128	86	1	75
Reallocations	11	(1)	(14)	2	2	–
Charge to income statement – continuing operations	4	(31)	27	(5)	–	(5)
Credit to equity	–	(6)	5	–	–	(1)
Foreign exchange rate movements	3	(1)	(2)	(5)	–	(5)
At 31 July 2021	(56)	(105)	144	78	3	64
Deferred tax assets	2	(113)	126	62	15	92
Deferred tax liabilities	(58)	8	18	16	(12)	(28)
At 31 July 2021	(56)	(105)	144	78	3	64

Businesses held for sale had net deferred tax liabilities of £39m at 31 July 2021 (FY2020: £39m).

Of the amounts included within "Other" in the table above as at 31 July 2021, liabilities relating to tax on unremitted earnings were £14m (FY2020: £11m). The aggregate amount of temporary differences associated with investments in subsidiaries for which deferred tax liabilities have not been recognised was immaterial.

The deferred tax asset relating to losses has been recognised on the basis of strong evidence of future taxable profits against which the unutilised tax losses can be relieved or because it is probable that they will be recovered against the reversal of deferred tax liabilities. Deferred tax relating to provisions includes £54m (FY2020: £59m) relating to John Crane Inc. litigation provision, and £11m (FY2020: £16m) relating to Titeflex Corporation litigation provision. See note 23 for additional information on provisions.

Included in other deferred tax balances above was a deferred tax asset related to inventory of £nil (FY2020: £5m) and deferred revenue of £nil (FY2020: £1m).

Unrecognised Deferred Tax

The Group, including Smiths Medical, had unrecognised deferred tax relating to losses amounting to £107m (FY2020: £94m).

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 the unrecognised deferred tax on losses is set out below:

	2021 £m	Expiry of losses	2020 £m	Expiry of losses
Restricted losses – Asia	30	2022-2027	27	2021–2026
Restricted losses – Americas	–	–	1	2021–2022
Unrestricted losses – operating losses	77	No expiry	66	No expiry
Total unrecognised deferred tax on losses	107		94	

Franked Investment Income Group Litigation Order (FII GLO)

The Group joined the FII GLO litigation against HM Revenue & Customs (HMRC) in 2009. The court actions were first filed in 2003 and the Group joined the GLO shortly before the then understood latest date by which it was "in time" to make a claim. Since then there have been about 12 years of litigation in both the EU and English Courts. In November 2020 the Supreme Court, in allowing HMRC's appeal, decided that the time limit for claims should be determined as 6 years from when the claimants (including the Group) knew, or by undertaking reasonable diligence could have known, that they had a valid claim. The case has now returned to the High Court to determine the actual date on the facts of the matter. This is expected to add at least three years to the litigation.

In the light of this decision, management's view of the likelihood of a successful outcome in the Courts has changed. So rather than incurring the costs and management time in continuing with litigation, with a worst case involving an outflow of cash of around £2m, the Group has chosen to settle with HMRC. The settlement amount of £1m was paid to the Group on 11 February 2021. This amount is in addition to £2m which the Group received in FY2018. The Group has now withdrawn from the FII GLO.

EU Commission Investigation re Claims for Partial (75%) Exemption for Profits from qualifying loan relationships

At 31 July 2020, the Group disclosed a contingent liability of £15m, in relation to the EU Commission decision that the UK's tax rules constituted illegal State Aid. In June 2019 the UK government appealed to the General Court of the European Union against the decision. Many UK based international companies also appealed the decision, including Smiths in October 2019. Nonetheless, the UK Government is required to commence recovery from beneficiaries of the alleged aid in line with the European Commission's decision.

The recovery process by the UK tax authorities is underway and HMRC has begun issuing charging notices.

In May 2021, Smiths received confirmation from HMRC that Smiths is not viewed as a beneficiary of State Aid and, subject to any new information coming to light, the matter is regarded as closed. On this basis there is no longer a contingent liability and Smiths is considering whether to withdraw its appeal to the European Court made in October 2019.

7 EMPLOYEES

	Year ended 31 July 2021			Year ended 31 July 2020		
	Continuing operations £m	Discontinued operations £m	Total £m	Continuing operations £m	Discontinued operations £m	Total £m
Staff costs during the period						
Wages and salaries	627	234	861	695	257	952
Social security	85	22	107	84	25	109
Share-based payment (note 9)	13	1	14	10	1	11
Pension costs (including defined contribution schemes - note 8)	26	11	37	28	12	40
	751	268	1,019	817	295	1,112

The average number of persons employed, rounded to the nearest 50 employees, was:

	Year ended 31 July 2021	Year ended 31 July 2020
John Crane	5,950	6,450
Smiths Detection	3,000	3,000
Flex-Tek	3,000	2,850
Smiths Interconnect	2,300	2,450
Corporate (including central/shared IT services)	300	300
Continuing operations	14,550	15,050
Discontinued operations – Smiths Medical	7,500	8,050
Total	22,050	23,100

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 within the Annual Report 2021.

	Year ended 31 July 2021 £m	Year ended 31 July 2020 £m
Key management compensation		
Salaries and short-term employee benefits	12.8	10.3
Cost of retirement benefits	0.9	0.8
Cost of share-based incentive plans	3.9	3.0

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.

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 2021		Year ended 31 July 2020	
	Number of instruments '000	Weighted average exercise price	Number of instruments '000	Weighted average exercise price
SEP	169		270	
LTIP	1,645		1,494	
Restricted stock	82		96	
SAYE	11	£10.11	13	£10.58

Related party transactions

The only related party transactions in FY2021 were key management compensation (FY2020: key management compensation).

8 RETIREMENT BENEFITS

Smiths provides 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 £36m (FY2020: £38m).

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 2021. 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 2021 £m	Year ended 31 July 2020 £m
At beginning of period	372	311
Foreign exchange rate movements	5	2
Current service cost	(2)	(3)
Scheme administration costs	(5)	(5)
Past service cost, curtailments, settlements	(6)	8
Finance income – retirement benefits	6	7
Contributions by employer	30	33
Actuarial gain	13	19
Net retirement benefit asset	413	372

The £413m net retirement benefit asset includes £5m (FY2020: £5m) of pension obligations disclosed as liabilities held for sale.

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 (S.I. Pension Trustees 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 2020. The valuation showed a surplus of £34m on the Technical Provisions funding basis at the valuation date and the funding position has improved since then. As part of the valuation agreement, the contributions of £1m per month previously payable to SIPS are stopping after October 2021. The Group's current expectation is that these contributions will not recommence (although the agreement with the Trustee means that there are circumstances relating to the Scheme's funding level in which they could).

The duration of SIPS liabilities is around 23 years (FY2020: 23 years) for active deferred members, 22 years (FY2020: 22 years) for deferred members and 12 years (FY2020: 12 years) for pensioners and dependants.

In SIPS, an issue has been raised relating to the method used in the early 1990s to equalise retirement ages between men and women in one of its smaller benefits sections. Legal investigation is ongoing to determine if equalisation was undertaken correctly. Should this not be the case, the current high level estimate of the impact of this issue is that it would increase liabilities by an amount between £nil and £20m. Any additional liability is expected to be accounted for at the point the legal investigations are completed and there is clarity on the legally effective date that equalisation of retirement ages was implemented by the scheme.

In October 2020 SIPS purchased a buy-in annuity policy with Canada Life for a premium of approximately £146m. An actuarial loss of £17m was recognised in the period 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 2020. The valuation showed a surplus of £22m on the Technical Provisions funding basis at the valuation date and the funding position

has improved since then. As part of the valuation agreement, the contributions of £1m per month payable to TIGPS stopped with effect from April 2021. The Group's current expectation is that these contributions will not recommence (although the agreement with the Trustee means that there are circumstances relating to the Scheme's funding level in which they could). 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.

The duration of the TIGPS liabilities is around 23 years (FY2020: 25 years) for active deferred members, 21 years (FY2020: 22 years) for deferred members and 11 years (FY2020: 11 years) for pensioners and dependants.

In September 2020 TIGPS purchased a buy-in annuity policy with Aviva for a premium of approximately £141m. An actuarial loss of £23m was recognised in the period as a result of this buy-in agreement.

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 overseen by a Settlor Committee appointed by Smiths Group Services Corp, a wholly-owned subsidiary of the Group.

The duration of the liabilities for the largest US plan is around 18 years (FY2020: 19 years) for active deferred members, 18 years (FY2020: 19 years) for deferred members and 12 years (FY2020: 12 years) for pensioners and dependants.

Risk management

The pensions schemes are exposed to risks that:

investment returns are below expectations, leaving the schemes with insufficient assets in future to pay all their pension obligations;

members and dependants live longer than expected, increasing the value of the pensions which 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 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 of supporting trustees in adopting investment strategies which aim to hedge the value of assets against changes in the value of liabilities caused by changes in interest and inflation rates.

Across SIPS and TIGPS, approximately 71% of pensioner liabilities are now de-risked through 10 bulk annuities.

TIGPS

TIGPS has covered roughly 55% of liabilities with matching annuities, eliminating investment return, longevity, inflation and funding risks in respect of those liabilities. It has also adopted a Liability Driven Investment 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. 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 Driven Investment (LDI) 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.

The principal assumptions used in updating the valuations are set out below:

	2021 UK	2021 US	2021 Other	2020 UK	2020 US	2020 Other
Rate of increase in salaries	n/a	n/a	2.5%	n/a	n/a	3.7%
Rate of increase for active deferred members	4.2%	n/a	n/a	3.8%	n/a	n/a
Rate of increase in pensions in payment	3.3%	n/a	1.5%	2.9%	n/a	3.2%
Rate of increase in deferred pensions	3.3%	n/a	n/a	2.9%	n/a	n/a
Discount rate	1.7%	2.7%	0.7%	1.4%	2.4%	3.0%
Inflation rate	3.3%	n/a	1.5%	2.9%	n/a	2.9%
Healthcare cost increases	4.4%	n/a	n/a	4.4%	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.

Inflation rate assumptions

The RPI inflation assumption of 3.3% has been derived using the Aon UK Government RPI Curve with an Inflation Risk Premium (IRP) of 0.2% p.a.. The Government's response to its consultation on RPI reform was published on 25 November 2020, and strongly implied that RPI will become aligned with CPI-H from 2030. No specific allowance (beyond anything already priced into markets) has been factored into the RPI assumptions for potential changes. The assumption for the long-term gap between RPI and CPI has been reduced by 0.1% (from 0.7% last year to 0.6%) to reflect the Group's view on the market pricing of this gap over the lifetime of the UK schemes' liabilities, i.e. 1.0% pre-2030 and 0.1% post-2030.

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. The US Plan uses a discount rate based on the annualised yield derived from Willis Towers Watson's RATE:Link (10th – 90th) model using the Plan's expected cash-flows.

Mortality assumptions

The mortality assumptions used in the principal UK schemes are based on the "SAPS S3" 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 2020 CMI projections, with a smoothing factor of 7.0 and 'A' parameter of 0.5%/0.25% (SIPS/TIGPS) and blended to a long-term rate of 1.25%. The mortality assumptions used in the principal US schemes are based on generational mortality using Pri-2012 sex-distinct, employee/ non-disabled annuitant table, with a 2012 base year, projected forward generationally with the MP-2020 mortality scale. While COVID-19 has had an impact on mortality in FY2021, the impact on future mortality trends is currently unknown and consequently no adjustment has been made to mortality assumptions in this regard.

	UK schemes				US schemes			
	Male 31 July 2021	Female 31 July 2021	Male 31 July 2020	Female 31 July 2020	Male 31 July 2021	Female 31 July 2021	Male 31 July 2020	Female 31 July 2020
Expected further years of life								
Member who retires next year at age 65	22	24	22	23	20	22	21	22
Member, currently 45, when they retire in 20 years' time	23	25	23	24	22	24	22	24

Sensitivity

Sensitivities in respect of the key assumptions used to measure the principal pension schemes as at 31 July 2021 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 2021 £m	Increase/ (decrease) in scheme assets 31 July 2021 £m	(Increase)/ decrease in scheme liabilities 31 July 2021 £m	Profit before tax for year ended 31 July 2020 £m	Increase/ (decrease) in scheme assets 31 July 2020 £m	(Increase)/ decrease in scheme liabilities 31 July 2020 £m
Rate of mortality – 1 year increase in life expectancy	(2)	99	(209)	(2)	85	(216)
Rate of mortality – 1 year decrease in life expectancy	2	(97)	206	2	(84)	212
Rate of inflation – 0.25% increase	(1)	30	(98)	(1)	26	(107)
Discount rate – 0.25% increase	3	(38)	146	4	(33)	156
Market value of scheme assets – 2.5% increase	1	73	–	1	81	–

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

The pension schemes hold assets in a variety of pooled funds, in which the underlying assets typically are invested in credit and cash assets. These funds are valued. The price of the funds is set by administrators/custodians employed by the investment managers and based on the value of the underlying assets held in the funds. Details of pricing methodology are set out within internal control reports provided for each fund. Prices are updated daily, weekly or monthly depending upon the frequency of the fund's dealing.

Bonds are valued using observable broker quotes. Gilt repurchase obligations are valued by the relevant manager, which derives the value using an industry recognised model with observable inputs.

Property is valued by specialists applying recognised property valuation methods incorporating current market data on rental yields and transaction prices.

Total return, interest and inflation swaps and forward FX contracts are bilateral agreements between counterparties and do not have observable market prices. These derivative contracts are valued using observable inputs.

Insured liabilities comprise annuity policies broadly matching the scheme obligation to identified groups of pensioners. These assets are valued by an external qualified actuary at the actuarial valuation of the corresponding liability, reflecting this matching relationship. The insurance policies are treated as qualifying insurance policies as none of the insurers are related parties of Smiths Group, and the proceeds of the policies can only be used to pay or fund employee benefits for the respective schemes, are not available to Smiths Group's creditors and cannot be paid to Smiths Group.

Retirement benefit plan assets

	31 July 2021 – £m				31 July 2020 – £m			
	UK schemes	US schemes	Other countries	Total	UK schemes	US schemes	Other countries	Total
Cash and cash equivalents	71	1	–	72	106	1	1	108
Pooled funds:								
– Pooled equity	–	–	3	3	38	–	2	40
– Pooled Diversified Growth	–	–	19	19	48	–	–	48
– Pooled credit	420	–	–	420	607	–	–	607
Corporate bonds	791	192	–	983	797	212	–	1,009
Government bonds/LDI	1,298	79	3	1,380	1,257	98	3	1,358
Insured liabilities	1,462	–	–	1,462	1,300	–	1	1,301
Property	62	–	–	62	78	–	–	78
Other	–	–	5	5	9	–	24	33
Total market value	4,104	272	30	4,406	4,240	311	31	4,582

The assets are unquoted. Government bonds/LDI portfolios contain £1,929m (FY2020: £2,343m) of UK Government bonds (Gilts), £626m (FY2020: £1,063m) of Gilt repurchase obligations and £5m (FY2020: £23m) of interest and inflation swap obligations.

The UK bond portfolios include forward FX contracts with a net value of £1m (FY2020: £11m). These are held to hedge against foreign currency risk in respect of overseas bonds.

The scheme assets do not include any property occupied by, or other assets used by, the Group.

Present value of funded scheme liabilities and assets for the main UK and US schemes

	31 July 2021 – £m			31 July 2020 – £m			
	SIPS	TIGPS	US schemes	SIPS	TIGPS	US schemes	
Present value of funded scheme liabilities:							
– Active deferred members		(42)	(29)	(73)	(44)	(61)	(95)
– Deferred members		(810)	(632)	(119)	(961)	(593)	(138)
– Pensioners		(1,226)	(809)	(81)	(1,178)	(866)	(81)
Present value of funded scheme liabilities		(2,078)	(1,470)	(273)	(2,183)	(1,520)	(314)
Market value of scheme assets		2,410	1,684	272	2,466	1,754	311
Surplus/(deficit)		332	214	(1)	283	234	(3)

Net retirement benefit obligations

	31 July 2021 – £m				31 July 2020 – £m			
	UK schemes	US schemes	Other countries	Total	UK schemes	US schemes	Other countries	Total
Market value of scheme assets	4,104	272	30	4,406	4,240	311	31	4,582
Present value of funded scheme liabilities	(3,558)	(273)	(38)	(3,869)	(3,724)	(314)	(40)	(4,078)
Surplus/(deficit)	546	(1)	(8)	537	516	(3)	(9)	504
Unfunded pension plans	(54)	(7)	(55)	(116)	(55)	(8)	(60)	(123)
Post-retirement healthcare	(4)	(1)	(3)	(8)	(5)	(1)	(3)	(9)
Present value of unfunded obligations	(58)	(8)	(58)	(124)	(60)	(9)	(63)	(132)
Net pension asset/(liability)	488	(9)	(66)	413	456	(12)	(72)	372
Retirement benefit assets	546	–	–	546	516	–	–	516
Retirement benefit liabilities	(58)	(9)	(61)	(128)	(60)	(12)	(67)	(139)
Liabilities held for sale	–	–	(5)	(5)	–	–	(5)	(5)
Net pension asset/(liability)	488	(9)	(66)	413	456	(12)	(72)	372

Liabilities held for sale comprise £4m (FY2020: £4m) of unfunded pension plans and £1m (FY2020: £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 i.e. when the last beneficiary's obligation has been met.

Amounts recognised in the consolidated income statement

	Year ended 31 July 2021 £m	Year ended 31 July 2020 £m
Amounts charged to operating profit		
Current service cost	2	3
Past service costs – Guaranteed Minimum Pension (GMP) equalisation	6	–
Settlement gain	–	(8)
Scheme administration costs	5	5
	13	–
The operating cost is charged as follows:		
Cost of sales	–	1
Sales and distribution costs	–	–
Headline administrative expenses	7	6
Non-headline settlement gain	–	(7)
Non-headline administrative expenses	6	–
	13	–
Amounts credited to finance costs		
Non-headline other finance income – retirement benefits	(6)	(7)

Amounts recognised directly in the consolidated statement of comprehensive income

	Year ended 31 July 2021 £m	Year ended 31 July 2020 £m
Re-measurements of retirement defined benefit assets and liabilities		
Difference between interest credit and return on assets	(57)	274
Experience gains on scheme liabilities	44	28
Actuarial gains arising from changes in demographic assumptions	10	22
Actuarial gains/(losses) arising from changes in financial assumptions	16	(305)
	13	19

Changes in present value of funded scheme assets

	31 July 2021 – £m				31 July 2020 – £m			
	UK schemes	US schemes	Other countries	Total	UK schemes	US schemes	Other countries	Total
At beginning of period	4,240	311	31	4,582	4,106	282	36	4,424
Interest on assets	58	7	1	66	86	9	1	96
Actuarial movement on scheme assets	(40)	(17)	–	(57)	222	54	(2)	274
Employer contributions	20	4	1	25	24	–	2	26
Scheme administration costs	(4)	(1)	–	(5)	(4)	(1)	–	(5)
Foreign exchange rate movements	–	(17)	–	(17)	–	(21)	(3)	(24)
Benefits paid	(170)	(15)	(3)	(188)	(194)	(12)	(3)	(209)
At end of period	4,104	272	30	4,406	4,240	311	31	4,582

Changes in present value of funded defined benefit obligations

	31 July 2021 – £m				31 July 2020 – £m			
	UK schemes	US schemes	Other countries	Total	UK schemes	US schemes	Other countries	Total
At beginning of period	(3,724)	(314)	(40)	(4,078)	(3,637)	(291)	(45)	(3,973)
Current service cost	–	–	(1)	(1)	–	–	(1)	(1)
Past service costs	(6)	–	–	(6)	–	–	–	–
Interest on obligations	(51)	(7)	(2)	(60)	(75)	(10)	(1)	(86)
Actuarial movement on liabilities	53	16	–	69	(206)	(47)	2	(251)
Foreign exchange rate movements	–	17	2	19	–	22	2	24
Benefits paid	170	15	3	188	194	12	3	209
At end of period	(3,558)	(273)	(38)	(3,869)	(3,724)	(314)	(40)	(4,078)

Changes in present value of unfunded defined benefit pensions and post-retirement healthcare plans

	Assets		Obligations	
	Year ended 31 July 2021 £m	Year ended 31 July 2020 £m	Year ended 31 July 2021 £m	Year ended 31 July 2020 £m
At beginning of period	–	–	(132)	(140)
Current service cost	–	–	(1)	(2)
Interest on obligations	–	–	(1)	(3)
Actuarial movement	–	–	2	(4)
Employer contributions	5	7	–	–
Foreign exchange rate movements	–	–	3	2
Liabilities extinguished on settlements	–	–	–	8
Benefits paid	(5)	(7)	5	7
At end of period	–	–	(124)	(132)

Cash contributions

Company contributions to the defined benefit pension plans and post-retirement healthcare plans totalled £30m (FY2020: £33m). This comprised regular contributions to funded schemes of £12m (FY2020: £12m) to SIPS, £8m (FY2020: £12m) to TIGPS, £4m (FY2020: £nil) to funded US schemes and contributions to other schemes of £1m (FY2020: £2m). In addition, £5m (FY2020: £7m) was spent on providing benefits under unfunded defined benefit pension and post-retirement healthcare plans.

In FY2022, cash contributions to the Group's schemes are expected to total up to £15m, including £3m to SIPS, with the balance relating to other schemes and post-retirement healthcare.

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 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, cash conversion, and free cash-flow.

Smiths Excellence Plan (SEP)

The last Smiths Excellence plan (SEP) grant was issued in October 2019 and vested on 31 July 2021, no further SEP awards have been made. The SEP was designed to reinforce value creation over the medium term by focusing on specific objectives in key areas of operational performance. Awards vested after two years, depending on performance on the operational objectives during the first year and continued employment with the Group. There was no re-testing of performance. However, the Remuneration Committee had discretion to adjust vesting rates if material misstatements in reported performance were subsequently identified and awards were subject to clawback provisions in the event of misconduct.

Directors were not eligible to participate in the SEP.

Restricted stock

Restricted stock is used by the Remuneration Committee, as a part of 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.

Save as you earn (SAYE)

The SAYE scheme is an HM Revenue & Customs approved all employee savings related share option scheme which is open to all UK employees. Participants enter into a contract to save a fixed amount per month of up to £500 in aggregate for three or five years and are granted an option over shares at a fixed option price, set at a discount to market price at the date of invitation to participate. The number of shares is determined by the monthly amount saved and the bonus paid on maturity of the savings contract. Options granted under the SAYE scheme are not subject to any performance conditions.

	Long-term incentive plans	SEP	Restricted stock	Save as you earn scheme	Total	Weighted average exercise price £
Ordinary shares under option/award ('000)						
31 July 2019	3,892	1,287	192	1,012	6,383	£1.77
Granted	1,379	924	48	695	3,046	£2.08
Exercised	(785)	(406)	(95)	(254)	(1,540)	£1.48
Lapsed	(549)	(510)	(14)	(246)	(1,319)	£2.22
31 July 2020	3,937	1,295	131	1,207	6,570	£1.89
Granted	2,143	358	11	139	2,651	£0.68
Exercised	(346)	(411)	(60)	(165)	(982)	£2.03
Lapsed	(819)	(391)	(18)	(96)	(1,324)	£0.75
31 July 2021	4,915	851	64	1,085	6,915	£1.63

Options and awards were exercised on an irregular basis during the period. The average closing share price over the financial year was 1,508.63p (FY2020: 1,490.92p). There has been no change to the effective option price of any of the outstanding options during the period. The number of exercisable share options at 31 July 2021 was nil (31 July 2020: nil).

Range of exercise prices	Total shares under options/awards at 31 July 2021 ('000)	Weighted average remaining contractual life at 31 July 2021 (months)	Total shares under options/awards at 31 July 2020 ('000)	Weighted average remaining contractual life at 31 July 2020 (months)
£0.00 – £2.00	5,830	15	5,363	14
£6.01 – £10.00	655	30	744	40
£10.01 – £12.00	430	24	463	22

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 model were volatility of 25% to 20% (FY2020: 25% to 20%) and dividend yield of 2.8% (FY2020: 2.8%), 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 £14.73 (FY2020: £14.39), LTIP of £14.10 (FY2020: £14.60), and restricted stock of £14.63 (FY2020: £14.04). Staff costs included £14m (FY2020: £11m) for share-based payments, of which £13m (FY2020: £10m) related to equity-settled share-based payments.

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 2019	1,312	144	565	171	2,192
Foreign exchange rate movements	(69)	(5)	(34)	(6)	(114)
Business combinations (note 27)	11	–	15	–	26
Additions	–	16	–	10	26
Disposals	–	–	–	(1)	(1)
At 31 July 2020	1,254	155	546	174	2,129
Foreign exchange rate movements	(68)	(7)	(30)	(6)	(111)
Business combinations (note 27)	21	–	46	–	67
Additions	–	8	–	10	18
Disposals	–	–	–	(1)	(1)
At 31 July 2021	1,207	156	562	177	2,102
Amortisation and impairments					
At 31 July 2019	66	99	205	138	508
Foreign exchange rate movements	(4)	(5)	(13)	(2)	(24)
Amortisation charge for the year	–	6	57	7	70
Impairment charge for the year	–	12	–	–	12
Disposals	–	–	–	(1)	(1)
At 31 July 2020	62	112	249	142	565
Foreign exchange rate movements	(3)	(5)	(15)	(4)	(27)
Amortisation charge for the year	–	7	53	7	67
Disposals	–	–	–	(1)	(1)
At 31 July 2021	59	114	287	144	604
Net book value at 31 July 2021	1,148	42	275	33	1,498
Net book value at 31 July 2020	1,192	43	297	32	1,564
Net book value at 31 July 2019	1,246	45	360	33	1,684

In addition to goodwill, acquired intangible assets comprise:

	Patents, licences and trademarks £m	Technology £m	Customer relationships £m	Total acquired intangibles £m
Cost				
At 31 July 2019	15	140	410	565
Foreign exchange rate movements	(1)	(9)	(24)	(34)
Business combinations (note 27)	1	8	6	15
At 31 July 2020	15	139	392	546
Foreign exchange rate movements	(1)	(7)	(22)	(30)
Business combinations (note 27)	3	2	41	46
At 31 July 2021	17	134	411	562
Amortisation				
At 31 July 2019	3	53	149	205
Foreign exchange rate movements	–	(4)	(9)	(13)
Charge for the year	1	11	45	57
At 31 July 2020	4	60	185	249
Foreign exchange rate movements	–	(3)	(12)	(15)
Charge for the year	1	10	42	53
At 31 July 2021	5	67	215	287
Net book value at 31 July 2021	12	67	196	275
Net book value at 31 July 2020	11	79	207	297
Net book value at 31 July 2019	12	87	261	360

Individually material intangible assets comprise £76m of customer related intangibles attributable to United Flexible (remaining amortisation period: 5 years), £66m of customer relationship intangibles attributable to Morpho Detection (remaining amortisation period: 7 years), £37m of customer related intangibles attributable to Royal Metal (remaining amortisation period: 7 years), and £14m of development cost intangibles attributable to a computed tomography programme in Detection that is currently under development.

The charge associated with the amortisation of intangible assets is included in operating costs on the consolidated income statement.

11 IMPAIRMENT TESTING

Goodwill

Goodwill is tested for impairment at least annually or whenever there is an indication that the carrying value may not be recoverable.

Further details of the impairment review process and judgements are included in the “Significant judgements made in applying accounting policies” section of the “Basis of preparation” for the consolidated financial statements.

For the purpose of impairment testing, assets are grouped at the lowest levels for which there are separately identifiable cash-flows, known as cash generating units (CGUs), taking into consideration the commonality of reporting, policies, leadership and intra-divisional trading relationships. Goodwill acquired through business combinations is allocated to groups of CGUs at a divisional (or operating segment) level, being the lowest level at which management monitors performance separately.

The carrying value of goodwill at 31 July is allocated by division as follows:

	2021 £m	2021 Number of CGUs	2020 £m	2020 Number of CGUs
John Crane	129	1	136	1
Smiths Detection	610	1	642	1
Flex-Tek	169	1	161	1
Smiths Interconnect	240	1	253	1
Smiths Medical – classified as an asset held for sale (see note 28)	–	1	–	1
	1,148	5	1,192	5

Principal assumptions used in impairment testing

The recoverable amount for impairment testing is determined from the higher of fair value less costs of disposal and value in use of the CGU. In assessing value in use, the estimated future cash flows are discounted to their present value using a post-tax discount rate that reflects current market assessments of the time value of money, from which pre-tax discount rates are determined.

Fair value less costs of disposal 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.

The value in use of CGUs is calculated as the net present value of the projected risk-adjusted cash-flows of each CGU. These cash-flow forecasts are based on the FY2022 business plan (as approved by the Board) and the five year detailed divisional strategic projections which have been prepared by divisional management and approved by the Chief Financial Officer.

The key assumptions used in determining the value in use were:

Sales: Projected sales were built up with reference to markets and product categories. They incorporated 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 did not include the impact of future restructuring projects to which the Group was not yet committed;

Projected capital expenditure: The cash-flow forecasts for capital expenditure were based on past experience and included committed ongoing capital expenditure consistent with the FY2022 budget and the divisional strategic projections. The forecast did not include any future capital expenditure that improved/enhanced the operation/asset in excess of its current standard of performance;

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. In determining the risk adjusted discount rate, management considered the systematic risk to each of the Group's CGUs and applied an average of discount rates used by other companies for the industries in which Smiths' divisions operate. Pre-tax rates of 9.9% to 13.2% (FY2020: 9.4% to 12.3%) have been used for the impairment testing;

Long-term growth rates: For the purposes of the Group's value in use calculations, a long-term growth rate into perpetuity was applied immediately at the end of the five year forecast period. Growth rates for the period after the detailed forecasts were based on the long-term GDP projections of the primary market for each CGU. The average growth rate used in the testing was 2.1% (FY2020: 1.9%). These rates did not reflect the long-term assumptions used by the Group for investment planning; and

COVID-19: The COVID-19 pandemic has evolved during FY2021, with some countries continuing to require businesses to limit or suspend operations whilst implementing travel restrictions and quarantine measures. These virus containment measures have had a significant adverse impact on global economic activity. It remains challenging to predict the full extent and duration of the pandemic impact on Smiths' businesses and the countries where Smiths operates. Based on information available as at 31 July 2021, management has made adjustments to the five year forecasts used in the Group's impairment testing in order to reflect the estimated impact.

The assumptions used in the impairment testing of CGUs with significant goodwill balances were as follows:

	Year ended 31 July 2021				
	John Crane	Smiths Detection	Flex-Tek	Smiths Interconnect	Smiths Medical
Net book value of goodwill (£m)	129	610	169	240	535
Basis of valuation	Value in use	Value in use	Value in use	Value in use	Value in use
Discount rate – pre-tax	13.2%	10.3%	11.4%	11.1%	9.9%
– post-tax	9.5%	8.2%	9.1%	9.0%	8.0%
Period covered by management projections	5 years	5 years	5 years	5 years	5 years
Revenue – average annual growth rate over projection period	6.4%	2.8%	5.0%	5.9%	5.9%
Average earnings before interest and tax margin	25.4%	13.4%	20.0%	19.0%	18.8%
Long-term growth rates	2.1%	1.8%	1.9%	2.4%	2.2%

	Year ended 31 July 2020				
	John Crane	Smiths Detection	Flex-Tek	Smiths Interconnect	Smiths Medical
Net book value of goodwill (£m)	136	642	161	253	563
Basis of valuation	Value in use	Value in use	Value in use	Value in use	Value in use
Discount rate – pre-tax	12.3%	10.8%	11.3%	10.7%	9.4%
– post-tax	9.3%	8.0%	8.7%	8.5%	7.5%
Period covered by management projections	5 years	5 years	5 years	5 years	5 years
Revenue – average annual growth rate over projection period	4.3%	2.1%	3.2%	4.2%	2.0%
Average earnings before interest and tax margin	24.1%	13.5%	17.5%	17.0%	18.1%
Long-term growth rates	2.0%	1.7%	1.8%	2.1%	2.0%

Forecast earnings before interest and tax have been projected using:

expected future sales based on the strategic plan, which was constructed at a market level with input from key account managers, product line managers, business development and sales teams. An assessment of the market and existing contracts/programmes was made to produce the sales forecast; and current cost structure and production capacity. The projections did not include the impact of future restructuring projects to which the Group was not yet committed.

Sensitivity analysis

With the exception of the Smiths Detection CGU, the recoverable amount of all CGUs exceeded their carrying value, on the basis of the assumptions set out in the table above and any reasonably possible changes thereof.

The estimated recoverable amount of the Smiths Detection CGU exceeded the carrying value by £334m. Any decline in estimated value-in-use in excess of this amount would result in the recognition of impairment charges. If the assumptions used in the impairment review were changed to a greater extent than as presented in the following table, the changes would, in isolation, lead to impairment losses being recognised for the year ended 31 July 2021:

Change required for carrying value to equal recoverable amount - FY2021	Smiths Detection	
Revenue - compound annual growth rate (CAGR) over 5 year projection period	-560 bps decrease	
Post-tax discount rate	+220 bps increase	
Change required for carrying value to equal recoverable amount - FY2020	Smiths Interconnect	Smiths Detection
Forecast earnings before interest and tax	-3,800 bps decrease	-1,500 bps decrease
Post-tax discount rate	+400 bps increase	+110 bps increase
Long-term growth rate	-740 bps decrease	-180 bps decrease

Property, plant and equipment, right of use assets and finite-life intangible assets

At each reporting period date, the Group reviews the carrying amounts of its property, plant, equipment, right of use assets and finite-life intangible assets to determine whether there is any indication that those assets have suffered an impairment loss.

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.

In FY2021 Smiths Medical conducted detailed impairment assessments on its capitalised development costs and related assets. This impairment assessment identified a non-cash impairment charge of £61 million that has been recognised as a non-headline item in discontinued operations. The most significant element related to the Intellifuse Large Volume Pump (LVP); a summary of the basis for and conclusion of this assessment has been included in note 28 'Discontinued operations and businesses held for sale'.

No impairment charges have been recognised in FY2021 for continuing operations. In the prior year £12m of impairment charges were recognised against capitalised development costs in Smiths Detection; see note 2 for further details.

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 2019	186	396	138	720
Foreign exchange rate movements	(10)	(25)	(5)	(40)
Business combinations (see note 27)	–	2	–	2
Additions	5	27	8	40
Disposals	(6)	(17)	(8)	(31)
At 31 July 2020	175	383	133	691
Foreign exchange rate movements	(6)	(21)	(6)	(33)
Business combinations (note 27)	–	2	–	2
Additions	6	38	–	44
Disposals	(3)	(14)	(5)	(22)
At 31 July 2021	172	388	122	682
Depreciation				
At 31 July 2019	104	271	113	488
Foreign exchange rate movements	(6)	(17)	(4)	(27)
Charge for the year	10	23	8	41
Disposals	(6)	(16)	(7)	(29)
At 31 July 2020	102	261	110	473
Foreign exchange rate movements	(3)	(15)	(6)	(24)
Charge for the year	10	26	4	40
Disposals	(3)	(12)	(4)	(19)
At 31 July 2021	106	260	104	470
Net book value at 31 July 2021	66	128	18	212
Net book value at 31 July 2020	73	122	23	218
Net book value at 31 July 2019	82	125	25	232

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13 RIGHT OF USE ASSETS

	Properties £m	Vehicles £m	Equipment £m	Total £m
Cost or valuation				
Right of use assets on transition on 1 August 2019	95	10	1	106
Foreign exchange rate movements	(6)	(1)	–	(7)
Business combinations (note 27)	1	–	–	1
Recognition of right of use asset	21	5	–	26
Derecognition of right of use asset	(1)	–	–	(1)
At 31 July 2020	110	14	1	125
Foreign exchange rate movements	(5)	(1)	–	(6)
Business combinations (note 27)	9	1	–	10
Recognition of right of use asset	44	3	–	47
Derecognition of right of use asset	(12)	–	–	(12)
At 31 July 2021	146	17	1	164
Depreciation				
Foreign exchange rate movements	(2)	–	–	(2)
Charge for the year	28	5	–	33
At 31 July 2020	26	5	–	31
Foreign exchange rate movements	(2)	–	–	(2)
Charge for the year	27	5	–	32
Derecognition of right of use asset	(5)	–	–	(5)
At 31 July 2021	46	10	–	56
Net book value at 31 July 2021	100	7	1	108
Net book value at 31 July 2020	84	9	1	94

14 INVENTORIES

	31 July 2021 £m	31 July 2020 £m
Raw materials and consumables	117	122
Work in progress	81	119
Finished goods	183	205
Total inventories	381	446

In FY2021 continuing operations consumed £1,233m (FY2020: £1,244m) of inventory, £8m (FY2020: £20m) was charged for the write-down of inventory and £4m (FY2020: £9m) was released from provisions no longer required.

Discontinued operations consumed £218m (FY2020: £299m) of inventory, £4m (FY2020: £4m) was charged for the write-down of inventory and £1m (FY2020: £nil) was released from provisions no longer required. Further details of discontinued operations are disclosed in note 28.

Inventory provisioning

	31 July 2021 £m	31 July 2020 £m
Gross inventory carried at full value	324	368
Gross value of inventory partly or fully provided for	104	132
	428	500
Inventory provision	(47)	(54)
Inventory after provisions	381	446

15 TRADE AND OTHER RECEIVABLES

	31 July 2021 £m	31 July 2020 £m
Non-current		
Contract assets	49	46
Other receivables	10	6
	59	52
Current		
Trade receivables	431	448
Prepayments	26	23
Contract assets	131	123
Other receivables	42	33
	630	627

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 accounted for at amortised cost. The maximum credit exposure arising from these financial assets was £629m (FY2020: £580m).

Contract assets comprise unbilled balances not yet due on contracts, where revenue recognition does not align with the agreed payment schedule. The main movements in the year arose from increases in contract asset balances of £18m (FY2020: £6m) principally within Smiths Detection, offset by £6m of foreign currency translation losses (FY2020: £7m loss).

A number of Flex-Tek's customers provide supplier finance schemes which allow their suppliers to sell trade receivables, without recourse, to banks. This is commonly known as invoice discounting or factoring. During FY2021 Flex-Tek collected £81m of receivables through these schemes (FY2020: £68m). The impact of invoice discounting on the FY2021 balance sheet was that trade receivables were reduced by £14m (2020: £11m). The cash received via these schemes was classified as an operating cash inflow as it had arisen from operating activities.

Trade receivables are disclosed net of provisions for expected credit loss, with historical write-offs used as a basis and a default risk multiplier applied to reflect country risk premium. 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 was the US Federal Government, representing 7% (FY2020: 7%) of Group revenue.

Ageing of trade receivables

	31 July 2021 £m	31 July 2020 £m
Trade receivables which are not yet due	338	342
Trade receivables which are between 1-30 days overdue	45	51
Trade receivables which are between 31-60 days overdue	15	18
Trade receivables which are between 61-90 days overdue	8	9
Trade receivables which are between 91-120 days overdue	5	12
Trade receivables which are more than 120 days overdue	52	51
	463	483
Expected credit loss allowance provision	(32)	(35)
Trade receivables	431	448

Movement in expected credit loss allowance

	31 July 2021 £m	31 July 2020 £m
Brought forward loss allowance at the start of the period	35	24
Exchange adjustments	(2)	(2)
Increase in allowance recognised in the income statement	6	18
Amounts written off or recovered during the year	(7)	(5)
Carried forward loss allowance at the end of the year	32	35

16 TRADE AND OTHER PAYABLES

	31 July 2021 £m	31 July 2020 £m
Non-current		
Other payables	13	15
Contract liabilities	46	36
	59	51
Current		
Trade payables	188	178
Other payables	39	12
Other taxation and social security costs	28	25
Accruals	188	194
Contract liabilities	87	118
	530	527

Trade and other payables, including accrued expenses and other payables qualifying as financial instruments, are accounted for at amortised cost and are categorised as Trade and other financial payables in note 21.

Contract liabilities comprise deferred income balances of £133m (FY2020: £154m) in respect of payments being made in advance of revenue recognition. The movement in the year arises primarily from the long term contracts of the Smiths Detection division where invoicing under milestones precedes the delivery of the programme performance obligations. Revenue recognised in the year includes £94m (FY2020: £126m) that was included in the opening contract liabilities balance. This revenue primarily relates to the delivery of performance obligations in the Smiths Detection business.

17 FINANCIAL ASSETS – OTHER INVESTMENTS

At 31 July 2021, £4m (FY2020: £11m) was held on deposit with banks as security for liabilities or letters of credit.

The remaining balance of financial assets relates to the Group's investments in early stage businesses that are developing or commercialising related technology.

18 BORROWINGS AND NET DEBT

This note sets out the calculation of net debt, an important measure in explaining our financing position. Net debt includes accrued interest and fair value adjustments relating to hedge accounting.

	31 July 2021 £m	31 July 2020 £m
Cash and cash equivalents		
Net cash and deposits	405	366
Short-term borrowings		
Lease liabilities	(27)	(31)
Interest accrual	(9)	(10)
	(36)	(41)
Long-term borrowings		
\$400m 3.625% US\$ Guaranteed notes 2022	(289)	(308)
€600m 1.25% Eurobond 2023	(516)	(546)
€650m 2.00% Eurobond 2027	(567)	(601)
Lease liabilities	(94)	(65)
	(1,466)	(1,520)
Borrowings	(1,502)	(1,561)
Derivatives managing interest rate risk and currency profile of the debt	75	82
Net debt (excludes net cash of £4m in discontinued operations (FY2020: net debt of £28m))	(1,022)	(1,113)

Net debt including net cash/debt held in discontinued operations was £1,018m (FY2020: £1,141m).

Cash and cash equivalents

	31 July 2021 £m	31 July 2020 £m
Cash at bank and in hand	219	173
Short-term deposits	186	193
Cash and cash equivalents	405	366

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 £30m (FY2020: £31m) was charged to the consolidated income statement in the period in respect of public bonds.

Movements in assets/(liabilities) arising from financing activities

	Changes in net debt					Changes in other financing items: FX contracts £m	Total liabilities from financing activities £m
	Cash and cash equivalents £m	Other short-term borrowings £m	Long-term borrowings £m	Interest rate & cross- currency swaps £m	Net debt £m		
At 31 July 2019	289	(9)	(1,500)	45	(1,175)	(1)	(1,176)
Adoption of IFRS 16	–	(26)	(79)	–	(105)	–	(105)
Sub-total	289	(35)	(1,579)	45	(1,280)	(1)	(1,281)
Foreign exchange gains/(losses)	(26)	1	40	–	15	(3,780)	(3,765)
Net cash inflow from continuing operations *	103	–	–	–	103	3,780	3,883
Lease liabilities acquired	–	–	(1)	–	(1)	–	(1)
Net movement from lease modifications	–	(6)	(20)	–	(26)	–	(26)
Fair value movement from interest rate hedging	–	–	10	–	10	–	10
Revaluation of derivative contracts	–	–	–	37	37	(1)	36
Interest expense taken to income statement**	–	(4)	(30)	(13)	(47)	–	(47)
Interest paid	–	–	29	13	42	–	42
Payment of lease liabilities	–	34	–	–	34	–	34
Reclassification to short-term borrowings	–	(31)	31	–	–	–	–
At 31 July 2020	366	(41)	(1,520)	82	(1,113)	(2)	(1,115)
Foreign exchange gains/(losses)	(24)	2	79	–	57	(3,200)	(3,143)
Net cash inflow from continuing operations *	63	33	–	–	96	3,200	3,296
Lease liabilities acquired	–	(1)	(10)	–	(11)	–	(11)
Net movement from lease modifications	–	(46)	–	–	(46)	–	(46)
Fair value movement from interest rate hedging	–	–	8	–	8	–	8
Revaluation of derivative contracts	–	–	–	(7)	(7)	3	(4)
Interest expense taken to income statement**	–	(4)	(31)	–	(35)	–	(35)
Interest paid	–	–	29	–	29	–	29
Reclassification to short-term borrowings	–	21	(21)	–	–	–	–
At 31 July 2021	405	(36)	(1,466)	75	(1,022)	1	(1,021)

* The £63m (FY2020: £103m) of net cash inflow from continuing operations excluded £28m (FY2020: £6m outflow) of net cash inflow from discontinued operations. Net cash inflow for the total Group including discontinued operations was £91m (FY2020: £97m).

** The Group has also incurred £9m (FY2020: £8m) of bank charges that were expensed when paid and were not included in net debt.

Cash pooling

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 2021 the total value of overdrafts on accounts

in interest compensation cash pooling systems was £nil (FY2020: £nil). The balances held in zero balancing cash pooling arrangements have daily settlement of balances. Therefore netting is not relevant.

Secured loans

Loans amounting to £nil (FY2020: £nil) were secured on plant and equipment with a book value of £nil (FY2020: nil).

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.

Lease liabilities

Lease liabilities have been measured at the present value of the remaining lease payments. The weighted average incremental borrowing rate applied to lease liabilities in FY2021 was 3.3% (FY2020: 4.0%).

19 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, debt market prices, interest rates, credit risks and liquidity risks. The management of operational credit risk is discussed in note 15.

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 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 against pre-agreed objectives.

1) 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 optimise the resulting cost of debt capital. The credit ratings at the end of July 2021 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 of two times or lower over the medium term. Capital management is discussed in more detail in note 26.

2) 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 2021 these measures were 100% (FY2020: 100%), 3.2 years (FY2020: 4.2 years) and 54% (FY2020: 53%).

The Group remains in full compliance with all covenants within its external debt agreements. Interest rate risk management is discussed in note 19(b).

3) 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 2021, these measures were £575m (FY2020: £611m) and 39 months (FY2020: 51 months). At 31 July 2021, net cash resources were £405m (FY2020: £366m). Liquidity risk management is discussed in note 19(d).

4) Currency management

The Group is an international business with the majority of its net assets denominated in foreign currency. It protects the balance sheet and reserves from adverse foreign exchange movements by financing 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 2021				
	Sterling £m	US\$ £m	Euro £m	Other £m	Total £m
Financial assets and liabilities					
Financial instruments included in trade and other receivables	28	326	113	177	644
Financial instruments included in trade and other payables	(49)	(167)	(79)	(64)	(359)
Cash and cash equivalents	46	187	80	92	405
Borrowings not designated as net investment hedges	(31)	(55)	(12)	(21)	(119)
	(6)	291	102	184	571
Exclude balances held in operations with the same functional currency.	7	(110)	(80)	(183)	(366)
Exposure arising from intra-group loans	–	(182)	(19)	(75)	(276)
Future forward foreign exchange contract cash flows	(51)	(67)	22	96	–
	(50)	(68)	25	22	(71)

	At 31 July 2020				
	Sterling £m	US\$ £m	Euro £m	Other £m	Total £m
Financial assets and liabilities					
Financial instruments included in trade and other receivables	26	293	116	145	580
Financial instruments included in trade and other payables	(37)	(176)	(62)	(65)	(340)
Cash and cash equivalents	50	194	38	84	366
Borrowings not designated as net investment hedges	(21)	(41)	(31)	(14)	(107)
	18	270	61	150	499
Exclude balances held in operations with the same functional currency	(16)	(84)	(60)	(146)	(306)
Exposure arising from intra-group loans	–	(87)	23	(100)	(164)
Future forward foreign exchange contract cash flows	32	(161)	26	103	–
	34	(62)	50	7	29

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 FY2021 £m	Gain/(loss) recognised in reserves FY2021 £m	Impact on profit for the year FY2020 £m	Gain/(loss) recognised in reserves FY2020 £m
US dollar	3	2	(8)	(2)
Euro	2	(5)	(3)	2
Sterling	(1)	2	3	(2)

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 2021, contracts with a nominal value of £107m (FY2020: £110m) were designated as hedging instruments. In addition, the Group had outstanding foreign currency contracts with a nominal value of £251m (FY2020: £203m) 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 20.

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 are the effect of the Group's and the counterparty credit risks on the fair value of the foreign exchange forward contracts, which is not reflected in the fair value of the hedged item 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, 89% are for periods of 12 months or less (FY2020: 98%).

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 2021 £m	Year ended 31 July 2020 £m
Brought forward cash-flow hedge reserve at start of year		–	–
Foreign exchange forward contracts:	Net fair value gains on effective hedges	1	1
	Amount reclassified to income statement – revenue	–	(2)
	Amount reclassified to income statement – cost of sales	1	1
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	Financial year	Changes in value of the hedged item for calculating ineffectiveness £m	Changes in value of the hedging instrument for calculating ineffectiveness £m	Cash-flow hedge reserve £m
Sales and purchases	Foreign currency risk	Foreign exchange contracts	FY2021	1	(1)	1
			FY2020	1	(1)	1

Cash-flow hedges generated £nil of ineffectiveness in FY2021 (FY2020: £nil) which was recognised in the income statement through finance costs.

Translational currency exposure

The Group has significant investments in overseas operations, particularly in the US 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.

Net investment hedges

The table below sets out the currency of loans and swap contracts designated as net investment hedges:

	At 31 July 2021			At 31 July 2020		
	US\$ £m	Euro £m	Total £m	US\$ £m	Euro £m	Total £m
Loans designated as net investment hedges	(285)	(459)	(744)	(303)	(484)	(787)
Cross-currency swap	(539)	–	(539)	(572)	–	(572)
	(824)	(459)	(1,283)	(875)	(484)	(1,359)

At 31 July 2021, cross-currency swaps hedged the Group's exposure to US Dollars and Euros (31 July 2020: US Dollars and Euros). All the cross-currency swaps designated as net investment hedges were non-current (FY2020: non-current).

Swaps generating £310m of the US Dollar exposure (FY2020: £329m) will mature in April 2023 and swaps generating £229m of the US Dollar exposure (FY2020: £243m) 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 2020 US Dollars and Euros). Borrowings generating £285m of the US Dollar exposure (FY2020: £303m) will mature in October 2022. Borrowings generating £508m of the Euro exposure (FY2020: £536m) will mature in April 2023 and borrowings generating £292m of the Euro exposure (FY2020: £308m) will mature in February 2027.

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 as 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 foreign exchange forward contracts which is not reflected in the fair value of the hedged item 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.

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 2021 £m	Year ended 31 July 2020 £m	
Brought forward net investment hedge reserve at start of year	(314)	(383)	
Cross-currency swaps	Net fair value gains on effective hedges	14	37
Bonds	Net fair value gains on effective hedges	62	32
Carried forward net investment hedge reserve at end of year	(238)	(314)	

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 2021 and 31 July 2020:

Hedged item	Hedged exposure	Hedging instrument	Financial year	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 £m
Overseas operation	Foreign currency risk	Cross-currency swaps	FY2021	(14)	17	14
		Bonds	FY2021	(62)	62	62
				(76)	79	76
Overseas operation	Foreign currency risk	Cross-currency swaps	FY2020	(37)	40	37
		Bonds	FY2020	(32)	32	32
				(69)	72	69

Net investment hedges generated £3m of ineffectiveness in FY2021 (FY2020: £3m) 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 2021 £m	Loss recognised in hedge reserve 31 July 2020 £m
US dollar	92	97
Euro	51	54

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 2021, 54% (FY2020: 53%) 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 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 2021, after interest rate swaps, was 2.06% (FY2020: 2.20%).

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. Other financial assets and liabilities do not earn or bear interest, and for all financial instruments except borrowings, the carrying value is not materially different from their fair value.

	As at 31 July 2021				As at 31 July 2020			
	At fair value through profit or loss £m	Cash and cash equivalents £m	Borrowings £m	Fair value of borrowings £m	At fair value through profit or loss £m	Cash and cash equivalents £m	Borrowings £m	Fair value of borrowings £m
Fixed interest								
Less than one year	–	–	(36)	(36)	–	–	(41)	(41)
Between one and five years	–	–	(418)	(434)	–	–	(423)	(429)
Greater than five years	–	–	(321)	(353)	–	–	(322)	(334)
Total fixed interest financial liabilities	–	–	(775)	(823)	–	–	(786)	(804)
Floating rate interest financial assets/(liabilities)*	4	333	(727)	(736)	8	305	(775)	(775)
Total interest-bearing financial assets/(liabilities)	4	333	(1,502)	(1,559)	8	305	(1,561)	(1,579)
Non-interest-bearing assets in the same category	7	72	–	–	11	61	–	–
Total	11	405	(1,502)	(1,559)	19	366	(1,561)	(1,579)

* Fair value gains and losses in this category of assets are recognised in other comprehensive income.

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 swaps and cross-currency interest rate swaps which for accounting purposes are designated as fair value hedges.

At 31 July 2021 and 31 July 2020, the Group had designated the following hedges against variability in the fair value of borrowings arising from fluctuations in base rates:

\$150m interest rate swap which matures on 12 October 2022 partially hedging the USD 2022 Guaranteed notes;

€400m of the fixed/floating element of the EUR/USD interest rate swaps that mature on 28 April 2023 partially hedging the € 2023 Eurobond; and

€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 20. The effect of the swaps was to convert £705m (FY2020: £745m) 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.

The main sources of hedge ineffectiveness in these hedging relationships is the effect of the 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 was recognised immediately in the income statement in the period in which it occurred.

The following table sets out the details of the hedged exposures covered by the Group's fair value hedges:

Hedged item	Hedged exposure	Financial year	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	Interest rate risk	FY2021	5	(5)	–	449	–	6
bonds (a)	Interest rate & currency rate risk	FY2021	4	(7)	–	256	–	16
			9	(12)	–	705	–	22
Fixed rate	Interest rate risk	FY2020	10	1	–	475	–	11
bonds (a)	Interest rate & currency rate risk	FY2020	–	(5)	–	270	–	20
			10	(4)	–	745	–	31

(a) Classified as borrowings

Fair value hedges generated a £3m ineffectiveness in FY2021 (FY2020: £6m) 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 2021, 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 (FY2020: £5m impact) on the Group's profit before tax.

Impact of LIBOR transition

The UK Financial Conduct Authority announced on 5 March 2021 that LIBOR benchmark rates will be discontinued after 31 December 2021 except the majority of US dollar settings which will be discontinued after 30 June 2023. The Group is exposed to interest rate benchmark reform on its interest rate swaps and cross-currency interest rate swaps which reference 3 month and 6 month USD LIBOR, have an aggregate nominal value of USD 899m, and mature between October 2022 and February 2027. In April 2021 the Group confirmed adherence to the ISDA 2020 IBOR Fallbacks Protocol as published by the International Swaps and Derivatives Association, Inc. (ISDA) on 23 October 2021 (the Protocol), ensuring that appropriate fallbacks can apply to these derivatives in the event of LIBOR discontinuation.

The Group believes that any outstanding contracts on 1 January 2022 with interest rates based on LIBOR benchmarks will adequately provide for alternate calculations of interest in the event they are unavailable.

(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 £416m at 31 July 2021 (FY2020: £385m).

	31 July 2021 £m	31 July 2020 £m
Cash in AAA liquidity funds	116	160
Cash at banks with at least a AA- credit rating	46	28
Cash at banks with all other A credit ratings	237	164
Cash at other banks	6	14
Investments in bank deposits	4	11
Other investments	7	8
	416	385

At 31 July 2021, the maximum exposure with a single bank for deposits and cash was £79m (FY2020: £124m), whilst the maximum mark to market exposure with a single bank for derivatives was £26m (FY2020: £29m). These banks have AAA and AA- credit ratings respectively (FY2020: Both AAA and AA-).

(d) Liquidity risk

Borrowing facilities

Board policy specifies the maintenance of unused committed credit facilities of at least £300m at all times to ensure that the Group has sufficient available funds for operations and planned development. The Group has Revolving Credit Facilities of \$110m maturing on 1 November 2023 and \$690m maturing 1 November 2024. At the balance sheet date, the Group had the following undrawn credit facilities:

	31 July 2021 £m	31 July 2020 £m
Expiring after more than two years	575	611

Cash deposits

As at 31 July 2021, £186m (FY2020: £192m) of cash and cash equivalents was on deposit with various banks of which £nil (FY2020: £12m) was on deposit with UK banks, and £116m (FY2020: £160m) was in liquidity funds. £4m (FY2020: £11m) of investments comprised bank deposits held to secure liabilities and letters of credit.

Gross contractual cash-flows for borrowings

	As at 31 July 2021				As at 31 July 2020			
	Borrowings (note 18) £m	Fair value adjustment £m	Contractual interest payments £m	Total contractual cash-flows £m	Borrowings (note 18) £m	Fair value adjustment £m	Contractual interest payments £m	Total contractual cash-flows £m
Less than one year	(36)	–	(28)	(64)	(41)	–	(30)	(71)
Between one and two years	(823)	(6)	(23)	(852)	(20)	–	(30)	(50)
Between two and three years	(20)	–	(11)	(31)	(870)	22	(24)	(872)
Between three and four years	(14)	–	(11)	(25)	(10)	–	(12)	(22)
Between four and five years	(10)	–	(11)	(21)	(8)	–	(12)	(20)
Greater than five years	(577)	(16)	(11)	(604)	(612)	9	(24)	(627)
Total	(1,480)	(22)	(95)	(1,597)	(1,561)	31	(132)	(1,662)

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

	As at 31 July 2021			As at 31 July 2020		
	Receipts £m	Payments £m	Net cash-flow £m	Receipts £m	Payments £m	Net cash-flow £m
Assets						
Less than one year	142	(144)	(2)	174	(175)	(1)
Greater than one year	642	(568)	74	674	(595)	79
Liabilities						
Less than one year	220	(219)	1	144	(144)	–
Greater than one year	3	(2)	1	–	3	3
Total	1,007	(933)	74	992	(911)	81

This table above 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 were £351m (FY2020: £331m) due in less than one year, £8m (FY2020: £6m) due between one and five years, and £nil (FY2020: £3m) due after more than five years.

20 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:

	At 31 July 2021			
	Contract or underlying nominal amount £m	Fair value		
		Assets £m	Liabilities £m	Net £m
Foreign exchange contracts (cash-flow hedges)	107	1	(2)	(1)
Foreign exchange contracts (not hedge accounted)	251	1	(1)	–
Total foreign exchange contracts	358	2	(3)	(1)
Cross-currency swaps (fair value and net investment hedges)	539	72	–	72
Interest rate swaps (fair value hedges)	108	3	–	3
Total financial derivatives	1,005	77	(3)	74
Balance sheet entries:				
Non-current	655	75	–	75
Current	350	2	(3)	(1)
Total financial derivatives	1,005	77	(3)	74

	At 31 July 2020			
	Contract or underlying nominal amount £m	Fair value		
		Assets £m	Liabilities £m	Net £m
Foreign exchange contracts (cash-flow hedges)	110	1	(1)	–
Foreign exchange contracts (not hedge accounted)	203	1	(3)	(2)
Total foreign exchange contracts	313	2	(4)	(2)
Cross-currency swaps (fair value and net investment hedges)	572	78	–	78
Interest rate swaps (fair value hedges)	114	4	–	4
Total financial derivatives	999	84	(4)	80
Balance sheet entries:				
Non-current	690	82	–	82
Current	309	2	(4)	(2)
Total financial derivatives	999	84	(4)	80

The maturity profile, average interest and foreign currency exchange rates of the hedging instruments used in the Group's hedging strategies are as follows:

Hedged exposure	Hedging instrument	Maturity at 31 July 2021			Maturity at 31 July 2020		
		Up to one year	One to five years	More than five years	Up to one year	One to five years	More than five years
Fair value hedges							
Interest rate risk	Interest rate swaps – Notional amount (£m)	–	108	–	–	114	–
	– USD – Average spread over 6 month USD LIBOR	–	1.797%	–	–	1.797%	–
Interest rate risk	Interest rate swaps – Notional amount (£m)	–	341	–	–	360	–
	– EUR – Average spread over 3 month EUR LIBOR	–	1.015%	–	–	1.015%	–
Interest rate risk / Foreign currency risk	Cross-currency swaps (EUR:GBP) – Notional amount (£m)	–	–	254	–	–	254
	– Average exchange rate	–	–	0.845	–	–	0.845
	– Average spread over 3 month GBP LIBOR	–	–	1.750%	–	–	1.750%
Net investment hedges							
Foreign currency risk	Cross-currency swaps (EUR:USD) – Notional amount (£m)	–	310	–	–	329	–
	– Average exchange rate	–	1.0773	–	–	1.0773	–
Foreign currency risk	Cross-currency swaps (GBP:USD) – Notional amount (£m)	–	–	229	–	–	243
	– Average exchange rate	–	–	1.2534	–	–	1.2534
Cash-flow hedges							
Foreign currency risk	Foreign exchange contracts (EUR:USD) – Notional amount (£m)	47	5	–	59	3	–
	– Average exchange rate	1.1915	1.2205	–	1.0744	1.1731	–
	Foreign exchange contracts (EUR:GBP) – Notional amount (£m)	31	3	–	19	–	–
	– Average exchange rate	0.8996	0.9094	–	0.9483	–	–
	Foreign exchange contracts (EUR:AUD) – Notional amount (£m)	7	–	–	8	–	–
	– Average exchange rate	1.5832	–	–	1.6544	–	–
	Foreign exchange contracts (USD:GBP) – Notional amount (£m)	8	–	–	10	–	–
	– Average exchange rate	1.3577	–	–	1.2589	–	–
	Foreign exchange contracts (GBP:CZK) – Notional amount (£m)	6	–	–	6	–	–
	– Average exchange rate	29.7028	–	–	29.7191	–	–
	Foreign exchange contracts (USD:JPY) – Notional amount (£m)	–	–	–	4	1	–
	– Average exchange rate	–	–	–	103.0538	100.6200	–

At 31 July 2021, the Group had forward foreign exchange contracts with a nominal value of £107m (FY2020: £110m) 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 20 July 2023. 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 above.

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 2021 £m	Liabilities 31 July 2021 £m	Assets 31 July 2020 £m	Liabilities 31 July 2020 £m
Gross value of assets and liabilities	77	(3)	84	(4)
Related assets and liabilities subject to master netting agreements	(1)	1	(2)	2
Net exposure	76	(2)	82	(2)

21 FAIR VALUE OF FINANCIAL INSTRUMENTS

As at 31 July 2021	Notes	Basis for determining fair value	At amortised cost £m	At fair value through profit or loss £m	At fair value through OCI £m	Total carrying value £m	Total fair value £m
Financial assets							
Other investments	17	A	–	4	–	4	4
Other investments	17	E	–	–	7	7	7
Cash and cash equivalents	18	A	289	116	–	405	405
Trade and other financial receivables	15	A/B	689	–	–	689	689
Derivative financial instruments	20	B	–	77	–	77	77
Total financial assets			978	197	7	1,182	1,182
Financial liabilities							
Trade and other financial payables	16	A	(589)	–	–	(589)	(589)
Short-term borrowings	18	C	(9)	–	–	(9)	(9)
Long-term borrowings	18	C	(1,372)	–	–	(1,372)	(1,429)
Lease liabilities	18	D	(121)	–	–	(121)	(121)
Derivative financial instruments	20	B	–	(3)	–	(3)	(3)
Total financial liabilities			(2,091)	(3)	–	(2,094)	(2,151)

As at 31 July 2020	Notes	Basis for determining fair value	At amortised cost £m	At fair value through profit or loss £m	At fair value through OCI £m	Total carrying value £m	Total fair value £m
Financial assets							
Other investments	17	A	–	11	–	11	11
Other investments	17	E	–	–	8	8	8
Cash and cash equivalents	18	A	206	160	–	366	366
Trade and other financial receivables	15	A/B	679	–	–	679	679
Derivative financial instruments	20	B	–	84	–	84	84
Total financial assets			885	255	8	1,148	1,148
Financial liabilities							
Trade and other financial payables	16	A	(578)	–	–	(578)	(578)
Short-term borrowings	18	C	(10)	–	–	(10)	(10)
Long-term borrowings	18	C	(1,455)	–	–	(1,455)	(1,473)
Lease liabilities	18	D	(96)	–	–	(96)	(96)
Derivative financial instruments	20	B	–	(4)	–	(4)	(4)
Total financial liabilities			(2,139)	(4)	–	(2,143)	(2,161)

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 arm's-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).
- 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 as 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

22 COMMITMENTS

At 31 July 2021, commitments, comprising bonds and guarantees arising in the normal course of business, amounted to £210m (FY2020: £240m), including pension commitments of £54m (FY2020: £54m). In addition, the Group has committed expenditure on capital projects amounting to £4m (2020: £6m).

23 PROVISIONS AND CONTINGENT LIABILITIES

	Trading	Non-headline and legacy			Total
	£m	John Crane, Inc. litigation £m	Titeflex Corporation litigation £m	Other £m	£m
At 31 July 2019	18	237	74	22	351
Foreign exchange rate movements	(1)	(17)	(5)	(1)	(24)
Provision charged	9	30	1	3	43
Provision released	(4)	–	–	(1)	(5)
Unwind of provision discount	–	4	1	–	5
Utilisation	(8)	(23)	(5)	(3)	(39)
At 31 July 2020	14	231	66	20	331
Current liabilities	12	26	13	4	55
Non-current liabilities	2	205	53	16	276
At 31 July 2020	14	231	66	20	331
Foreign exchange rate movements	(1)	(12)	(4)	(1)	(18)
Provision charged	7	5	–	–	12
Provision released	(4)	–	(13)	–	(17)
Unwind of provision discount	–	1	1	–	2
Utilisation	(6)	(13)	(3)	(2)	(24)
Business combinations (note 27)	1	–	–	–	1
At 31 July 2021	11	212	47	17	287
Current liabilities	10	26	8	2	46
Non-current liabilities	1	186	39	15	241
At 31 July 2021	11	212	47	17	287

The John Crane, Inc. and Titeflex Corporation litigation provisions were the only provisions that were discounted; other provisions have not been discounted as the impact would be immaterial.

Trading

The provisions included as trading represent amounts provided for in the ordinary course of business. Trading provisions are charged and released through headline profit.

Warranty provision and product liability

At 31 July 2021, the Group had warranty and product liability provisions of £9m (FY2020: £13m). 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, although 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 the 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 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 40 years since the start of this litigation:

	Year ended 31 July 2021	Year ended 31 July 2020	Year ended 31 July 2019	Year ended 31 July 2018	Year ended 31 July 2017
JCI claims experience					
Claims against JCI that have been dismissed	305,000	297,000	285,000	277,000	273,000
Claims JCI is currently a defendant in	22,000	25,000	38,000	43,000	50,000
Cumulative final judgments, after appeals, against JCI since 1979	149	149	144	140	138
Cumulative value of awards (\$'m) since 1979	175	175	168	164	160

The number of claims outstanding at 31 July 2021 reflected the benefit of 8,000 (FY2020: 12,000) 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. The provision utilised in the period is lower than previous periods, principally due to court closures and trial delays arising from the COVID-19 pandemic. Management believes this reduction in utilisation is temporary until after the effects of the pandemic subside and trial activity returns to pre-pandemic levels.

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.

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 (FY2020: 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.

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 certain excess liability insurance, 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 of £212m (FY2020: £231m) 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).

The JCI asbestos litigation provision has developed over the last five years as follows:

	Year ended 31 July 2021 £m	Year ended 31 July 2020 £m	Year ended 31 July 2019 £m	Year ended 31 July 2018 £m	Year ended 31 July 2017 £m
John Crane, Inc. litigation provision					
Gross provision	220	235	257	251	260
Discount	(8)	(4)	(20)	(28)	(23)
Discounted pre-tax provision	212	231	237	223	237
Deferred tax	(54)	(59)	(50)	(48)	(79)
Discounted post-tax provision	158	172	187	175	158
Operating profit charge/(credit)					
Increased provisions for adverse judgments and legal defence costs	10	14	7	13	17
Change in US risk-free rates	(5)	16	8	(6)	(13)
Subtotal – items charged to the provision	5	30	15	7	4
Litigation management, legal fees in connection with litigation against insurers and defence strategy	1	1	2	3	11
Recoveries from insurers	(9)	(3)	(11)	–	(6)
Total operating profit charge/(credit)	(3)	28	6	10	9
Cash-flow					
Provision utilisation – legal defence costs and adverse judgements	(13)	(23)	(24)	(27)	(24)
Litigation management expense	–	(1)	(2)	(3)	(11)
Recoveries from insurers	9	3	11	–	6
Net cash outflow	(4)	(21)	(15)	(30)	(29)

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 will be incurred because of the significant uncertainty associated with the future level of asbestos claims and of the costs arising out of related litigation.

John Crane, Inc. 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 £191m and future spend at the 95th percentile of £246m (FY2020: £214m and £271m, respectively). Statistical analysis of the distribution of these outcomes indicates that there is a 50% probability that the total future spend will fall between £209m and £230m (FY2020: between £222m and £244m), compared to the gross provision value of £220m (FY2020: £235m).

John Crane, Inc. sensitivity of the projections to changes in the time horizon used

If the asbestos litigation environment becomes more volatile and uncertain, 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 (FY2020: £20m) and reducing it by five years would reduce the provision by £93m (FY2020: £106m).

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 pre-tax provision by £14m (FY2020: £17m) and extending it by five years would increase the pre-tax provision by £58m (FY2020: £69m). 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 will 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 in the US 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 product liability claims regarding this product in the US, 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 market-place face similar challenges.

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 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 assumptions relating to the number of future settlements exclude the use of recent claims history due to the uncertain impact that the COVID-19 lockdown has had on the number of claims.

The provision of £47m (FY2020: £66m) 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 2021 £m	31 July 2020 £m
Gross provision	69	86
Discount	(22)	(20)
Discounted pre-tax provision	47	66
Deferred tax	(11)	(16)
Discounted post-tax provision	36	50

Titeflex Corporation litigation provision history

A credit of £13m (FY2020: £1m 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 foreign exchange rate movements, a reduction in the average number of claims per year and by decreasing US dollar discount rates.

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 will 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 £4m (FY2020: £6m) lower, and if the benefit were 0.5% lower, the provision would be £4m (FY2020: £7m) higher.

The projections use assumptions of future claims that are based on both the number of future settlements and the average amount of those settlements. If the assumed average number of future settlements increased 10%, the provision would rise by £4m (FY2020: £5m), with an equivalent fall for a reduction of 10%. If the assumed amount of those settlements increased 10%, the provision would rise by £3m (FY2020: £3m), also with an equivalent fall for a reduction of 10%.

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, disposal indemnities and litigation in respect of old products, and discontinued business activities.

Reorganisation

At 31 July 2021, there were reorganisation provisions of £2m (FY2020: £3m) relating to the various restructuring programmes that are expected to be utilised in the next 18 months.

Property

At 31 July 2021, there were provisions of £11m (FY2020: £12m) related to actual and potential environmental issues for sites currently or previously occupied by Smiths operations and £nil (FY2020: £1m) of dilapidations provisions.

24 SHARE CAPITAL

	Number of shares	Average number of shares	Issued capital £m	Consideration £m
Ordinary shares of 37.5p each				
Total share capital at 31 July 2019	395,956,781	395,936,520	148	
Exercise of share options	254,399	256,790	1	2
Total share capital at 31 July 2020	396,211,180	396,193,310	149	
Exercise of share options	165,934	157,276	–	2
Total share capital at 31 July 2021	396,377,114	396,350,586	149	

Share capital structure

As at 31 July 2021, the Company's issued share capital was 396,377,114 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 Depositary Receipt (ADR) programme and one ADR equates to one ordinary share. As at 31 July 2021, 4,892,064 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 or distributions made by 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 2020 AGM, and at the 2021 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 in its own name during the financial year ended 31 July 2021. All share purchases have been made by an Employee Benefit Trust, with the shares acquired used to satisfy Company share plan commitments. As at 24 September 2021 (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 (FY2020: 40m). As at 24 September 2021, 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 2021, the trust held 326,364 (FY2020: nil) ordinary shares in the Company. The trust waived its dividend entitlement on its holding during the year, and the trust abstains from voting any shares held at general meetings.

25 DIVIDENDS

The following dividends were declared and paid in the period:

	Year ended 31 July 2021 £m	Year ended 31 July 2020 £m
Ordinary final dividend of 24.0p (FY2020: 31.8p) paid 20 November 2020	94	126
Ordinary delayed interim dividend of 11.0p (FY2020: nil) paid 20 November 2020	44	–
Ordinary interim dividend of 11.7p (FY2020: nil) paid 14 May 2021	47	–
	185	126

In the current year a total dividend of 46.7p has been paid, comprising a delayed interim dividend of 11.0p and a final dividend of 24.0p paid in respect of FY2020 and an interim dividend of 11.7p paid in respect of FY2021. In the comparative year an ordinary final dividend of 31.8p was paid in respect of FY2019.

The final dividend for the year ended 31 July 2021 of 26.0p per share was recommended by the Board on 24 September 2021 and will be paid to shareholders on 19 November 2021, subject to approval by the shareholders. This dividend is payable to all shareholders on the register of members at 6.00pm on 22 October 2021 (the record date).

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)

26 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 800,606 (FY2020: 1,234,907) shares to the Trust, and the Trust purchased 1,126,970 shares (FY2020: 1,181,849 shares) in the market for a consideration of £16m (FY2020: £18m). At 31 July 2021, the Trust held 326,364 (FY2020: nil) 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 retirement benefit related assets and liabilities, net litigation provisions relating to non-headline items and net debt. The efficiency of the allocation of 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. In FY2021 ROCE was 13.2% (FY2020: 11.8%); see note 30.

Capital structure is based on the Directors' judgement of the balance required to maintain flexibility, whilst achieving an efficient cost of capital.

The FY2021 ratio of net debt to headline EBITDA of 1.6 (FY2020: 1.9) 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 are more than able to fund immediate investment needs and 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 maintains a solid investment grade credit rating to ensure access to the widest possible sources of financing and to optimise the resulting cost of capital. At 31 July 2021, the Group had a credit rating of BBB+/Baa2 (FY2020: BBB+/Baa2) with Standard & Poor's and Moody's respectively.

The Board has a progressive dividend policy for future pay-outs, 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 a minimum dividend cover of at least 2 times.

Hedge reserve

The hedge reserve on the balance sheet comprises:

	31 July 2021 £m	31 July 2020 £m
Net investment hedge reserve from continuing operations (net of £8m of deferred tax (FY2020: £3m))	(230)	(311)
Cash-flow hedge reserve from discontinued operations	2	–
Net investment hedge reserve from discontinued operations	–	(1)
	(228)	(312)

See transactional currency exposure risk management disclosures in note 19 for additional details of cash-flow hedges, and translational currency exposure risk management disclosure also in note 19 for additional details of net investment hedges.

Non-controlling interest

The Group has recorded non-controlling interests of £21m (FY2020: £21m), of which the most significant balance is in John Crane Japan Inc., which represented £20m (FY2020: £21m) of the total non-controlling interests.

The non-controlling interest in John Crane Japan Inc. represents a 30% interest. John Crane Japan Inc. generated operating profits of £5m in the period (FY2020: £9m), and cash inflows from operating activities of £6m (FY2020: £11m). It paid dividends of £2m (FY2020: £2m) and tax of £3m (FY2020: £3m). At 31 July 2021, the company contributed £57m (FY2020: £60m) of net assets to the Group.

27 ACQUISITIONS

On 2 August 2020, Smiths Detection completed the acquisition of 100% of the share capital of PathSensors Inc for consideration of £5m. PathSensors Inc is a leading biotechnology solutions and environmental testing company providing, high-speed, high-sensitivity pathogen detection and biothreat prevention. This acquisition brings new technology to Smiths Detection to strengthen its position in the markets in which it operates.

Goodwill represents the expected synergies from the strategic fit of the acquisition and the value of the expertise in the workforce. From the date of acquisition to 31 July 2021, PathSensors Inc contributed £2m to revenue and a £1m loss before taxation. If the Group had acquired this business at the beginning of the financial year, the acquisition would have contributed the same value to revenue and profit.

On 16 February 2021, the Group's Flex-Tek division completed the acquisition of 100% of the share capital of Royal Metal Products, LLC (Royal Metal) for consideration of £78m. Consideration paid to acquire the business includes £4m paid to the previous owner to settle a bank loan to which the owner had previously issued guarantees.

Royal Metal is a manufacturer of metal duct products and flexible ducting used in commercial and residential construction, mainly in the South Eastern states of the US. This acquisition will complement the organic growth that Flex-Tek is already driving through the development of innovative air distribution products that support improved energy efficiency and indoor air quality.

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 2021, Royal Metal contributed £33 million to revenue and £10 million to profit before taxation. If the Group had acquired this business at the beginning of the financial year, the acquisition would have contributed £64 million to revenue and £15 million to profit before taxation.

Provisional fair values at acquisition date		PathSensors Inc £m	Royal Metal Products, LLC £m	Total £m
Non-current assets	– acquired intangible assets	2	44	46
	- property, plant and machinery	–	2	2
	- right of use assets	–	10	10
Current assets	- inventories	–	10	10
	- trade and other receivables	–	8	8
Current liabilities	- lease liabilities	–	(1)	(1)
	- trade and other payables	–	(2)	(2)
	- provisions for liabilities and charges	–	(1)	(1)
Non-current liabilities	- lease liabilities	–	(10)	(10)
Total identifiable net assets		2	60	62
Goodwill		3	18	21
Total		5	78	83
Satisfied by:				
Cash paid during the year		5	78	83
Total consideration		5	78	83

28 DISCONTINUED OPERATIONS AND BUSINESSES HELD FOR SALE

In the prior year the Smiths Medical business was classified as discontinued and held for distribution to owners, as the Group was committed to pursue a demerger of Smiths Medical, whilst in parallel continuing to evaluate all opportunities for value maximisation. Following the Board decision in July 2021 to pursue a sale process, the balance sheet presentation of Smiths Medical has been updated to a business held for sale.

On 8 September 2021, the Group announced that it had agreed the sale of Smiths Medical to ICU Medical; see note 31 for further details of this Post Balance Sheet Event.

Discontinued operations

The financial performance of the Smiths Medical business in the current and prior years is presented below:

	Year ended 31 July 2021			Year ended 31 July 2020		
	Headline £m	Non- headline (note 3) £m	Total £m	Headline £m	Non- headline (note 3) £m	Total £m
Revenue	849	–	849	918	–	918
Direct materials, labour, production and distribution overheads	(385)	–	(385)	(418)	–	(418)
Selling costs	(117)	–	(117)	(124)	–	(124)
Administrative expenses	(170)	(79)	(249)	(192)	(23)	(215)
Operating costs	(672)	(79)	(751)	(734)	(23)	(757)
Operating profit	177	(79)	98	184	(23)	161
Finance costs	(1)	50	49	(4)	62	58
Taxation	(42)	23	(19)	(41)	22	(19)
Profit from discontinued operations	134	(6)	128	139	61	200

Interest capitalised as part of the costs of Smiths Medical development projects amounted to £3m (FY2020: £3m). £1m (FY2020: £1m) of tax relief has been recognised as current tax relief in the period. The sale 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.

Businesses held for sale

The carrying value of the assets and liabilities of the Smiths Medical business as at 31 July 2021 and 31 July 2020 was as follows:

	31 July 2021 £m	31 July 2020 £m
Assets classified as held for sale:		
Intangible assets	669	734
Property, plant and equipment	162	141
Right of use assets	63	54
Financial assets - other investments	14	–
Inventories	145	164
Deferred tax assets	12	14
Current tax receivable	3	3
Trade and other receivables	123	148
Cash and cash equivalents	48	20
Financial derivatives	4	1
Assets classified as held for sale	1,243	1,279
Liabilities classified as held for sale:		
Financial liabilities		
– lease liabilities	(44)	(48)
– financial derivatives	(2)	(4)
Trade and other payables	(161)	(167)
Current tax payable	(13)	(10)
Deferred tax liabilities	(51)	(53)
Retirement benefit obligations	(5)	(5)
Provisions for liabilities and charges	(7)	(8)
Liabilities classified as held for sale	(283)	(295)

Contract liabilities from variable consideration agreements

Smiths Medical has a number of agreements with Group Purchasing Organisations and Individual Development Networks offering variable pricing arrangements on sales creating the need for rebates to be paid.

Gross contract liabilities relating to variable consideration agreements amounted to £43m in the current year (FY2020: £41m). £30m (FY2020: £34m) of these gross contract liabilities have been netted against trade and other receivables, as there is the contractual right of offset, and £13m (FY2020: £7m) have been included within trade and other payables.

These contract liabilities are estimated based on current sales and an applicable erosion rate. The erosion rate is based on historical rebate trends and adjusted for inventory maintained at distributor sites. There has been no recent history of material revisions to this contract liability.

Intangible assets

Smiths Medical intangible assets comprise:

	31 July 2021 £m	31 July 2020 £m
Goodwill	535	564
Development costs	104	140
Acquired intangibles	19	20
Software, patents and intellectual property	11	10
Intangible assets	669	734

During the year impairment tests were carried out on capitalised development costs for products that were still under development and acquired intangibles where there were indications of impairment. Value in use and fair value less costs to sell calculations were used to determine the recoverability of these assets.

The impairment analysis performed for FY2021 has identified a total non-cash impairment charge for Smiths Medical of £61m, comprising £52m of capitalised development costs, £5m of specific inventory and £4m of attributable fixed assets. The impairment charge mostly related to the Intellifuse Large Volume Pump (LVP); see below for further details.

Intellifuse programme capitalised development costs, fixed assets and inventory

In April 2021 Smiths Medical invested in Ivenix Inc., the owner of an US Food and Drug Administration (FDA) approved LVP and also entered into an exclusive distribution agreement for the Ivenix LVP. The investment and distribution agreement meant that Smiths Medical prioritised the commercialisation of the Ivenix LVP and the development of the Intellifuse LVP was put on hold. This change has given rise to the impairment charges disclosed above, with the entire value of the Intellifuse LVP having been impaired. In June 2021 the first customer purchase order was secured for the Ivenix LVP, confirming the commercial acceptance of Ivenix within the LVP market segment.

These agreements with Ivenix triggered an impairment assessment for the Intellifuse programme. The Intellifuse programme has previously been considered a single CGU for impairment testing purposes. Following the change in circumstances for Intellifuse LVP, management has reassessed the appropriateness of the CGU structure and has concluded that it is appropriate to assess the Intellifuse syringe pump and LVP products as separate CGUs.

The fair value model for the Intellifuse programme had previously been supported by the cash-flows from commercialising the LVP ahead of the syringe pump revenue stream. Developments in the syringe pump market, together with the partnership with Ivenix Inc., have provided a stronger business case to prioritise the commercialisation of the Intellifuse syringe pump. Revised impairment review cash-flow models have been prepared to assess the Intellifuse syringe pump and LVP revenue streams as two separate CGUs.

Impairment assessment methodology:

In light of the change in strategy, the Intellifuse project has been updated to focus on completion of the syringe pump development and submit this for FDA regulatory approval in the next financial year. The Intellifuse LVP development has been placed on hold but may be revisited depending on the success of Smiths Medical's agreement with Ivenix.

Management has separated the Intellifuse capitalised development costs between the syringe pump and LVP assets, including an allocation of shared costs. A summary of the cost allocation of the capitalised development costs, tangible fixed assets and inventory attributable to the Intellifuse programme at 31 July 2021 is as follows:

	LVP £m	Syringe pump £m	Total programme £m
Capitalised development expenditure	48	35	83
Inventory	3	1	4
Fixed assets	4	2	6
Total allocated costs	55	38	93

Intellifuse LVP

As the Intellifuse LVP development has been placed on hold, the LVP impairment model assumes that it is not currently probable that the product will be commercialised and generate any positive cash-flows. Therefore management has impaired the entire value of the LVP, and an impairment charge of £55m has been recognised in the second half of the financial year to 31 July 2021, comprising £48m of capitalised development costs, £3m of specific inventory and £4m of attributable fixed assets.

Intellifuse syringe pump

The syringe pump impairment model cash-flow forecast utilises a 15-year model for North American revenues – with an 8 year asset life and a subsequent 7 year annuity for related software licences. The result of this impairment testing is that the estimated fair value of the Intellifuse syringe pump exceeded the carrying value by £12m. Therefore, no impairment charge has been determined for the Intellifuse syringe pump.

IAS 36 states that the recoverable amount of an asset is the greater of its 'fair value less costs to sell' (FVLCTS) and its 'value in use'. Accordingly, the impairment review for the Intellifuse syringe pump has been completed using a FVLCTS valuation model. As valuations of identical assets in active markets are not available, nor are market observations, the valuation is based on assumptions which a third party would use in estimating a fair value in an arm's length sale process.

The fair value model utilised for syringe pump impairment testing used the following key assumptions:

9% post-tax discount rate (pre-tax: 12.5%);

15.8% tax amortisation benefit;

1% cost to sell;

An additional period of development to gain FDA clearance and prepare for commercial launch;

8-year sales forecast focused on North America only, being the expected primary market, excluding for modelling purposes the opportunities from other regions where CE Mark regulatory approval has already been obtained;

7-year annuity for Software Licences in North America; and

manufacturing and operating expenses priced as if they were outsourced to a third party, based on the third quartile of data points in third party benchmarking studies.

If the assumptions used in the syringe pump impairment review were changed to a greater extent than as presented in the following table, the changes would, in isolation, lead to impairment losses being recognised for the year ended 31 July 2021:

	Change required for carrying value to equal recoverable amount
Delay in commercial launch of product	9 month delay
Post-tax discount rate	+319 bps increase
Volume of sales achieved per annum	+1,910 bps decrease

Contingent Liability

Medfusion product range - US Food and Drug Administration (FDA) 'for-cause' audit

In February 2021 the FDA commenced a for-cause audit inspection of Smiths Medical's product development documentation as a result of an initial review into the Medfusion product range of syringe pumps.

At the conclusion of the inspection, in April 2021 the FDA issued a Form 483 (a form issued by the FDA to Smiths Medical management at the conclusion of an inspection when an investigator has observed any conditions that in their judgment may constitute violations of the Food Drug and Cosmetic Act and related acts).

The Form 483 contained certain observations and discussion items, the majority of which related to an aged regulatory submission, design changes done through letters to the file and several field issues for certain Medfusion products. The Group has submitted an initial written response to the Form 483 to the FDA, in which the Group described the actions it had already completed, as well as a number of promised actions to address each of the observations and discussion items.

Smiths Medical is undertaking significant remediation actions, and committing significant resources, to address each of the observations and discussion items contained in the FDA findings and to strengthen its quality control systems. Smiths Medical is aiming to complete the outstanding remediation actions it described in its response to the Form 483 by the end of 2023 at an estimated total remediation cost of up to £72m (\$100m).

The FDA feedback to Smiths Medical's initial written response is not known at this time and to date the FDA have not formally issued a warning letter or any other formal overall conclusion. Additionally, whilst not considered likely, there is risk of a product recall, warranty claims and fines. It is not possible to reliably quantify this risk at this time. Accordingly, this issue is considered to be a contingent liability.

Cash-flow from discontinued operations

Cash-flows from discontinued operations included in the consolidated cash-flow statement are as follows:

	31 July 2021 £m	31 July 2020 £m
Net cash inflow from operating activities	148	141
Net cash-flow used in investing activities	(67)	(55)
Net cash-flow used in financing activities	(53)	(83)
	28	3

Movement in net cash held in the disposal group included £nil of foreign exchange gains/losses (FY2020: £9m losses), generating a total inflow of £28m (FY2020: £6m outflow).

Additional segmental information for discontinued operations

Headline operating profit for discontinued operations was stated after charging depreciation £nil (FY2020: £nil), amortisation £nil (FY2020: £nil) and share based payments £1m (FY2020: £1m). The capital expenditure on property, plant and equipment, capitalised development and other intangible assets for discontinued operations was £56m (FY2020: £46m).

Revenue for the Smiths Medical discontinued operation is analysed by the following product lines: Infusion Systems £303m (FY2020: £323m), Vascular Access £272m (FY2020: £275m) and Vital Care/Other £274m (FY2020: £320m). Vital Care in FY2020 included £25m of revenue attributable to the Ventilator Challenge UK.

Revenue by destination and non-current operating assets by location for discontinued operations is shown below:

	Year ended 31 July 2021				Year ended 31 July 2020			
	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	456	228	165	849	488	282	148	918
Intangible assets, right of use assets and property, plant and equipment	730	107	57	894	780	96	53	929

Revenue by destination attributable to the United Kingdom was £26m (FY2020: £69m). FY2020 included £25m of revenue attributable to the Ventilator Challenge UK. Revenue earned in the United States of America was material totalling £411m (FY2020: £438m). Revenue by destination has been selected as the basis for attributing revenue to geographical areas as this is the attribution used by management to review the performance of the business.

Non-current assets located in the United Kingdom total £35m (FY2020: £33m). Significant non-current assets were held in the United States of America totalling £710m (FY2020: £732m).

29 CASH-FLOW

Cash-flow from operating activities

	Year ended 31 July 2021			Year ended 31 July 2020		
	Headline £m	Non- headline £m	Total £m	Headline £m	Non- headline £m	Total £m
Operating profit – continuing operations	372	(46)	326	327	(86)	241
– discontinued operations	177	(79)	98	184	(23)	161
Amortisation of intangible assets	14	53	67	13	57	70
Impairment of intangible assets	1	52	53	12	–	12
Impairment of tangible assets	–	6	6	–	–	–
Depreciation of property, plant and equipment	39	1	40	41	–	41
Depreciation of right of use assets	32	–	32	33	–	33
Loss on disposal of property, plant and equipment	1	–	1	3	–	3
Profit on disposal of businesses	–	–	–	–	(1)	(1)
Share-based payment expense	13	–	13	10	–	10
Retirement benefits*	6	(23)	(17)	8	(41)	(33)
Distribution from trading investment	5	–	5	–	–	–
Recycling of cash-flow hedge reserve	(5)	–	(5)	–	–	–
Decrease/(increase) in inventories	62	4	66	(73)	–	(73)
Decrease/(increase) in trade and other receivables	(14)	4	(10)	76	4	80
Increase/(decrease) in trade and other payables	46	(10)	36	49	(2)	47
Increase/(decrease) in provisions	(4)	(26)	(30)	1	–	1
Cash generated from operations	745	(64)	681	684	(92)	592
Interest paid	(40)	–	(40)	(57)	–	(57)
Interest received	2	1	3	7	–	7
Tax paid	(109)	–	(109)	(113)	–	(113)
Net cash inflow from operating activities	598	(63)	535	521	(92)	429
– continuing operations	445	(58)	387	356	(68)	288
– discontinued operations	153	(5)	148	165	(24)	141

* The retirement benefits non-headline operating cash-flows principally relate to employer contributions to legacy defined benefit and post-retirement healthcare plans.

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 2021			Year ended 31 July 2020		
	Headline £m	Non- headline £m	Total £m	Headline £m	Non- headline £m	Total £m
Net cash inflow from operating activities	598	(63)	535	521	(92)	429
Include:						
Expenditure on capitalised development, other intangible assets and property, plant and equipment	(117)	–	(117)	(110)	–	(110)
Repayment of lease liabilities	(44)	–	(44)	(47)	–	(47)
Disposals of property, plant and equipment	2	–	2	1	–	1
Investment in financial assets relating to operating activities and pensions financing outstanding at the balance sheet date	7	–	7	–	–	–
Free cash-flow			383			273
Exclude:						
Investment in financial assets relating to operating activities and pensions financing outstanding at the balance sheet date	(7)	–	(7)	–	–	–
Repayment of lease liabilities	44	–	44	47	–	47
Interest paid	40	–	40	57	–	57
Interest received	(2)	–	(2)	(7)	–	(7)
Tax paid	109	–	109	113	–	113
Operating cash-flow	630	(63)	567	575	(92)	483

Headline cash conversion

Headline operating cash conversion for the total Group is calculated as follows:

	Year ended 31 July 2021 £m	Year ended 31 July 2020 £m
Headline operating profit - including discontinued operations	549	511
Depreciation and amortisation of held for sale assets	(45)	(45)
Pro-forma profit including depreciation and amortisation on held for sale assets	504	466
Headline operating cash-flow	630	575
Headline operating cash conversion	125%	123%

Reconciliation of free cash-flow to total movement in cash and cash-equivalents

	Year ended 31 July 2021 £m	Year ended 31 July 2020 £m
Free cash-flow	383	273
Investment in financial assets and acquisition of businesses	(97)	(36)
Disposal of businesses and discontinued operations	–	1
Other net cash-flows used in financing activities (note: repayment of lease liabilities is included in free cash-flow)	(195)	(141)
Net increase/(decrease) in cash and cash equivalents	91	97

30 ALTERNATIVE PERFORMANCE MEASURES AND KEY PERFORMANCE INDICATORS

The Group uses several alternative performance measures ('APMs') in order to provide additional useful information on underlying trends and the performance and position of the Group. APMs are non-GAAP and not defined by IFRS; therefore they may not be directly comparable with other companies' APMs and should not be considered a substitute for IFRS measures.

The Group uses these measures, which are common across the industry, for planning and reporting purposes. The measures are also used in discussions with the investment analyst community and by credit rating agencies.

We have identified and defined the following key measures which are used within the business by management to assess the performance of the Group's businesses:

APM term	Definition and purpose
Capital employed	Capital employed is a non-statutory measure of invested resources. It comprises statutory net assets and is adjusted to add goodwill recognised directly in reserves in respect of subsidiaries acquired before 1 August 1998 and eliminate post-retirement benefit assets and liabilities and non-headline litigation provisions related to John Crane, Inc. and Titeflex Corporation, both net of deferred tax, and net debt. It is used to monitor capital allocation within the Group. See below for a reconciliation from net assets to capital employed.
Capital expenditure	Comprises additions to property, plant and equipment, capitalised development and other intangible assets, excluding assets acquired through business combinations, see note 1 for an analysis of capital expenditure. This measure quantifies the level of capital investment into ongoing operations.
Divisional headline operating profit ('DHOP')	DHOP comprises divisional earnings before central costs, finance costs and taxation. DHOP is used to monitor divisional performance. A reconciliation of DHOP to operating profit is shown in note 1.
Free cash-flow	Free cash-flow is calculated by adjusting the net cash inflow from operating activities to include capital expenditure, the repayment of lease liabilities and proceeds from the disposal of property, plant and equipment. The measure shows cash generated by the Group before discretionary expenditure on acquisitions and returns to shareholders. A reconciliation of free cash-flow is shown in note 29.
Gross debt	Gross debt is total borrowings (bank, bonds and lease liabilities). It is used to provide an indication of the Group's overall level of indebtedness. See below for an analysis of gross debt.
Headline	The Group has defined a 'headline' measure of performance that excludes material non-recurring items or items considered non-operational/trading in nature. Items excluded from headline are referred to as non-headline items. This measure is used by the Group to measure and monitor performance excluding material non-recurring items or items considered non-operational. See note 3 for an analysis of non-headline items.
Headline EBITDA	EBITDA is a widely used profit measure, not defined by IFRS, being earnings before interest, taxation, depreciation and amortisation. A reconciliation of headline operating profit to headline EBITDA is shown in the note below.
Headline EBITDA before restructuring costs and write-downs	Headline EBITDA, as defined above, is adjusted to exclude restructuring costs from the Group's strategic restructuring programme which commenced in FY2020. A reconciliation of Headline EBITDA to Headline EBITDA before restructuring costs and write-downs is shown in the note below.
Headline operating profit excluding restructuring and write-downs	Headline operating profit is adjusted for strategic restructuring programme costs and write-downs. See note 2 for a reconciliation. This measure of profitability is used by the Group to measure and monitor performance.
Net debt	Net debt is total borrowings (bank, bonds and lease liabilities) less cash balances and derivatives used to manage the interest rate risk and currency profile of the debt. This measure is used to provide an indication of the Group's overall level of indebtedness and is widely used by investors and credit rating agencies. See note 18 for an analysis of net debt.
Non-headline	The Group has defined a 'headline' measure of performance that excludes material non-recurring items or items considered non-operational/trading in nature. Items excluded from headline are referred to as non-headline items. This is used by the Group to measure and monitor material non-recurring items or items considered non-operational. See note 3 for an analysis of non-headline items.
Operating cash-flow	Comprises free cash-flow and excludes cash-flows relating to interest and taxation. The measure shows how cash is generated from operations in the Group. A reconciliation of operating cash-flow is shown in note 29.
Operating profit	Operating profit is earnings before finance costs and tax. A reconciliation of operating profit to profit before tax is shown on the income statement. This common measure is used by the Group to measure and monitor performance.
Return on capital employed ('ROCE')	Smiths ROCE is calculated over a rolling 12-month period and is the percentage that headline operating profit represents of the monthly average capital employed on a rolling 12-month basis. This measure of return on invested resources is used to monitor performance and capital allocation within the Group. See below for Group ROCE and note 1 for divisional headline operating profit and divisional capital employed.

The key performance indicators ('KPIs') used by management to assess the performance of the Group's businesses are as follows:

KPI term	Definition and purpose
Aftermarket % of sales	The aftermarket percentage of sales is defined as the proportion of revenue derived from aftermarket sales. Aftermarket sales are a core characteristic of Smiths businesses and are an indicator of resilient, repeatable revenue for the Group.
Dividend cover – headline	Dividend cover is the ratio of headline earnings per share (see note 5) to dividend per share (see note 25). This commonly used measure indicates the number of times the dividend in a financial year is covered by headline earnings.
Free cash-flow (as a % of operating profit)	This measure is defined as free cash-flow divided by headline operating profit averaged over a three-year performance period. This cash generation measure is used by the Group as a performance measure for remuneration purposes.
Headline cash conversion	Comprises cash flow from operations before non-headline items as a percentage of headline operating profit. This measure is used to show the proportion of headline operating profit converted into cash flow from operations before investment, finance costs, non-headline items and taxation. The calculation is shown in note 29.
Headline operating profit margin	Headline operating profit margin is calculated by dividing headline operating profit by revenue. This measure is used to monitor the Group's ability to drive profitable growth and control costs.
Organic revenue growth	Organic revenue growth is the compounded annualised growth in revenue calculated on an underlying basis. Organic revenue growth differs from underlying revenue growth in that it is calculated on a compounded annualised basis. This measure of revenue growth is used by the Group for remuneration purposes.
Portfolio strength	Portfolio strength is defined as the percentage of revenue derived from products that are positioned in the top three in their markets. Portfolio strength is used to measure the success of the Group's strategy to actively manage its portfolio of businesses to operate in growing markets where it can achieve a sustainable top-three leadership position
R&D cash costs as a % of sales	This measure is defined as the cash cost of research and development activities as a percentage of revenue. Innovation is an important driver of sustainable growth for the Group and this measures our investment in research and development to drive innovation.
Ratio of capital expenditure to depreciation and amortisation	Represents the amount of capital expenditure as a proportion of the depreciation and amortisation charge for the period. This measure shows the level of reinvestment into operations.
Stock turns	Stock turns during the year is calculated as the last 12 month cost of sales divided by the 12 month average inventory. This measure is used by the Group to measure operational efficiency.
Underlying revenue growth	Underlying revenue growth is net revenue growth or decline excluding the effects of foreign exchange, acquisitions (see note 27) and adjusting the prior period to reflect an equivalent period of ownership for divested businesses (see note 28). Underlying revenue growth is used by the Group to aid comparability when monitoring performance.
Underlying headline operating profit growth	Underlying headline operating profit growth is net headline operating profit growth or decline excluding the effects of foreign exchange, acquisitions (see note 27), restructuring costs and write-downs (see note 2), adjusting the prior period to reflect an equivalent period of ownership for divested businesses and including depreciation and amortisation for discontinued operations. Underlying headline operating profit growth is used by the Group to aid comparability when monitoring performance.
Vitality Index / Gross vitality	The Vitality Index or Gross vitality is calculated as the percentage of revenue over the last 12 months derived from new products and services launched in the performance period, typically three years. This measure is used to monitor the effectiveness of the Group's investment into new products and services.
Working capital	Working capital is calculated as the sum of the 12-month rolling average of inventory, trade receivables, contract assets, trade payables and contract liabilities.

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 (FY2020: £787m) and eliminate post-retirement benefit assets and liabilities and non-headline litigation provisions related to John Crane, Inc. and Titeflex Corporation, both net of related tax, and net debt.

	Notes	31 July 2021 £m	31 July 2020 £m
Net assets		2,423	2,394
Adjust for:			
Goodwill recognised directly in reserves		787	787
Retirement benefit assets and obligations	8	(413)	(372)
Tax related to retirement benefit assets and obligations		108	70
John Crane, Inc. litigation provisions and related tax	23	158	172
Titeflex Corporation litigation provisions and related tax	23	36	50
Net debt (including £4m of net cash in discontinued operations (FY2020: £28m cash))	18	1,018	1,141
Capital employed		4,117	4,242

Return on capital employed ('ROCE') – total Group including discontinued operations

	Notes	Year ended 31 July 2021 £m	Year ended 31 July 2020 £m
Headline operating profit for previous 12 months – including discontinued operations		549	511
Average capital employed	1	4,165	4,315
ROCE		13.2%	11.8%

Credit metrics – total Group including discontinued operations

Smiths Group monitors the ratio of net debt to headline EBITDA as part of its management of credit ratings; see note 26 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) – total Group including discontinued operations

	Notes	Year ended 31 July 2021 £m	Year ended 31 July 2020 £m
Headline operating profit		372	327
Include:			
– headline operating profit of discontinued operations	28	177	184
Exclude:			
– depreciation of property, plant and equipment	12	40	41
– depreciation of right of use assets	13	32	33
– amortisation and impairment of development costs	10	7	18
– amortisation of software, patents and intellectual property	10	7	7
Headline EBITDA		635	610
Add back: restructuring costs and write-downs (including £9m in discontinued operations (FY2020: £4m))	2	30	47
Headline EBITDA before restructuring costs and write-downs		665	657

In FY2020 £1m of software amortisation was charged to restructuring projects and treated as a non-headline cost.

Ratio of net debt to headline EBITDA – total Group including discontinued operations

	Notes	Year ended 31 July 2021 £m	Year ended 31 July 2020 £m
Headline EBITDA		635	610
Net debt – incl. £4m of net cash in discontinued operations (FY2020: £20m cash)	18	1,018	1,141
Ratio of net debt to headline EBITDA		1.6	1.9

The ratio of net debt to headline EBITDA before restructuring costs and write-downs was 1.5 times (FY2020: 1.7 times).

Gross debt – total Group including discontinued operations

	Year ended 31 July 2021			Year ended 31 July 2020		
	Continuing operations (note 18) £m	Discontinued operations (note 28) £m	Total £m	Continuing operations (note 18) £m	Discontinued operations (note 28) £m	Total £m
Short-term borrowings:						
– lease liabilities	27	44	71	31	48	79
– interest accrual	9	–	9	10	–	10
Long-term borrowings	1,466	–	1,466	1,520	–	1,520
Gross debt			1,546			1,609

31 POST BALANCE SHEET EVENTS

Details of the proposed final dividend announced since the end of the reporting period are given in note 25.

On 2 August 2021, the Group announced that it had entered into an agreement for the sale of Smiths Medical to TA Associates LLP. Subsequently, on 8 September 2021, the Group announced that it had agreed the sale of Smiths Medical to ICU Medical on terms that are superior to the previously announced transaction with TA Associates (the “ICU Transaction”).

The ICU Transaction is a non-adjusting post balance sheet event for the Group and values Smiths Medical at an enterprise value of \$2.7bn, plus an additional \$0.1bn contingent on the future share price performance of the enlarged ICU Medical business. After the deduction of debt and other liabilities, the equity value of the ICU Transaction is \$2.4bn.

The Group expects to receive initial net cash proceeds on completion of the ICU Transaction of \$1.85bn (equivalent to £1.34bn at current FX rates). In addition to the initial net cash proceeds, the Group will also receive 2.5m new ICU Medical shares, worth \$0.5bn at ICU Medical’s closing share price on 7 September 2021 of \$205.98, equivalent to approximately 10% of the fully diluted enlarged ICU Medical share capital.

The ICU Transaction is a Class 1 transaction under the UK Listing Rules and is therefore conditional upon the approval of Smiths’ shareholders. The ICU Transaction is also conditional on receipt of customary regulatory approvals. ICU Medical has provided strong contractual commitments to the Group to secure the customary regulatory approvals by 8 March 2022 (the “Long Stop Date”). However, in certain limited circumstances, the Long Stop Date may be extended to 8 March 2023.

The Board have determined that the realistic expectation is that it will take six to nine months to complete the customary regulatory approvals for the sale to ICU Medical. Therefore management believe that it remains highly probable that the transaction will complete within 12 months of the balance sheet date.