Smiths Group plc Interim Results for the half year ended 31 January 2020

London, Monday 6 April 2020

Strength & Resilience

- Good growth that continued into the first 2 months of the second half.
- Excellent cash conversion.
- Strong balance sheet.
- Increasing trend of weakening demand with the exception of Smiths Medical.
- Resilient business model and actions in place to respond to market changes.

	Headline[1]				Statutory		
	HY 2020 £m	HY 2019[2] £m	Reported growth	Underlying growth[3]	HY 2020 £m	HY 2019[2] £m	Reported growth
Continuing Operations[4]							
Revenue	1,240	1,143	+8%	+3%	1,240	1,143	+8%
Operating profit	186	175	+6%	+1%	145	127	+14%
Pre-tax profit	160	146	+10%	+4%	46	89	(48)%
Cash conversion	109%	63%	+46%				
Discontinued Operations[5]							
Profit after tax	70	54	+30%		133	67	+99%
Total Group							
Profit for the half year	187	160	+17%		145	121	+20%
Basic EPS	46.9p	40.2p	+17%	+3%	36.3p	30.3p	+20%
Cash conversion	98%	74%	+24%				

The differences between headline and statutory operating profit are non-headline items as defined in note 3 to the accounts, of which the largest constituents are the offsetting impact of foreign exchange on an intercompany loan between the continuing and discontinued operations, amortisation of acquisition related intangible assets and provision for asbestos litigation in John Crane, Inc.

Smiths Continuing Operations: strong results

- 4th consecutive half of good growth with underlying revenue up +3%, and United Flexible acquisition adding a further 5% of growth. As a result, reported revenue increased +8%.
- Strong profit growth across John Crane, Smiths Detection and Flex-Tek, held back by market weakness in Smiths Interconnect.
- Excellent cash generation; 109% cash conversion.

Smiths Medical discontinued operations: excellent further progress

- Another period of revenue and profit growth, both up +1% on an underlying basis.
- As previously announced, separation delayed due to uncertain conditions.
- A strong start to the second half with increasing demand for critical care products globally.

Financial strength

- Free Cash Flow £132m, up 86%.
- Net debt of £1.3bn (including leases) and EBITDA (Continuing and Discontinued) of £699m; a ratio of 1.8x.
- Issued debt has average maturity of 4.6 years, no maturities until October 2022 & no covenants.
- Cash of c.£250m and undrawn RCF of c.£600m; total liquidity headroom in excess of £850m.
- Based on credit rating, eligible for up to £600m in funding via the CCFF.
- Pension plans well hedged, well funded and well invested.

COVID-19 update

- In HY2020 only the Chinese operations of John Crane and Interconnect were disrupted.
- Trading to the end of March was affected to some extent by early COVID-19 disruption; this is now accelerating with impact on both demand and supply in the near-term.
- Resilient characteristics: capex-light, flexible cost base, significant aftermarket activity serving critical industries and strong cash generation.
- Actions to reduce costs and protect cash in place.

Attractive strategic fundamentals

- Well-positioned in long term, attractive growth markets.
- Highly-differentiated, market-leading products and services.
- Organic growth complemented by disciplined M&A.
- World-class operational excellence.
- A culture of innovation, entrepreneurship and relentless execution.

Andy Reynolds Smith, Group Chief Executive, commented:

"We started the year strongly, delivering good growth and cash across the Group. This positive start has also continued during the first two months of the second half, demonstrating the quality and financial strength of our business.

Over the coming months, COVID-19 presents significant uncertainty and our number one priority is to keep our people safe and well. We enter this period confident in our resilience and preparedness; financially, operationally and strategically. We have clear plans underway to contain costs, flex our operations, maximise business continuity and conserve cash. This combined with the significant built-in resilience and our diverse critical end markets with long term structural drivers, will deliver the very best performance through this period and position us well for the future. I'm deeply grateful to our incredible people who are handling this terrible situation with real grit and determination in these challenging times."

Statutory reporting

Statutory reporting takes account of all items excluded from headline performance. On a statutory basis, total Group profit for the half year was £145m (HY 2019: £121m) and basic earnings per share were 36.3p (HY 2019: 30.3p).

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 document:
[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] HY 2019 has been restated for the reclassification of Smiths Medical as discontinued operations.
[3] Underlying modifies headline performance to adjust prior year to reflect an equivalent period of ownership for divested businesses, excludes the effects of foreign exchange and acquisitions, and adds back the depreciation and amortisation of discontinued operations for comparability purposes.
[4] Continuing operations exclude Smiths Medical which is accounted for as 'discontinued operations – businesses held for distribution to owners'.
[5] Discontinued operations are defined in note 17 to the financial statements.

Contact details

Investor enquiries
Marion Le Bot, Smiths Group
+44 (0)20 7004 1672
+44 (0)75 8315 4386
marion.lebot@smiths.com

Media enquiries
Deborah Scott, FTI Consulting
+44 (0)20 3727 1459
+44 (0)797 953 7449
smiths@fticonsulting.com

Alex Le May, FTI Consulting
+44 (0)20 3727 1308
+44 (0)770 244 3312
smiths@fticonsulting.com

Legal Entity Identifier (LEI): 213800MJL6IPZS3ASA11

Presentation

The presentation slides and a live webcast of the analyst presentation will be available at https://smiths.com/investors/results-reports-and-presentations at 09.00 (UK time) today. A recording of the webcast will be made available from 13.00 (UK time).

Photography

Original high-resolution photography is available to the media from the media contacts above or from http://www.smiths-images.com/

COVID-19

As communicated in a trading statement on 31 March 2020, Smiths activated its central crisis management team in January 2020 to drive the Smiths response, first in China and now globally.

People

The health and safety of our people is our number one priority and we have put measures in place to ensure that they remain safe. These include working from home for employees who can, alternating shift schedules and infection controls in manufacturing sites.

Impact on trading year-to-date

Group trading to the end of March was affected to some extent by early COVID-19 disruption, which is now accelerating. In HY2020 only the Chinese operations of John Crane and Interconnect were disrupted. All our sites in China have now reopened and are operating at close to normal levels.

For the 8 weeks ended 28 March 2020, percentage underlying revenue growth for continuing operations and for Smiths Medical was mid-single digit.

All measures are in place to flex cost and conserve cash including hiring freezes, cancellation of discretionary expenditure and, postponement of non-critical capex. We have reinforced controls around receivables and payables, including cash tax (corporate, indirect and payroll).

Demand

We are now seeing generally weaker demand with the exception of Medical, but with some mitigating factors;

- Some customers have temporarily closed their facilities and have not been able to accept delivery of equipment and services.
- Together with lower oil prices, energy customers have announced reductions in capital expenditure. John Crane is not exposed to upstream oil & gas and has a very strong order book, two thirds of which is aftermarket.
- Many airports are closing or operating at significantly reduced capacity, with delays impacting both OE and aftermarket revenue. As a counter balance some customers are starting to pull forward installation, service and software activity in order to use the downtime effectively and enable instant restart when required. Smiths Detection has a record order book to meet global regulatory changes.
- Smiths is responding to a significant increase in demand globally for critical care devices including ventilators. Smiths Medical is contracting with the UK government and is in discussion with other governments around the world for a significant ramp-up in production of its paraPAC plus™ ventilator.

Supply

We are experiencing increasing disruption to supply chain and production;

- As of 3 April 2020, sites accounting for more than 90% of manufacturing capacity were open but a large number of sites and service centres continue to be affected and this is changing daily.
- We are pre-emptively obtaining government authorisation for sites supplying critical products to remain operational.
- A group team is working daily with operating units and suppliers, to identify and resolve potential operations and supply chain issues.

Forward guidance

We are moving decisively on all fronts to address the near-term challenges. Although we believe that we are in a strong position as we enter this period of high uncertainty, it is too early to assess the full impact of COVID-19. Therefore we are withdrawing forward guidance for FY2020.

Results overview

Continuing operations (£m)	HY 2019	Foreign exchange	Acquisitions & disposals*	Underlying movement	HY 2020
Group revenue	1,143	5	56	36	**1,240**
Group headline operating profit	175	1	9	1	**186**

* Includes disposals and FY2019 performance from acquisitions that do not have comparators for the prior year

HY 2020 - Headline	Underlying revenue growth	Operating margin	Variance in operating margin
John Crane	+6%	21.3%	(40)bps
Smiths Detection	+4%	15.0%	(20)bps
Flex-Tek	+3%	18.4%	+40bps
Smiths Interconnect	(7)%	6.5%	(540)bps
Group	**+3%**	**15.0%**	**(30)bps**

Smiths continuing operations

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

Revenue

The Group has delivered four consecutive halves of good underlying growth. Underlying revenue growth for the half was +3%. John Crane, Smiths Detection and Flex-Tek delivered good performances, whilst Smiths Interconnect was impacted by previously communicated market weakness.

The United Flexible acquisition added a further +5% (£56m) of growth. The impact of foreign exchange translation (£5m) was marginal. As a result, reported revenue increased to £1,240m (HY 2019: £1,143m), up +8% or £97m.

Operating profit and margin

Underlying headline operating profit growth of +1% was driven by growth in John Crane, Smiths Detection and Flex-Tek, offset by Smiths Interconnect. Headline operating margin decreased (30)bps to 15.0% on a reported basis. The reduction was mainly driven by Smiths Interconnect. The favourable impact of foreign exchange translation (+£1m) was marginal. The United Flexible acquisition (+£9m) added a further +5% to profit growth. Central costs reduced by +£1m to £(27)m (HY 2019: £(28)m). As a result, reported headline operating profit increased to £186m (HY 2019: £175m), up +6% or £11m.

The £(41)m difference between headline and statutory operating profit is non-headline items as defined in note 3 to the financial statements. The largest constituents relate to amortisation of acquisition related intangible assets and provision for asbestos litigation in John Crane, Inc. On a statutory basis, after taking into account all items excluded from headline performance, operating profit of £145m was +£18m higher than last year (HY 2019: £127m).

Finance costs

Headline finance costs of £(26)m (HY 2019: £(29)m) were lower than last year. This reflects the early repayment of higher coupon debt, which more than offset the inclusion of lease interest following the adoption of IFRS16. Statutory finance costs were £(99)m (HY 2019: £(38)m) due to a £(68)m foreign exchange loss on an intercompany loan with Smiths Medical; the corresponding credit in discontinued operations nets out to zero in total Group earnings.

Taxation

The headline tax charge for the half year of £(43)m (HY 2019: £(40)m) represents an effective rate of 27.0% (HY 2019: 27.0%).

Non-headline taxation items of £9m (HY 2019: £5m) related to tax on non-headline profit, including tax relief on acquired intangibles, and legacy provisions. Therefore, the statutory tax rate is 74.3% (HY 2019: 39.3%). Please refer to notes 3 and 5 of the financial statements for further details.

The headline tax rate for continuing operations is expected to be c.27% for the year ending 31 July 2020.

R&D and capex

The income statement cost of R&D was broadly in line with last year, being £(46)m for HY 2020 (HY 2019: £(45)m). The cash cost increased to £(62)m or 5.0% of sales (HY 2019: £(55)m or 4.8%).

Capex at £(37)m (HY 2019: £(29)m) represented 1.4x depreciation and amortisation (HY 2019: 1.1x), excluding the first time adoption impact of IFRS16.

Cash generation

Strong cash generation is a central feature of our business. Headline operating cash-flow was £202m (HY 2019: £109m). This strong performance was achieved in spite of higher inventory levels which reflect good order books in John Crane and Smiths Detection. Operating cash conversion was 109% (HY 2019: 63%), with the adoption of IFRS16 providing a tailwind of 9%.

Statutory net cash inflow from operating activities was £143m (HY 2019: £43m). See note 15 to the financial statements for a reconciliation of headline operating cash to statutory cash-flow measures.

Portfolio

In October 2019, Smiths Interconnect completed the acquisition of Reflex Photonics ("Reflex") for an enterprise value of CAD$40m. Reflex's technological leadership in ruggedized fibre optics significantly strengthens Smiths Interconnect's product offering in defence, space, aerospace and industrial market segments.

For more information, please read note 13 of the financial statements.

Smiths Medical discontinued operations

Smiths Medical continued its return to growth in the first half and has started the second half strongly. Revenue was up +1% on an underlying basis to £434m, in line with expectations. The result reflects good growth in ambulatory pumps and vascular access as well as the contribution of new products like convective warming, partially offset by disruption of supply for our syringe pump.

Reported revenue was up +1% after inclusion of £4m favourable foreign exchange translation and £(3)m revenue from prior year's disposals.

Headline operating profit of £94m was up +1% on an underlying basis. Operating profit benefitted from volume growth, offset by restructuring costs (now recorded in headline operating costs) and one-off costs. The costs associated with the Notified Body transition and implementation of the new EU Medical Device Regulation were £(4)m, as anticipated. For FY2020 we continue to expect costs of c.£(10)m. Underlying headline operating margin was broadly in line with last year at 16.4%, after including full proforma depreciation and amortisation. The difference between statutory and headline operating profit mainly comprised separation costs.

Accounting standards require the Group to stop charging depreciation and amortisation within Smiths Medical, since it has been reclassified as discontinued operations. For comparability purposes, depreciation and amortisation have been included in the calculation of underlying measures.

As disclosed on 31 March 2020, the Board has decided to delay the previously announced separation of Smiths Medical until conditions improve. It is simply not practicable to complete the separation in current circumstances. Moreover, Smiths and Smiths Medical need to focus on navigating the external challenges – including the delivery of ventilators and other critical care devices.

Total Group

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

Total profit and EPS

Total headline profit after tax increased by +17% on a reported basis. Headline basic EPS was up +3% on an underlying basis and up +17% on a reported basis, excluding amortisation and depreciation for discontinued operations and including the United Flexible acquisition. Total statutory profit after tax increased by +20% to £145m (HY 2019: £121m), driven by the headline performance and lower non-headline items. Statutory basic EPS was also up +20% to 36.3p (HY 2019: 30.3p).

Cash-flow

Headline operating cash conversion for the Group was 98% (HY 2019: 74%), with the adoption of IFRS16 providing a tailwind of 8%. Free cash-flow of £132m (HY 2019: £71m) increased by £61m, underpinned by the strong operating cash-flow. See note 15 to the financial statements for a reconciliation of headline operating cash to statutory cash-flow measures.

Debt

Net debt at 31 January 2020 was £(1,270)m, an increase of £(73)m in the period, driven by the adoption of IFRS16 (£134m). Annualised EBITDA (continuing and discontinued operations) was £699m. Hence net debt to EBITDA was 1.8x after inclusion of leases.

Gross debt was £(1,517)m (FY2019: £1,512m), including leases. There are no covenants associated with this debt. The weighted average maturity was 4.6 years and there are no maturities before October 2022.

Cash reserves were £247m (FY2019: £315m).

An $800m (c.£600m at the period-end exchange rate) revolving credit facility ('RCF') remains undrawn. $160m of the RCF extends until November 2023 and $640m until November 2024. The only covenant relates to interest cover which must be greater than or equal to 3 times, compared with 13 times at the half year.

Taking cash and the RCF together, total liquidity was in excess of £850m at the half year.

It is our understanding that the Group should also be eligible to access up to £600m in funding via the Bank of England's Covid Corporate Financing Facility ('CCFF').

Together with high cash conversion, a conservative balance sheet means that we are very well placed to withstand external shocks.

Pension

The net accounting pension surplus increased to £343m (FY2019: £311m), driven by lower inflation expectations, asset returns and experience gains, partially offset by a lower discount rate. Taken together, the two UK schemes are fully funded on a technical provisions basis.

Pension contributions for the half were £(16)m (HY 2019: £(15)m). For the year, we expect total cash contributions of up to £40m across all schemes (FY2019: £36m).

The two UK pension schemes are well positioned to withstand the current market environment. The schemes are well hedged, so that a movement in liabilities is largely reflected in the movement in assets. Approximately 35% of the liabilities have been de-risked through the purchase of annuities from third party insurers. Approximately 90% of assets are invested in third-party annuities, government bonds and investment grade credit. Only around 1% of assets is invested in equities.

Dividend

We remain confident in the strength of the Group's financial position. However, as announced on 31 March 2020 and at this time of unprecedented uncertainty, the Board considers it prudent not to declare an interim dividend for HY2020. Recognising the importance of the dividend to shareholders, the Board will review this decision again later in the financial year as trading conditions become clearer.

ROCE

ROCE was 14.7% (HY 2019: 14.5%). The increase reflects the absence of depreciation and amortisation in discontinued operations, partially offset by recent investments (such as the acquisition of United Flexible, which are expected to generate superior returns over the longer-term) and the adoption of IFRS16.

IFRS 16 – Leases

The Group has adopted IFRS 16 from 1 August 2019 and has elected to apply the modified retrospective transition approach, requiring no restatement of the comparative period. The main changes include recognition of right of use assets and lease liabilities with a value of £134m (of which £43m relates to discontinued operations), and a marginal increase in operating profit due to reclassification of the financing charges inherent in operating lease costs to finance costs.

Foreign exchange

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

	Average rates			Period-end rates		
	31 January 2020 (6 months)	31 January 2019 (6 months)	*31 July 2019 (1 year)*	31 January 2020	31 January 2019	*31 July 2019*
USD	1.27	1.29	*1.29*	1.32	1.31	*1.22*
EUR	1.15	1.12	*1.13*	1.19	1.15	*1.10*

With over 95% of revenue originating outside the UK, the Group is exposed to foreign exchange movements, mainly the US Dollar and the Euro.

John Crane

John Crane is a leading provider of mission-critical engineered solutions for global energy and process industries. c.63% of revenue is derived from the energy sector (downstream and midstream oil & gas and power generation) and c.37% comes from other process industries (including chemical, pharmaceutical, mining, water treatment, and pulp & paper). 67% of John Crane revenue comes from aftermarket sales. John Crane represents 38% of continuing Group revenue.

	HY 2020 £m	HY 2019 £m	Reported growth	Underlying growth
Revenue	474	449	+6%	**+6%**
Original Equipment	154	142		**+8%**
Aftermarket	320	307		**+5%**
Headline operating profit	101	97	+4%	**+4%**
Headline operating margin	21.3%	21.7%	(40)bps	
Statutory operating profit	94	94	Flat	
Return on capital employed	23.3%	23.0%	+30bps	
R&D cash costs % sales	1.9%	1.9%	Flat	

Revenue

John Crane delivered another good performance, with revenue up +6% on an underlying basis. Reported revenue was also up +6%, as foreign exchange translation had a neutral impact.

Underlying revenue from John Crane's Energy segment was up around +11%. Revenue from Industrial activities was down around (2)% due to a strong comparator and the phasing of orders. John Crane continued to invest in Original Equipment ('OE') projects and expansion of the installed base; OE sales grew +8% overall in the period. Multiple new contracts were secured, including oil and gas expansion projects in the Middle East, Africa and APAC, an oil field development project in Brazil, large petrochemical plants in APAC and the United States, as well as new power, pulp and paper, and chemical contracts across all regions.
John Crane's large installed base and leading service offering position it well to satisfy aftermarket demand for repairs, maintenance and upgrades; underlying aftermarket revenue grew +5% during the year and represents 67% of John Crane's revenue (HY 2019: 68%).

Operating profit

Headline operating profit of £101m increased +4% on an underlying basis, mainly driven by good volumes. Headline operating profit margin was 21.3%, down (40)bps, with the positive impact of volume growth being offset by the higher mix of OE. 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 +30bps at 23.3%, despite the adverse impact of IFRS16 adoption.

R&D

Cash R&D expenditure during the period represented 1.9% of sales, in line with 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.

During the half, John Crane introduced a standby gas booster to provide constant supply of clean seal gas, at a pressure above that of the process during "off conditions", such as standby or shut down. The advanced seal for crude oil pipeline pumps, launched last year, has been complemented by an equivalent product for light end hydrocarbon applications.

Smiths Detection

Smiths Detection is a global leader in the detection and identification of security threats and contraband. It produces equipment for customers in the Aviation market and Other Security Systems for ports & borders, defence and urban security markets. 48% of Smiths Detection's sales are derived from the aftermarket. Smiths Detection represents 31% of continuing Group revenue.

	HY 2020 £m	HY 2019 £m	Reported growth	Underlying growth
Revenue	378	361	+5%	**+4%**
Aviation	254	241		**+5%**
Other Security Systems	124	120		**+3%**
Headline operating profit	57	55	+4%	**+4%**
Headline operating margin	15.0%	15.2%	(20)bps	
Statutory operating profit	44	43	+2%	
Return on capital employed	11.5%	11.8%	(30)bps	
R&D cash costs % sales	10.5%	8.8%	+170bps	

Revenue
Smiths Detection's underlying revenue increased by +4%. The delivery of previously announced contract wins drove Original Equipment ('OE') up +8% on an underlying basis. Aftermarket revenue grew +1% on an underlying basis, accounting for 48% of the division's revenue (HY 2019: 50%). Reported revenue was up +5%, including £2m of favourable impact from foreign exchange translation.

Revenue from Aviation activities increased +5% on an underlying basis. Aviation is Smiths Detection's largest segment, representing 67% of total revenue. We continued to see strong demand for hold-baggage systems ('HBS') across Europe, as a result of the ECAC standard-3 regulation, and globally, as airports upgrade their fleets. Demand is also driven by Computed Tomography ('CT') based screening systems for cabin baggage, which allow laptops and liquids to remain in bags. Deliveries in the half included part of the previously announced contracts with Aena in Spain, Airports Authority India (AAI) and with the TSA in the US. Additionally, Smiths Detection secured in the half a large order for HBS at Singapore's airport and orders for cabin baggage screening for airports in Australia, contributing to a record order book for the division.

Revenue from Other Security Systems grew by +3%, reflecting an improved focus in Smiths Detection's other core vertical markets, particularly ports and borders which grew by +4%. Additionally, Smiths Detection secured contracts to deliver inspection systems to improve border infrastructure in Pakistan and Azerbaijan.

Operating profit
Headline operating profit increased +4% on an underlying basis, reflecting good volume growth but also a higher proportion of OE sales (where pricing pressures continued) and increased investment in R&D. As a result, headline reported operating margin decreased (20)bps to 15.0%. The difference between statutory and headline operating profit primarily reflects amortisation of acquired intangibles.

ROCE
ROCE decreased by (30)bps to 11.5%, impacted by the adoption of IFRS16.

R&D
Cash R&D expenditure during the period was 10.5% of sales (excluding customer funded R&D, HY 2020: 7.9%, HY 2019: 6.8%). We continue to invest in the development of the next generation of detection devices for the defence market, new algorithms to improve the detection of dangerous goods for cargo applications and operational efficiency, and digital solutions to strengthen our aftermarket proposition 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. 31% of Flex-Tek's revenue is derived from the Aerospace sector and 69% from Industrials. 41% of Flex-Tek's revenue comes from aftermarket sales. Flex-Tek represents 20% of continuing Group revenue.

	HY 2020 £m	HY 2019 £m	Reported growth	Underlying growth
Revenue	248	184	+35%	**+3%**
Aerospace	77	44		**+5%**
Industrials	171	140		**+2%**
Headline operating profit	46	33	+39%	**+9%**
Headline operating margin	18.4%	18.0%	+40bps	
Statutory operating profit	25	32	(22)%	
Return on capital employed	20.6%	33.3%	(1,270)bps	
R&D cash costs % sales	0.5%	0.7%	(20)bps	

Revenue

Flex-Tek delivered another good half, with revenue up +3% on an underlying basis, driven by growth in both Aerospace and Industrials. On a reported basis, revenue increased +34%, including +£56m incremental revenue associated with the acquisition of United Flexible (where integration is progressing well), and +£2m favourable foreign exchange translation.

Aerospace revenue was up +5% on an underlying basis, driven by growth in engine and airframe platforms including GEnx, Airbus 320, and LEAP engines, as well as good growth in the overhaul and repair aftermarket business and higher levels of development work for new engine platforms. Industrials revenue was up +2% driven by product innovation in flexible gas tubing and strong growth in flexible duct for construction applications, offset by weakness in some core industrial markets. In the half, Flex-Tek also secured a 2-year $25m contract for heat application products for the aerospace market.

Operating profit

On an underlying basis headline operating profit increased +9% to £46m, driven by revenue growth, strong cost management and the non-repeat of one-off costs. As a result, headline operating margin increased +40bps to 18.4%. The difference between statutory and headline operating profit is due to amortisation of acquired intangible assets, provision for Titeflex Corporation subrogation claims, and acquisition costs.

ROCE

ROCE decreased (1,270)bps to 20.6%, driven by the acquisition of United Flexible in the prior year. Excluding this, ROCE improved by +150bps as a result of improved profitability.

R&D

Cash R&D expenditure remained consistent at 0.5% of sales, focused on developing new products to meet specific customer needs for improved efficiency.

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 11% of continuing Group revenue.

	HY 2020 £m	HY 2019 £m	Reported growth	Underlying growth
Revenue	140	149	(6)%	**(7)%**
Headline operating profit	9	18	(50)%	**(50)%**
Headline operating margin	6.5%	11.9%	(540)bps	
Statutory operating profit	7	17	(59)%	
Return on capital employed	10.1%	12.9%	(280)bps	
R&D cash costs % sales	8.2%	7.4%	+80bps	

Revenue
Revenue on an underlying basis was down (7)% reflecting the previously communicated slowdown in the market and a strong comparator. On a reported basis, revenue decreased by (6)% including £1m favourable foreign exchange translation.

The volume decline reflects a general slowdown in Interconnect's markets, which were impacted by the China-US trade dispute. This was combined with a strong comparator in the prior year driven by first-half weighted defence and semiconductor programmes.

Operating profit
Headline operating profit decreased (50)% on an underlying basis to £9m, reflecting lower volumes and also costs to relocate and rationalise production capacity. As a result, headline operating margin of 6.5% decreased (540)bps. We continue to optimise the operational footprint and to strengthen the product portfolio, through organic R&D and selective acquisition. The difference between statutory and headline operating profit reflects adjustments for amortisation of acquired intangibles and acquisition costs.

Portfolio
In October 2019, Smiths Interconnect completed the acquisition of Reflex Photonics ("Reflex") for an enterprise value of CAD$40m. Reflex's technological leadership in shock-resistant fibre optics significantly strengthens Smiths Interconnect's product offering in defence, space, aerospace and industrial market segments.

ROCE
ROCE decreased (280)bps to 10.1%, driven by lower profitability.

R&D
Cash R&D expenditure increased to 8.2% of sales (7.4% excluding customer funded R&D, HY 2019: 6.4%), as we continued to invest in technology-led growth. R&D is focused on bringing to market new products that improve connectivity in difficult operating environments. Product launches in the half included connectors for power transmission in harsh environments and efficient probe heads for the semiconductor packaging industry.

Smiths Medical - Discontinued operations

Smiths Medical supplies high-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. 82% of Smiths Medical's sales are from consumable and disposable products.

	HY 2020 £m	HY 2019 £m	Reported growth	Underlying growth
Revenue	434	430	+1%	**+1%**
Headline operating profit	94	71	+32%	**+1%**
Headline operating margin	21.7%	16.5%	+520bps	**(10)bps**
Statutory operating profit	83	86	(3)%	
Return on capital employed	13.2%	11.9%	+130bps	
R&D cash costs % sales	6.1%	5.8%	+30bps	

Accounting standards require the Group to stop charging depreciation and amortisation within Smiths Medical, since it has been reclassified as discontinued operations. For comparability purposes, depreciation and amortisation have been included in the calculation of underlying measures.

Update on separation

As disclosed on 31 March 2020, the Board has decided to delay the previously announced separation of Smiths Medical until conditions improve. It is simply not practicable to complete the separation in current circumstances. Moreover, Smiths and Smiths Medical need to focus on navigating the external challenges – including the delivery of ventilators and other critical care devices.

Revenue

Smiths Medical continued its return to growth in the first half. Revenue was up +1% on an underlying basis to £434m, in line with expectations. The result reflects good growth in ambulatory pumps and vascular access as well as the contribution of new products like convective warming, partially offset by disruption of supply for our syringe pump. Reported revenue was up +1% after inclusion of £4m favourable foreign exchange translation and £(3)m revenue from prior year's disposals.

Underlying revenue was down (3)% year-on-year in Infusion Systems, with good growth in ambulatory pumps offset by the syringe pump. Vascular Access underlying revenue increased by +3% as a result of strong performance in sharps safety and catheters, with successful account conversions to active safety catheters. Underlying revenue from Vital Care and Specialty Products grew +2%, with good growth in the COPD product line, which is now being sold directly, and temperature management, supported by a new product.

Operating profit

Headline operating profit of £94m was up +32% on a reported basis (excluding depreciation and amortisation) and up +1% on an underlying basis. Operating profit benefitted from volume growth, offset by restructuring costs (now recorded in headline operating costs) and one-off costs. The costs associated with the Notified Body transition and implementation of the new EU Medical Device Regulation were £(4)m, as anticipated. For FY2020 we continue to expect costs of c. £(10)m. Underlying headline operating margin was broadly in line with last year at 16.4%, after including full proforma depreciation and amortisation. The difference between statutory and headline operating profit mainly comprised separation costs.

ROCE

ROCE increased by +130bps to 13.2% due to the absence of depreciation and amortisation, partially offset by the adoption of IFRS16.

R&D

Cash R&D expenditure was 6.1% of sales. Smiths Medical continues to invest in the development of innovative, commercially focused products across the portfolio to support long-term, sustainable growth. Product launches in the half included: wireless radio connectivity enhancements to CADD™ Solis ambulatory pumps, enhancements to PharmGuard software for infusion systems, next generation range of tracheostomy free from DEHP chemical, an enhanced basic percutaneous kit, and a full component procedural tray. One of the division's most significant new product investments, the large volume pump, has been submitted for approval to the US regulator and to the European Notified Body. The large volume pump market represents a c.£2bn extension to Smiths Medical's addressable market.

Other financial matters

Risk management

The principal risks and uncertainties which may affect the Group during the second half of FY2020 are set out below.

COVID-19: The Group is closely monitoring the fast-moving global spread of COVID-19 and taking prudent steps to mitigate any potential impacts to the health and safety of employees, customers and suppliers, and to the successful operation of our business. More information on how Smiths is being impacted by and responding to COVID-19 is set out in page 4 and note 1 to the condensed interim financial statements of this release.

Technology: Differentiated new products and services are critical to our success. We may be unable to maintain technological differentiation or to meet customers' needs and may face disruptive innovation by a competitor.

Economy and geopolitics: Economic and financial market conditions may cause adverse effects on customers or suppliers with consequential capacity or cash-flow implications for Smiths Group.

Acquisitions/integration and divestment/separation: Acquisitions bring risk as well as opportunity. We may invest substantial funds and resources in acquisitions which fail to deliver on expectations – due to incorrect appraisal of the target and/or poor execution. Divestments also carry risk. We may divest an asset at the wrong time or may not realise the appropriate value for the asset. Separation may be complex and, if poorly executed, may impact the wider business.

Product quality: Manufacturing flaws, component failures, damage to persons / property, and / or design defects could require us to recall products causing damage to our reputation and reduction in market acceptance of, and demand for, our products. Also, we are potentially subject to product liability claims and lawsuits, including potential class actions. The mission-critical nature of many of our solutions makes the potential consequences of failure more serious than may otherwise be the case. This includes potential exposure to losses in the event of a cyber security breach relating to the Group's products.

Ethical breach: We have more than 22,000 employees in more than 50 countries. Individuals may not all behave in accordance with the Group's values and ethical standards. We operate in highly regulated markets requiring strict adherence to laws with risk areas including: bribery and corruption, anti-trust matters, international trade laws and sanctions, human rights, modern slavery and international labour standards, General Data Protection Regulation (GDPR), and government contracting regulations.

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

Integrated supply chain: Timely, efficient supply of raw materials and purchased components is critical to our ability to deliver to our customers. Manufacturing continues to be exposed to external events which could have significant adverse consequences, including natural catastrophes, disease pandemics and terrorist attacks. We are also affected by the social, economic, regulatory and political conditions where we operate. This applies to our own manufacturing sites and those of our key component suppliers.

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

Customers: Our markets are evolving at a fast pace, creating potential for customers to change their business models as they look to deliver products and services at higher quality, with better service and at lower cost. Failure to keep pace with customer changes/requirements (innovation, go to market, strategies) could have a materially adverse impact on Group performance.

Contractual obligations: We may fail to deliver the products and services we are obliged to deliver, or fail in our contractual execution due to delays or breaches by our suppliers or other counterparties. This may result in significant expenses due to disputes and claims, loss of customers, damage to reputation and adversely impact our financial performance.

People: People are our only truly sustainable source of competitive advantage and competition for key skills is intense, especially around science, technology, engineering and mathematics (STEM) disciplines. We may not be successful in attracting, retaining, developing, engaging and inspiring the right people with the right skills to achieve our growth ambitions.

Statement of directors' responsibilities

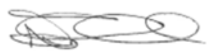
The directors confirm that, to the best of our knowledge:

- the condensed set of financial statements has been prepared in accordance with IAS 34 *Interim Financial Reporting* as adopted by the EU;
- the interim management report includes a fair review of the information required by:

  a) DTR 4.2.7R of the *Disclosure Guidance and Transparency Rules*, being an indication of important events that have occurred during the first six months of the financial year and their impact on the condensed set of financial statements; and a description of the principal risks and uncertainties for the remaining six months of the year; and

  b) DTR 4.2.8R of the *Disclosure Guidance and Transparency Rules*, being related party transactions that have taken place in the first six months of the current financial year and that have materially affected the financial position or performance of the entity during that period; and any changes in the related party transactions described in the last annual report that could do so.

For and on behalf of the Board of directors:



Andy Reynolds Smith

Chief Executive

5 April 2020

John Shipsey

Chief Financial Officer

5 April 2020

Independent review report to Smiths Group plc

Conclusion
We have been engaged by the company to review the condensed set of financial statements in the half-yearly financial report for the six months ended 31 January 2020 which comprises the consolidated income statement, the consolidated statement of comprehensive income, the consolidated balance sheet, the consolidated statement of changes in equity, the consolidated cash-flow statement and the related explanatory notes.

Based on our review, nothing has come to our attention that causes us to believe that the condensed set of financial statements in the half-yearly financial report for the six months ended 31 January 2020 is not prepared, in all material respects, in accordance with IAS 34 Interim Financial Reporting as adopted by the EU and the Disclosure Guidance and Transparency Rules ("the DTR") of the UK's Financial Conduct Authority ("the UK FCA").

Scope of review
We conducted our review in accordance with International Standard on Review Engagements (UK and Ireland) 2410 Review of Interim Financial Information Performed by the Independent Auditor of the Entity issued by the Auditing Practices Board for use in the UK. A review of interim financial information consists of making enquiries, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures. We read the other information contained in the half-yearly financial report and consider whether it contains any apparent misstatements or material inconsistencies with the information in the condensed set of financial statements.

A review is substantially less in scope than an audit conducted in accordance with International Standards on Auditing (UK) and consequently does not enable us to obtain assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, we do not express an audit opinion.

Directors' responsibilities
The half-yearly financial report is the responsibility of, and has been approved by, the directors. The directors are responsible for preparing the half-yearly financial report in accordance with the DTR of the UK FCA.

As disclosed in note 1, the annual financial statements of the group are prepared in accordance with International Financial Reporting Standards as adopted by the EU. The directors are responsible for preparing the condensed set of financial statements included in the half-yearly financial report in accordance with IAS 34 as adopted by the EU.

Our responsibility
Our responsibility is to express to the company a conclusion on the condensed set of financial statements in the half-yearly financial report based on our review.

The purpose of our review work and to whom we owe our responsibilities
This report is made solely to the company in accordance with the terms of our engagement to assist the company in meeting the requirements of the DTR of the UK FCA. Our review has been undertaken so that we might state to the company those matters we are required to state to it in this report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the company for our review work, for this report, or for the conclusions we have reached.

Michael Maloney

for and on behalf of KPMG LLP
Chartered Accountants
15 Canada Square
London
E14 5GL

5 April 2020

Consolidated income statement (unaudited)

	Notes	Six months ended 31 January 2020 Headline £m	Six months ended 31 January 2020 Non-headline (note 3) £m	Six months ended 31 January 2020 Total £m	Six months ended 31 January 2019 – restated* Headline £m	Six months ended 31 January 2019 – restated* Non-headline (note 3) £m	Six months ended 31 January 2019 – restated* Total £m
Continuing operations							
Revenue	2	1,240		1,240	1,143		1,143
Cost of sales		(731)		(731)	(652)		(652)
Gross profit		509		509	491		491
Sales and distribution costs		(138)		(138)	(130)		(130)
Administrative expenses		(185)	(41)	(226)	(186)	(48)	(234)
Operating profit/(loss)		**186**	**(41)**	**145**	**175**	**(48)**	**127**
Interest receivable		4		4	4		4
Interest payable		(30)		(30)	(33)		(33)
Other financing losses			(77)	(77)		(15)	(15)
Other finance income – retirement benefits			4	4		6	6
Finance costs		(26)	(73)	(99)	(29)	(9)	(38)
Continuing operations – profit before taxation		**160**	**(114)**	**46**	**146**	**(57)**	**89**
Taxation	5	(43)	9	(34)	(40)	5	(35)
Continuing operations – profit for the period		**117**	**(105)**	**12**	**106**	**(52)**	**54**
Discontinued operations							
Profit from discontinued operations	17	70	63	133	54	13	67
PROFIT FOR THE PERIOD		**187**	**(42)**	**145**	**160**	**(39)**	**121**
Attributable to:							
Smiths Group shareholders – continuing operations		116	(105)	11	105	(52)	53
Smiths Group shareholders – discontinued operations		70	63	133	54	13	67
Non-controlling interests in respect of continuing operations		1		1	1		1
		187	**(42)**	**145**	**160**	**(39)**	**121**
Earnings per share	4						
Basic				36.3p			30.3p
Basic – continuing				2.8p			13.4p
Diluted				36.2p			29.9p
Diluted – continuing				2.8p			13.2p
Dividends per share (declared)	14						**14.1p**

* Results for the period ended 31 January 2019 have been restated to reflect the reclassification of the Smiths Medical business as a discontinued operation.

Consolidated statement of comprehensive income (unaudited)

	Notes	Six months ended 31 January 2020 £m	Six months ended 31 January 2019 £m
Profit for the period		**145**	**121**
Other comprehensive income:			
Actuarial gains/(losses) on retirement benefits	6	1	(117)
Taxation			20
Other comprehensive income/(expenditure) which will not be reclassified to the consolidated income statement		**1**	**(97)**
Other comprehensive income/(expenditure) which will be, or has been, reclassified:			
Exchange losses		(257)	(14)
Fair value gains and reclassification adjustments:			
– on financial assets at fair value through other comprehensive income		1	
– deferred in the period on cash-flow and net investment hedges		112	7
– reclassified to income statement on cash-flow and net investment hedges		(1)	(1)
Total other comprehensive expenditure		**(144)**	**(105)**
Total comprehensive income		**1**	**16**
Attributable to:			
Smiths Group shareholders		1	15
Non-controlling interests			1
		1	**16**

Consolidated balance sheet (unaudited)

	Notes	31 January 2020 £m	31 July 2019 £m
Non-current assets			
Intangible assets	7	1,560	1,684
Property, plant and equipment	8	218	232
Right of use assets	9	92	
Financial assets – other investments		21	19
Retirement benefit assets	6	486	469
Deferred tax assets		106	115
Trade and other receivables		53	52
Financial derivatives		40	47
		2,576	**2,618**
Current assets			
Inventories		470	417
Current tax receivable		30	11
Trade and other receivables		613	764
Cash and cash equivalents	10	206	289
Financial derivatives		2	3
Assets held for distribution to owners	17	1,219	1,216
		2,540	**2,700**
Total assets		**5,116**	**5,318**
Current liabilities			
Financial liabilities:			
– borrowings	10	(18)	(9)
– lease liabilities	10	(26)	
– financial derivatives		(3)	(5)
Provisions for liabilities and charges	12	(62)	(66)
Trade and other payables		(498)	(569)
Current tax payable		(62)	(56)
Liabilities held for distribution to owners	17	(253)	(213)
		(922)	**(918)**
Non-current liabilities			
Financial liabilities:			
– borrowings	10	(1,386)	(1,500)
– lease liabilities	10	(67)	
– financial derivatives			(1)
Provisions for liabilities and charges	12	(265)	(285)
Retirement benefit obligations	6	(138)	(152)
Corporation tax payable		(5)	(6)
Deferred tax liabilities		(44)	(45)
Trade and other payables		(49)	(30)
		(1,954)	**(2,019)**
Total liabilities		**(2,876)**	**(2,937)**
Net assets		**2,240**	**2,381**
Shareholders' equity			
Share capital		149	148
Share premium account		361	360
Capital redemption reserve		6	6
Revaluation reserve		1	1
Merger reserve		235	235
Retained earnings		1,740	1,993
Hedge reserve		(272)	(383)
Total shareholders' equity		**2,220**	**2,360**
Non-controlling interest equity		20	21
Total equity		**2,240**	**2,381**

Consolidated statement of changes in equity (unaudited)

	Notes	Share capital and share premium £m	Other reserves £m	Retained earnings £m	Hedge reserve £m	Equity shareholders' funds £m	Non-controlling Interest £m	Total equity £m
At 1 August 2019		508	242	1,993	(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 period				144		144	1	145
Other comprehensive income:								
– exchange losses net of recycling				(256)		(256)	(1)	(257)
– actuarial losses on retirement benefits and tax				1		1		1
– fair value gains				1	111	112		112
Total comprehensive income for the period				**(110)**	**111**	**1**		**1**
Transactions relating to ownership interests:								
Exercises of share options		2				2		2
Purchase of own shares				(18)		(18)		(18)
Dividends:								
– equity shareholders	14			(126)		(126)		(126)
– non-controlling interests							(1)	(1)
Share-based payment				6		6		6
At 31 January 2020		**510**	**242**	**1,740**	**(272)**	**2,220**	**20**	**2,240**

	Notes	Share capital and share premium £m	Other reserves £m	Retained earnings £m	Hedge reserve £m	Equity shareholders' funds £m	Non-controlling Interest £m	Total equity £m
At 1 August 2018		506	242	1,826	(302)	2,272	16	2,288
Profit for the period				120		120	1	121
Other comprehensive income:								
– exchange losses net of recycling				(14)		(14)		(14)
– actuarial losses on retirement benefits and tax				(97)		(97)		(97)
– fair value gains					6	6		6
Total comprehensive income for the period				**9**	**6**	**15**	**1**	**16**
Transactions relating to ownership interests:								
Exercises of share options		2				2		2
Purchase of own shares				(19)		(19)		(19)
Dividends – equity shareholders	14			(122)		(122)		(122)
Share-based payment				4		4		4
At 31 January 2019		**508**	**242**	**1,698**	**(296)**	**2,152**	**17**	**2,169**

Consolidated cash-flow statement (unaudited)

	Notes	Six months ended 31 January 2020 £m	Six months ended 31 January 2019 £m
Net cash inflow from operating activities	15	**187**	**123**
Cash-flows from investing activities			
Expenditure on capitalised development		(18)	(12)
Expenditure on other intangible assets		(8)	(7)
Purchase of property, plant and equipment		(29)	(35)
Disposal of property, plant and equipment			1
Net movement in investment in financial assets			1
Acquisition of businesses		(24)	
Disposal of businesses – continuing operations			29
Net cash-flow used in investing activities		**(79)**	**(23)**
Cash-flows from financing activities			
Proceeds from exercise of share options		2	2
Purchase of own shares		(18)	(19)
Dividends paid to equity shareholders		(126)	(122)
Settlement of cash share awards		(1)	
Cash (outflow) from matured derivative financial instruments		(1)	(4)
Principal elements of lease payments		(22)	
Reduction and repayment of borrowings			(194)
Net cash-flow used in financing activities		**(166)**	**(337)**
Decrease in cash and cash equivalents		**(58)**	**(237)**
Cash and cash equivalents at beginning of the period		289	717
Net debt/ (cash) held in disposal group		4	
Exchange differences		(29)	
Cash and cash equivalents at end of the period		**206**	**480**
Cash and cash equivalents at end of the period comprise:			
– cash at bank and in hand		179	203
– short-term deposits		27	277
		206	**480**

Reconciliation of net cash-flow to movement in net debt

	Notes	Six months ended 31 January 2020 £m	Six months ended 31 January 2019 £m
Net debt at start of period (as previously reported)	10	**(1,220)**	**(893)**
Fair value of derivatives used to hedge net debt		45	43
Adoption of IFRS 16		(148)	
Net debt at start of period (represented)		**(1,323)**	**(850)**
Net decrease in cash and cash equivalents		(58)	(237)
Net cash held in disposal group		42	(29)
Repayment of lease liabilities		22	
Reduction and repayment of borrowings			194
Movement in net debt resulting from cash-flows		**6**	**(72)**
Increase in lease liabilities in the period		(11)	
Capitalisation, interest accruals and unwind of capitalisation of fees		(12)	(6)
Fair value movement from interest rate hedging		(4)	(20)
Foreign exchange gains		93	21
Movement in net debt in the period		**72**	**(77)**
Net debt at end of period	10	**(1,251)**	**(927)**

Notes to the condensed interim financial statements (unaudited)

1 Basis of preparation

The financial information for the period ended 31 January 2020 does not constitute statutory accounts as defined in section 434 of the Companies Act 2006. A copy of the statutory accounts for the year ended 31 July 2019 has been delivered to the Registrar of Companies. The auditor’s report on those accounts was not qualified, did not include a reference to any matters to which the auditor drew attention by way of emphasis without qualifying the report, and did not contain statements under section 498(2) or (3) of the Companies Act 2006.

This condensed set of financial statements has been prepared in accordance with IAS 34 Interim Financial Reporting as adopted by the EU.

The annual financial statements of the Group are prepared in accordance with International Financial Reporting Standards (IFRSs) as adopted by the EU. As required by the Disclosure Guidance and Transparency Rules of the Financial Conduct Authority, this condensed set of financial statements has been prepared applying the accounting policies and presentation that were applied in the preparation of the company's published consolidated financial statements for the year ended 31 July 2019, except for the changes detailed in the accounting policies section below.

The Directors have assessed the principal risks discussed on page 13, including by modelling a severe but plausible downside scenario for COVID-19, whereby the Group experiences:

- a closure of operating plants for 2 months across all countries, except China where activities have already begun to recover;
- ongoing supply chain disruption due to availability of suppliers;
- a significant reduction in demand over the next six months across all its continuing divisions, which in conjunction with plant closures, depresses revenue by 20-40% versus prior year; and
- a further period of depressed activity into the next financial year which reduces revenue by 15-35% versus prior year;

Furthermore, this downside scenario assumes;

- no material cost mitigation, including staff reductions or government subsidies; and
- the Medical division remains under the Group’s control and continues to operate all its factories with smaller reductions than the other divisions due to continued (and in some instances increased) demand for its critical products.

Throughout this severe but plausible downside scenario, the Group continues to have significant liquidity headroom on existing facilities and against the RCF financial covenant. Moreover, based on its credit rating, the Group should be eligible to participate in the Bank of England’s Covid Corporate Financing Facility (“CCFF”); however participation has not been incorporated into the downside scenario.

The Directors believe that the Group is well placed to manage its financing and other business risks satisfactorily, and 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 condensed consolidated interim financial statements. They therefore consider it appropriate to adopt the going concern basis of accounting in preparing the financial statements.

The interim financial information was approved by the Board on 5 April 2020.

Accounting policies

The same accounting policies, estimates, presentation and methods of computation are followed in the condensed interim financial statements as applied in the Group’s latest annual audited financial statements, with the exception of updating accounting policies to reflect changes required by the adoption of IFRS 16 and IFRIC 23.

Newly adopted accounting policies – IFRS 16 – Leases

The Group adopted IFRS 16 – Leases with effect from 1 August 2019. The standard fundamentally changed the accounting treatment of leased assets, requiring that all material lease liabilities and corresponding ‘right of use’ assets are recognised on the balance sheet. The operating lease rental expense previously charged to operating profit in the income statement has been replaced by a depreciation charge for the ‘right of use’ assets recognised in operating profit and an interest charge on the lease liabilities recognised in finance costs.

The Group has adopted IFRS 16 using the modified retrospective transition approach, which does not require the restatement of comparative figures. Adoption of IFRS 16 resulted in right of use assets totalling £106m being recognised, together with lease liabilities of £105m and a net £1m increase in net assets within continuing operations. The weighted average incremental borrowing rate (IBR) was 4.0%. Discounting the operating lease commitments at 31 July 2019 at the IBR reduced the lease liabilities by £11m, which was largely offset by increases in the lease liability arising from revised lease extension and termination assumptions.

Within continuing operations during the period, lease interest of £2m has been recognised within finance costs and £16m of depreciation has been charged to the income statement. In total, payments of £18m were made under leasing contracts, of which £16m was made to repay the principal portion of the lease. Additionally, administrative expenses include £3m in respect of variable lease payments for short term and low value leases which are not included in the lease liabilities and payments disclosed above.

On transition the Group applied the following available practical expedients permitted by the standard:

- the exclusion of leases relating to low-value assets (less than £5,000 when new);
- the exclusion of short-term leases, being those with a lease term of 12 months or less; and
- applying the new definition of a lease only to contracts entered into after the transition date.

Newly adopted interpretations IFRIC 23 – Uncertainty over Income Tax Treatments

The Group adopted IFRIC 23 – Uncertainty over Income Tax Treatments on 1 August 2019. This interpretation clarifies how to recognise and measure uncertainties over income tax treatments. The Group already provides for tax uncertainties and the net impact on the Group of implementing IFRIC 23 did not have a material impact on the financial statements.

New standards and interpretations not yet adopted

Certain new standards, amendments to standards and interpretations are not yet effective for the period ended 31 January 2020 and have, therefore, not been applied in preparing these condensed consolidated interim financial statements. These standards are not expected to have a material impact on the Group in the current or future reporting periods.

Presentation of results

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 a form consistent with the prior year.

Judgement is required in determining which items should be included as non-headline. The amortisation of acquired intangibles, impairments, legacy liabilities, material one-off items and certain re-measurements are included in a separate column of the income statement. See note 3 for a breakdown of the items excluded from headline operating profit and headline finance costs.

Performance measures for the Group's ongoing trading activity are described as 'headline' and used by management to measure and monitor performance. See note 2 for disclosures of headline operating profit and note 18 for more information about the calculation of return on capital employed and credit metrics.

In addition, the Group reports underlying growth rates for sales and profit measures, and determining which items should be adjusted for involves judgement. Underlying growth excludes the impact of acquisitions, divestments and the effects of foreign exchange translation, by making the following adjustments:

- exclude acquisitions from the current period for the first 12 months of ownership;
- exclude the performance of divested businesses after the date of disposal from comparative period; and
- retranslate the comparative to current year exchange rates before calculating growth measures.

2 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 and manufacture 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 which 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 diagnostics and emergency patient transport.

The position and performance of each division is reported at each Board meeting to the Board of Directors. This information is prepared using the same accounting policies as the consolidated financial information, except that the Group uses headline operating profit to monitor divisional results and operating assets to monitor divisional position. See note 3 for an explanation of which items are excluded from headline profit measures.

Following the reclassification of the Smiths Medical business as a discontinued operation, the segmental information for the Smiths Medical division is disclosed in note 17.

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

Segment trading performance

	Six months ended 31 January 2020					
	John Crane £m	Smiths Detection £m	Flex-Tek £m	Smiths Interconnect £m	Corporate costs £m	Total £m
Revenue	474	378	248	140		1,240
Divisional headline operating profit	101	57	46	9		213
Corporate headline operating costs					(27)	(27)
Headline operating profit/(loss)	**101**	**57**	**46**	**9**	**(27)**	**186**
Items excluded from headline measures (note 3)	(7)	(13)	(21)	(2)	2	(41)
Operating profit/(loss) for the period	**94**	**44**	**25**	**7**	**(25)**	**145**
Headline operating margin	21.3%	15.0%	18.4%	6.5%		15.0%

	Six months ended 31 January 2019 – restated					
	John Crane £m	Smiths Detection £m	Flex-Tek £m	Smiths Interconnect £m	Corporate costs £m	Total Restated £m
Revenue	449	361	184	149		1,143
Divisional headline operating profit	97	55	33	18		203
Corporate headline operating costs					(28)	(28)
Headline operating profit/(loss)	**97**	**55**	**33**	**18**	**(28)**	**175**
Items excluded from headline measures (note 3)	(3)	(12)	(1)	(1)	(31)	(48)
Operating profit/(loss) for the period	**94**	**43**	**32**	**17**	**(59)**	**127**
Headline operating margin	21.7%	15.2%	18.0%	11.9%		15.3%

Segment assets and liabilities

Segment assets

	John Crane £m	Smiths Detection £m	Flex-Tek £m	Smiths Interconnect £m	Corporate and non-headline £m	Total £m
						31 January 2020
Property, plant, equipment, right of use assets, development projects, other intangibles and investments	144	132	60	46	27	409
Inventory, trade and other receivables	394	461	151	113	17	1,136
Segment assets	**538**	**593**	**211**	**159**	**44**	**1,545**

	John Crane £m	Smiths Detection £m	Flex-Tek £m	Smiths Interconnect £m	Corporate and non-headline £m	Total £m
						31 July 2019
Property, plant, equipment, development projects, other intangibles and investments	113	106	52	38	20	329
Inventory, trade and other receivables	428	485	171	132	17	1,233
Segment assets	**541**	**591**	**223**	**170**	**37**	**1,562**

Non-headline assets comprise receivables relating to non-headline items, acquisitions and disposals.

Segment liabilities

	John Crane £m	Smiths Detection £m	Flex-Tek £m	Smiths Interconnect £m	Corporate and non-headline £m	Total £m
						31 January 2020
Divisional liabilities	(166)	(321)	(71)	(47)		(605)
Corporate and non-headline liabilities					(362)	(362)
Segment liabilities	**(166)**	**(321)**	**(71)**	**(47)**	**(362)**	**(967)**

	John Crane £m	Smiths Detection £m	Flex-Tek £m	Smiths Interconnect £m	Corporate and non-headline £m	Total £m
						31 July 2019
Divisional liabilities	(158)	(287)	(63)	(56)		(564)
Corporate and non-headline liabilities					(386)	(386)
Segment liabilities	**(158)**	**(287)**	**(63)**	**(56)**	**(386)**	**(950)**

Non-headline liabilities comprise provisions and accruals relating to non-headline items, acquisitions and disposals.

Reconciliation of segment assets and liabilities to statutory assets and liabilities

	Assets		Liabilities	
	31 January 2020 £m	31 July 2019 £m	31 January 2020 £m	31 July 2019 £m
Segment assets and liabilities	**1,545**	**1,562**	**(967)**	**(950)**
Goodwill and acquired intangibles	1,482	1,606		
Derivatives	42	50	(3)	(6)
Current and deferred tax	136	126	(111)	(107)
Retirement benefit assets and obligations	486	469	(138)	(152)
Cash and borrowings	206	289	(1,404)	(1,509)
Assets and liabilities held for distribution to owners	1,219	1,216	(253)	(213)
Statutory assets and liabilities	**5,116**	**5,318**	**(2,876)**	**(2,937)**

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 (31 July 2019: £787m), and eliminate post-retirement benefit assets and liabilities and litigation provisions relating to non-headline items, both net of related tax, and net debt. See note 18 for additional details.

The 12-month rolling average capital employed by division, which Smiths uses to calculate divisional return on capital employed, is set out below:

					31 January 2020
	John Crane £m	Smiths Detection £m	Flex-Tek £m	Smiths Interconnect £m	Total £m
Average divisional capital employed	962	1,125	469	380	2,936
Average capital employed – assets held for distribution to owners					1,290
Average corporate capital employed					(70)
Average total capital employed					**4,156**
Return on capital employed	**23.3%**	**11.5%**	**20.6%**	**10.1%**	**14.7%**

					31 January 2019
	John Crane £m	Smiths Detection £m	Flex-Tek £m	Smiths Interconnect £m	Total £m
Average divisional capital employed	905	1,099	206	357	2,567
Average capital employed – assets held for distribution to owners					1,222
Average corporate capital employed					(43)
Average total capital employed					**3,746**
Return on capital employed	**23.0%**	**11.8%**	**33.3%**	**12.9%**	**14.5%**

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 six months ended 31 January 2020	154	320	474
Revenue six months ended 31 January 2019	142	307	449

Smiths Detection	Aviation security £m	Other security systems £m	Total £m
Revenue six months ended 31 January 2020	254	124	378
Revenue six months ended 31 January 2019	241	120	361

Flex-Tek	Aerospace £m	Industrials £m	Total £m
Revenue six months ended 31 January 2020	77	171	248
Revenue six months ended 31 January 2019	44	140	184

Smiths Interconnect	Components, Connectors & Subsystems £m
Revenue six months ended 31 January 2020	140
Revenue six months ended 31 January 2019	149

Following a review, the Group has rationalised the analysis of divisional revenue to focus on the key markets of each division and to reflect the measures of revenue performance that are reported to and reviewed by the chief operating decision maker of the business. This review resulted in the following changes to the analysis of revenue, and comparatives have been updated accordingly:

- Smiths Detection – Air Transportation has been renamed as Aviation, whilst Urban Security, Defence and Ports & Borders have been aggregated and reported as Other Security Systems;
- Flex-Tek – revenue is now analysed by end market, Aerospace and Industrials. Previously revenue was analysed by product line; and
- Smiths Interconnect – the Connectors and Microwave sectors have been aggregated and reported as Components, Connectors & Subsystems.

The Group's statutory revenue is analysed as follows:

	Six months ended 31 January 2020 £m	Six months ended 31 January 2019 Restated £m
Sale of goods recognised as a point in time	979	899
Sale of goods recognised over time	23	15
Services	238	229
Revenue – continuing operations	**1,240**	**1,143**

3 Non-statutory profit measures

Headline profit measures

The Group seeks to present a measure of performance which is not impacted by material non-recurring items or items considered non-operational in nature. This measure of profit is described as ‘headline’ and is used by management to measure and monitor performance. See the disclosures on presentation of results in accounting policies for an explanation of the adjustments. The items excluded from 'headline' are referred to as ‘non-headline’ items.

Non-headline operating profit items

The non-headline items included in statutory operating profit for continuing operations are as follows:

	Six months ended 31 January 2020 £m	Six months ended 31 January 2019 Restated* £m
Post-acquisition integration costs and fair value adjustment unwind		
Integration programmes	(3)	(5)
Acquisition and disposal related transactions costs and provision releases		
Business acquisition / disposal costs	(2)	(6)
Release of acquisition related provisions		4
Legacy pension scheme arrangements		
Settlement gains on post-retirement benefit schemes	8	
Guaranteed Minimum Pensions (GMP) equalisation		(29)
Non-headline litigation provision movements		
Provision for John Crane, Inc. asbestos litigation	(11)	(2)
Cost recovery for John Crane, Inc. asbestos litigation		4
Movement in provision held against Titeflex Corporation subrogation claims	(5)	2
Other items		
Amortisation of acquisition related intangible assets	(28)	(16)
Non-headline items in operating profit – continuing operations	**(41)**	**(48)**

* The comparatives for the period to 31 January 2019 have been restated to reflect the reclassification of Smiths Medical as a discontinued operation.

Post-acquisition integration costs and fair value adjustment unwind

The £3m (31 January 2019: £5m) of integration programme costs relate to defined projects for the integration of Morpho Detection into the existing Smiths Detection business and United Flexible into the existing Flex-Tek business. Integration programme costs include the direct costs of organisational change, IT system harmonisation expenses, site rationalisation and entity closure costs. The Morpho Detection integration programme is due to conclude in the current financial year and the United Flexible integration programme is due to conclude in 2021. Integration costs are recognised as non-headline items because they are considered material and non-recurring.

Acquisition and disposal transaction costs and provision releases

The £2m of business acquisition / disposal costs (31 January 2019: £6m) comprise £1m of directly linked incremental transaction costs, principally related to the acquisition of Reflex Photonic Inc. which completed in October 2019, and £1m of litigation settlement costs relating to a prior year disposal. These costs do not include the cost of employees working on transactions, and are reported as non-headline because they are dependent on the level of acquisition and disposal activity in the year.

The £4m release of acquisition related provisions in the prior period represents the release of excess accruals for deferred consideration on business acquisitions. These are reported as non-headline as the initial provision accrual was recognised as a non-headline expense.

Legacy pension scheme arrangement

The £8m settlement gain on post-retirement benefit schemes (31 January 2019: £nil) is due to changes to the US post-retirement healthcare plans as a result of the US Patient Protection and Affordable Care Act.

In the prior period £29m of past service costs were recognised following the UK High Court ruling that Guaranteed Minimum Pension equalisation is required. This was included in non-headline as it is material, non-recurring and relates 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 £11m (31 January 2019: £2m) charge in respect of John Crane, Inc. asbestos litigation is principally due to litigation management expenses and discount rate movements following a reduction in US treasury bond yields. The costs recovered via insurer settlements in the prior period were £4m. See note 12 for further details; and
- A £5m charge (31 January 2019: £2m credit) has been recognised by Titeflex Corporation in respect of changes to the estimated cost of future claims. The additional charge is driven by discount rate movements following a reduction in US treasury bond yields. See note 12 for further details.

Other items

Acquisition related intangible asset amortisation costs of £28m (31 January 2019: £16m) were recognised in the current period. This is considered to be a non-headline item on the basis that these charges result from acquisition accounting and do not relate to current trading activity.

Non-headline finance costs items

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

	Six months ended 31 January 2020 £m	Six months ended 31 January 2019 Restated £m
Unwind of discount on provisions	(3)	(4)
Other finance income – retirement benefits	4	6
Foreign exchange (loss) on intercompany loan with discontinued operations	(68)	
Other financing losses	(6)	(11)
Non-headline items in finance costs – continuing operations	**(73)**	**(9)**
Continuing operations – non-headline loss before taxation	**(114)**	**(57)**

The financing elements of non-headline legacy liabilities, including the £3m (31 January 2019: £4m) unwind of discount on provisions, are excluded from headline finance costs because these provisions were originally recognised as non-headline and this treatment has been maintained for ongoing costs and credits.

Other finance income comprises £4m (31 January 2019: £6m) of financing credits relating to retirement benefits. These are excluded from headline finance costs because the ongoing costs and credits are a legacy of previous employee pension arrangements.

Following the reclassification of Smiths Medical as a discontinued operation, foreign exchange gains or losses on intercompany financing between Smiths Medical and the continuing group are recognised on the face of the income statement as a non-headline item. The £68m foreign exchange loss in continuing operations (31 January 2019: £nil) directly offsets the foreign exchange gain in discontinued operations. This is excluded from headline net finance costs as these fair value movements are non-operational in nature and are purely a consequence of the presentational requirements for discontinued operations.

Other financing losses represent fair value movements on financial instruments and foreign exchange movements on borrowings, which the Group excludes from headline net finance costs. The current period loss of £6m (31 January 2019: £11m) is principally due to hedge ineffectiveness on the Group’s 2023 and 2027 Eurobonds, which will reverse over the remaining period to maturity. These fair value movements are excluded from headline net finance costs when the following requirements are met:

- Fair value gains and losses on the interest element of derivative financial instruments hedging the Group’s net debt exposures are excluded from headline, as they will either reverse over time or be matched in future periods by interest charges.
- Fair value gains and losses on the currency element of derivative financial instruments hedging the Group’s net debt and exposures, and exchange gains and losses on borrowings are excluded, as the relevant foreign exchange gains and losses on the commercially hedged items are recognised as a separate component of other comprehensive income, in accordance with the Group’s foreign currencies accounting policy.

Non-headline taxation items

The £9m of non-headline taxation for continuing operations (31 January 2019: £5m) represents the tax attributable to the non-headline items above.

Non-headline items for discontinued operations

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

	Six months ended 31 January 2020 £m	Six months ended 31 January 2019 £m
Acquisition and disposal related transactions costs and provision releases		
Medical separation costs	(11)	(1)
Other items		
Amortisation of acquisition related intangible assets		(1)
Profit on disposal of businesses		17
Non-headline finance costs items		
Foreign exchange gain on intercompany loan with parent	68	
Non-headline taxation items		
Taxation on non-headline profit	6	(2)
Non-headline items in profit from discontinued operations	**63**	**13**
Profit for the period – non-headline items for continuing and discontinued operations	**(42)**	**(39)**

The £11m of Medical separation costs (31 January 2019: £1m) represent incremental costs incurred by the Group to demerge Smiths Medical. This cost has been reported as non-headline as the full year effect of the transaction on the Group's financial statements is both material and non-recurring.

Profit on disposal of businesses in the prior period of £17m relates to the sale of Medical's sterile water bottling and EMEA kitting businesses. These are considered to be non-headline items since the profit and cash impact are material and non-recurring arising from the sale of a business.

The £68m foreign exchange gain on intercompany loan with parent (31 January 2019: £nil) directly offsets the foreign exchange loss in continuing operations. This is excluded from headline net finance costs as these fair value movements are non-operational in nature and are purely a consequence of the presentational requirements for discontinued operations.

4 Earnings per share

Basic earnings per share are calculated by dividing the profit for the period attributable to equity shareholders of the Company by the average number of ordinary shares in issue during the period.

	Six months ended 31 January 2020 £m	Six months ended 31 January 2019 Restated £m
Profit attributable to equity shareholders for the period		
- Continuing	11	53
- Discontinuing	133	67
Total	144	120
Average number of shares in issue during the period	396,181,277	395,924,559
Statutory earnings per share continuing operations – basic	2.8	13.4
Statutory earnings per share continuing operations – diluted	2.8	13.2
Statutory earnings per share total – basic	36.3	30.3
Statutory earnings per share total – diluted	36.2	29.9

Diluted earnings per share are calculated by dividing the profit attributable to ordinary shareholders by 397,160,603 (31 January 2019: 400,943,218) ordinary shares, being the average number of ordinary shares in issue during the year adjusted by the dilutive effect of employee share schemes.

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

	Six months ended 31 January 2020			Six months ended 31 January 2019 – Restated		
	£m	Basic EPS (p)	Diluted EPS (p)	£m	Basic EPS (p)	Diluted EPS (p)
Basic earnings per share:						
Total profit attributable to equity shareholders of the Parent Company	144	36.3	36.2	120	30.3	29.9
Exclude: Non-headline items (note 3)	42	10.6	10.6	39	9.9	9.7
Headline earnings per share	186	46.9	46.8	159	40.2	39.6
Profit from continuing operations attributable to equity shareholders of the Parent Company	11	2.8	2.8	53	13.4	13.2
Exclude: Non-headline items (note 3)	105	26.5	26.4	52	13.1	13.0
Headline earnings per share – continuing operations	116	29.3	29.2	105	26.5	26.2

5 Taxation

The interim tax rate of 74.3% (31 January 2019: 39.3%) is calculated by applying the estimated effective headline tax rate for continuing operations of 27.0% (31 January 2019: 27.0%) for the year ended 31 July 2020 to headline profit before tax and then taking into account the tax effect of non-headline items in the interim period.

A reconciliation of headline and total tax charge is as follows:

	Six months ended 31 January 2020		Six months ended 31 January 2019 – Restated	
	Continuing operations £m	Tax rate	Continuing operations £m	Tax rate
Headline tax rate				
Headline profit before taxation	160		146	
Taxation on headline profit	(43)	27.0%	(40)	27.0%
Adjustments				
Non-headline items excluded from profit before taxation (note 3)	(114)		(57)	
Taxation on non-headline items and non-headline tax adjustment	9		5	
Total interim tax rate				
Profit before taxation	46		89	
Taxation	(34)	74.3%	(35)	39.3%

The changes in the value of the net tax asset/(liability) in the period were:

	Current tax £m	Deferred tax £m	Net tax balance £m
At 31 July 2019	(51)	70	19
Foreign exchange gains and losses	2	(7)	(5)
Business combinations (note 13)		(3)	(3)
(Charge)/credit to income statement	(36)	2	(34)
Tax paid	48		48
At 31 January 2020	**(37)**	**62**	**25**

Developments in the Group tax position

Franked Investment Income Group Litigation Order (FII GLO)

Smiths Group is one of the companies enrolled in the FII GLO litigation against the UK's HM Revenue and Customs ("HMRC"). The court actions first filed in 2003 are nearing an end and some claimants with different fact patterns have received payments. There are further relevant legal actions that could impact Smiths' recoveries that amount to approximately £28m (31 January 2019: £28m), after deducting the 45% withholding tax. The Group has not recognised any impact to the financial statements in the current period or in prior years, due to the uncertainty of the eventual outcome.

EU Commission Investigation regarding Claims for Partial (75%) Exemption for Profits from qualifying loan relationships under Chapter 9 FA2012

In April 2019, the European Commission issued its decision in respect of a state aid investigation into the Group Financing Exemption under the UK controlled foreign company ("CFC") rules. The European Commission's decision found that part of the Group Financing Exemption constitutes state aid. The Group Financing Exemption was introduced in legislation by the UK Government in 2013. In common with other UK-based international companies whose arrangements were in line with the then UK CFC legislation, Smiths Group may be affected by the ultimate outcome of this decision.

In June 2019 the UK government appealed to the General Court of the European Union against the decision. Many UK based International companies have 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. As the first step in this recovery process, HMRC have written to beneficiaries, including Smiths, for information.

In December 2019 HMRC issued general guidance on reliefs which can be taken into account in computing the amount of State Aid. If the European Commission's decision is ultimately upheld, Smiths should be able to use tax attributes, including tax losses, resulting in no material cash outlay for Smiths. Nevertheless, the use of these attributes is not certain and the estimated maximum potential liability (which includes both tax and interest) remains at £15m. Based on our current assessment, no provision is being made in respect of this issue.

6 Post retirement benefits

The Group provides post-retirement benefits to employees in a number of countries throughout the world. The arrangements include defined benefit and defined contribution plans and, mainly in the United Kingdom (UK) and United States of America (US), post-retirement healthcare. The principal defined benefit pension plans are in the UK and US, and these have been closed so that no future benefits are accrued.

Where any individual scheme shows a 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 arises from the rights of the employers to recover the surplus at the end of the life of the scheme. The schemes in surplus are mature, with a duration averaged over all scheme participants, of 17 years. However 33% of the liabilities of these schemes are expected to be paid after 2040.

The amounts recognised in the balance sheet are as follows:

	31 January 2020 £m	31 July 2019 £m
Market value of scheme assets	4,422	4,424
Present value of funded scheme liabilities	(3,953)	(3,973)
Surplus	469	451
Unfunded pension plans	(118)	(123)
Post-retirement healthcare	(8)	(17)
Present value of unfunded obligations	(126)	(140)
Net retirement benefit asset	**343**	**311**
Post-retirement assets	486	469
Post-retirement liabilities	(138)	(152)
Liabilities held for distribution to owners (see note 17)	(5)	(6)
Net retirement benefit asset	**343**	**311**

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

	31 January 2020		31 July 2019	
	UK	US	UK	US
Rate of increase for active deferred members	3.8%	n/a	4.2%	n/a
Rate of increase in pensions in payment	2.9%	n/a	3.3%	n/a
Rate of increase in deferred pensions	2.9%	n/a	3.3%	n/a
Discount rate	1.7%	2.95%	2.1%	3.5%

The methods for setting the mortality assumptions for the UK schemes are consistent with the 31 July 2019 valuation. The US schemes have adopted the mortality improvement scale MP-2019 (31 July 2019: MP-2018).

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

	31 January 2020 – £m			31 July 2019 – £m		
	SIPS	TIGPS	US schemes	SIPS	TIGPS	US schemes
Present value of funded scheme liabilities						
– Active deferred members	(42)	(60)	(96)	(42)	(60)	(95)
– Deferred members	(928)	(582)	(129)	(930)	(587)	(123)
– Pensioners	(1,139)	(851)	(64)	(1,142)	(857)	(72)
Present value of funded scheme liabilities	**(2,109)**	**(1,493)**	**(289)**	**(2,114)**	**(1,504)**	**(290)**
Market value of scheme assets	2,379	1,709	281	2,377	1,710	282
Surplus/(deficit)	**270**	**216**	**(8)**	**263**	**206**	**(8)**

Contributions

Group contributions to the funded defined benefit pension plans in the period totalled £12m (31 January 2019: £12m), comprising regular contributions of £6m to SIPS and £6m to TIGPS. In addition, £4m (31 January 2019: £3m) was spent on providing benefits under unfunded defined benefit pension and post-retirement healthcare plans. No additional contributions to support risk reduction programmes were made in the current period.

The changes in the present value of the net pension balance in the period were:

	Six months ended 31 January 2020 £m	Year ended 31 July 2019 £m
At beginning of period	311	381
Exchange adjustment	7	(4)
Current service cost	(2)	(3)
Scheme administration costs	(2)	(4)
Finance income – retirement benefits	4	11
Contributions by employer	16	36
Past service costs, curtailments and settlements	8	(30)
Actuarial gain/(loss)	1	(76)
Net retirement benefit asset at end of period	**343**	**311**

Past service costs, curtailments and settlements

In the current period the Group recognised a curtailment gain of £8m due to changes to the US post-retirement healthcare plans, as a result of the US Patient Protection and Affordable Care Act, that mean over 65s will no longer be covered by the healthcare plans. In the prior period the Group recognised a past service cost of £29m in respect of Guaranteed Minimum Pension equalisation.

7 Intangible assets

		Goodwill £m	Development costs £m	Acquired intangibles £m	Software, patents and intellectual property £m	Total £m
Cost						
At 31 July 2019		1,312	144	565	171	2,192
Exchange adjustments		(98)	(10)	(43)	(7)	(158)
Business combinations	13	9		14		23
Additions			8		5	13
At 31 January 2020		1,223	142	536	169	2,070
Amortisation						
At 31 July 2019		66	99	205	138	508
Exchange adjustments		(5)	(7)	(17)	(4)	(33)
Charge for the period			3	28	4	35
At 31 January 2020		61	95	216	138	510
Net book value at 31 January 2020		1,162	47	320	31	1,560
Net book value at 31 July 2019		1,246	45	360	33	1,684

8 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
Exchange adjustments	(13)	(29)	(9)	(51)
Business combinations (note 13)		2		2
Additions	4	14	5	23
Disposals	(4)	(8)	(1)	(13)
At 31 January 2020	**173**	**375**	**133**	**681**
Depreciation				
At 31 July 2019	104	271	113	488
Exchange adjustments	(7)	(18)	(7)	(32)
Charge for the period	5	10	5	20
Disposals	(4)	(8)	(1)	(13)
At 31 January 2020	**98**	**255**	**110**	**463**
Net book value at 31 January 2020	**75**	**120**	**23**	**218**
Net book value at 31 July 2019	82	125	25	232

9 Right of use assets

	Properties £m	Vehicles £m	Equipment £m	Total £m
Cost				
Right of use assets on transition	95	10	1	106
Exchange adjustments	(6)	(1)		(7)
Business combinations (note 13)	1			1
Recognition of right of use assets	6	3		9
Derecognition of right of use assets	(1)			(1)
At 31 January 2020	**95**	**12**	**1**	**108**
Depreciation				
Charge for the period	13	3		16
At 31 January 2020	**13**	**3**		**16**
Net book value at 31 January 2020	**82**	**9**	**1**	**92**

10 Borrowings and net debt

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

	31 January 2020 £m	31 July 2019 represented* £m
Cash and cash equivalents		
Cash and cash equivalents	206	289
Short-term borrowings		
Lease liabilities	(26)	
Interest accrual	(18)	(9)
	(44)	(9)
Long-term borrowings		
$400m 3.625% US$ Guaranteed notes 2022	(306)	(329)
€600m 1.25% Eurobond 2023	(520)	(564)
€650m 2.00% Eurobond 2027	(560)	(607)
Lease liabilities	(67)	
	(1,453)	**(1,500)**
Borrowings	**(1,497)**	**(1,509)**
Derivatives managing interest rate risk and currency profile of the debt	40	45
Net debt	**(1,251)**	**(1,175)**

* The 31 July 2019 comparatives have been represented to include the fair value of the derivatives used for the management of net debt interest rate and currency risks as part of the net debt balance.

Movements in net debt

	Cash and cash equivalents £m	Short-term borrowings £m	Long-term borrowings £m	Interest rate and cross currency swaps £m	Net debt £m
At 31 July 2019	289	(9)	(1,500)	45	(1,175)
Adoption of IFRS 16		(37)	(111)		(148)
Net debt at start of period (represented)	289	(46)	(1,611)	45	(1,323)
Foreign exchange gains and losses	(29)		122		93
Decrease in cash and cash equivalents	(58)				(58)
Net movement on lease liabilities			11		11
Capitalisation, interest accruals and unwind of capitalised fees		(8)	(4)		(12)
Fair value movement from interest rate hedging			1	(5)	(4)
Movement in discontinued operations cash, loans and lease liabilities	4	10	28		42
At 31 January 2020	**206**	**(44)**	**(1,453)**	**40**	**(1,251)**

11 Fair value of financial instruments

	Basis for determining fair value	As at 31 January 2020				As at 31 July 2019**			
		At amortised cost £m	At fair value through profit or loss £m	Total carrying value £m	Total fair value £m	At amortised cost £m	At fair value through profit or loss £m	Total carrying value £m	Total fair value £m
Financial assets									
Other investments	A		11	11	11		13	13	13
Other investments*	E		10	10	10		6	6	6
Cash and cash equivalents	A	138	68	206	206	153	136	289	289
Trade and other financial receivables	A/B	666		666	666	816		816	816
Derivative financial instruments	B		42	42	42		50	50	50
Total financial assets		**804**	**131**	**935**	**935**	969	205	1,174	1,174
Financial liabilities									
Trade and other financial payables	A	(547)		(547)	(547)	(599)		(599)	(599)
Short-term borrowings	C	(18)		(18)	(18)	(9)		(9)	(9)
Long-term borrowings	C	(1,386)		(1,386)	(1,434)	(1,500)		(1,500)	(1,535)
Lease liabilities	D	(93)		(93)	(93)				
Derivative financial instruments	B		(3)	(3)	(3)		(6)	(6)	(6)
Total financial liabilities		**(2,044)**	**(3)**	**(2,047)**	**(2,095)**	**(2,108)**	**(6)**	**(2,114)**	**(2,149)**

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

** Amounts as at 31 July 2019 have been represented to include non-current trade receivables and trade payables.

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 instruments is estimated by using unobservable inputs to the extent that relevant observable inputs are not available. Unobservable inputs are developed using the best information available in the circumstances, which may include the Group's own data, taking into account all information about market participation assumptions that is reliably available. (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

12 Provisions and contingent liabilities

	Headline	Non-headline and legacy			Total
	£m	John Crane, Inc. litigation £m	Titeflex Corporation litigation £m	Other £m	£m
Current liabilities	17	29	16	4	66
Non-current liabilities	1	208	58	18	285
At 31 July 2019	**18**	**237**	**74**	**22**	**351**
Exchange adjustments	(1)	(18)	(6)	(1)	(26)
Provision charged	4	10	5	3	22
Provision released	(3)				(3)
Unwind of provision discount		2	1		3
Utilisation	(5)	(9)	(4)	(2)	(20)
At 31 January 2020	**13**	**222**	**70**	**22**	**327**
Current liabilities	13	30	14	5	62
Non-current liabilities		192	56	17	265
At 31 January 2020	**13**	**222**	**70**	**22**	**327**

The John Crane, Inc. and Titeflex Corporation litigation provisions are the only provisions which are discounted.

Headline provisions and contingent liabilities:

Warranty provision and product liability

At 31 January 2020 there are warranty and product liability provisions of £11m (31 July 2019: £17m). 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 also co-operates with relevant authorities in investigating business conduct issues whenever requested to. The Group is not aware of any issues which are expected to generate material financial exposures.

Non-headline and legacy provisions and contingent liabilities:

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. 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.

The table below summarises the JCI claims experience over the last 40 years since the start of this litigation:

	31 January 2020	31 July 2019
JCI claims experience		
Claims against JCI that have been dismissed	287,000	285,000
Claims which JCI is currently a defendant in	37,000	38,000
Cumulative final judgments, after appeals, against JCI since 1979	145	144
Cumulative value of awards ($m) since 1979	169	168

John Crane, Inc. litigation insurance recoveries

While JCI has excess liability insurance, the availability of such insurance and scope of the cover are currently the subject of litigation in the United States. Pending the outcome of that litigation, JCI has met defence costs directly. The calculation of the provision does not take account of any potential recoveries from insurers. See note 3 for the cost recovery achieved in both the current and prior periods.

John Crane, Inc. litigation provision

The provision is based on past history and published tables of asbestos incidence projections and is determined using 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 JCI asbestos litigation provision has developed in the period as follows:

	Six months ended 31 January 2020 £m	Year ended 31 July 2019 £m
John Crane, Inc. litigation provision		
Gross provision	236	257
Discount	(14)	(20)
Discounted provision	**222**	**237**
Operating profit charge		
Increased provision for adverse judgments and legal defence costs	6	7
Change in US risk free rates	4	8
Subtotal – items charged to the provision	10	15
Litigation management expense - legal fees in connection with litigation against insurers and defence strategy	1	2
Recoveries from insurers		(11)
Total operating profit charge	**11**	**6**
Cash-flow		
Provision utilisation	(9)	(24)
John Crane, Inc. litigation spend	9	26

John Crane, Inc. litigation provision sensitivities

The provision may be subject to potentially material revision from time to time if new information becomes available as a result of future events. There can be no guarantee that the assumptions used to estimate the provision will result in an accurate prediction of the actual costs that may be incurred because of the significant uncertainty associated with the future level of asbestos claims and of the costs arising out of related litigation.

Statistical reliability of projections over the ten year time horizon

In order to evaluate the statistical reliability of the projections, a population of outcomes is modelled using randomised verdict outcomes. This generated a distribution of outcomes with future spend at the 5th percentile of £225m and future spend at the 95th percentile of £284m (31 July 2019: £234m and £297m, respectively). Statistical analysis of the distribution of these outcomes indicates that there is a 50% probability that the total future spend will fall between £224m and £246m (31 July 2019: between £242m and £267m), compared with the gross provision value of £236m (31 July 2019: £257m).

Sensitivity of the projections to changes in the time horizon used

If the asbestos litigation environment becomes more volatile and uncertain, for example if defendants are successful in legal cases against plaintiff law firms and this impacts the nature of claims filed, the time horizon over which the provision can be calculated may reduce. Conversely, if the environment became more stable, or JCI changed approach and committed to long term settlement arrangements, the time period covered by the provision might be extended.

The projections use a 10 year time horizon. Reducing the time horizon by one year would reduce the provision by £17m (31 July 2019: £17m) and reducing it by five years would reduce the provision by £98m (31 July 2019: £100m).

We consider, after obtaining advice from Bates White LLC, that to forecast beyond ten years requires that the litigation environment remains largely unchanged with respect to the historical experience used for estimating future asbestos expenditures. Historically, the asbestos litigation environment has undergone significant changes more often than every ten years. If one assumed that the asbestos litigation environment would remain unchanged for longer and extended the time horizon by one year it would increase the provision by £14m (31 July 2019: £14m); extending it by five years would increase the provision by £58m (31 July 2019: £59m). However, there are also reasonable scenarios that, given certain recent events in the US asbestos litigation environment, would result in no additional asbestos litigation for JCI beyond ten years. At this time, how the asbestos litigation environment may evolve beyond 10 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 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 number of future claims, the nature of such claims or the cost to resolve them for years beyond the 10 year time horizon.

Titeflex Corporation litigation

In recent years Titeflex Corporation, a subsidiary of the Group in the Flex-Tek division, has received a number of claims from insurance companies seeking recompense on a subrogated basis for the effects of damage allegedly caused by lightning strikes in relation to its flexible gas piping product. It has also received a number of product liability claims regarding this product, some in the form of purported class actions. Titeflex Corporation believes that its products are a safe and effective means of delivering gas when installed in accordance with the manufacturer's instructions and local and national codes; however some claims have been settled on an individual basis without admission of liability. Equivalent third-party products in the US marketplace face similar challenges.

Titeflex Corporation litigation provision

The continuing progress of claims and the pattern of settlement provide sufficient evidence to recognise a liability in the accounts. Therefore provision has been made for the costs which the Group is expected to incur in respect of future claims to the extent that such costs can be reliably estimated. Titeflex Corporation sells flexible gas piping with extensive installation and safety guidance (revised in 2008) designed to assure the safety of the product and minimise the risk of damage associated with lightning strikes.

The assumptions made in assessing the appropriate level of provision, which are based on past experience, include: the period over which expenditure can be reliably estimated; the number of future settlements; the average amount of settlements; and the impact of statutes of repose and safe installation initiatives on the expected number of future claims.

The provision of £70m (31 July 2019: £74m) 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.

	31 January 2020 £m	31 July 2019 £m
Gross provision	105	118
Discount	(35)	(44)
Discounted pre-tax provision	**70**	**74**
Deferred tax	(17)	(18)
Discounted post-tax provision	**53**	**56**

Titeflex Corporation litigation provision sensitivities

The significant uncertainty associated with the future level of claims and of the costs arising out of related litigation means that there can be no guarantee that the assumptions used to estimate the provision will result in an accurate prediction of the actual costs that may be incurred. Therefore the provision may be subject to potentially material revision from time to time, if new information becomes available as a result of future events.

The projections incorporate a long-term assumption regarding the impact of safe installation initiatives on the level of future claims. If the assumed annual benefit of bonding and grounding initiatives were 0.5% higher, the provision would be £5m (31 July 2019: £5m) lower, and if the benefit were 0.5% lower, the provision would be £6m (31 July 2019: £6m) higher.

Other non-headline and legacy

Legacy provisions comprise provisions relating to former business activities and properties no longer used by the Group. Non-headline provisions comprise all provisions which were disclosed as non-headline items when they were charged to the income statement.

These provisions cover non-headline reorganisation, vacant properties, disposal indemnities, and litigation in respect of old products and discontinued business activities.

13 Acquisitions

In October 2019, Interconnect completed the acquisition of 100% of the share capital of Reflex Photonics Inc. for an enterprise value of CAD$40m. Reflex Photonics is a business that manufactures ruggedised high-speed optics products for space, aerospace, defence, avionics, and industrial applications. The acquisition strengthens Interconnect's position in these markets.

The intangible assets recognised on acquisition comprise customer relationships, intellectual property and technology. 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 January 2020, Reflex Photonics contributed £2m to revenue and less than £1m to profit before taxation. If the Group had acquired this business from the beginning of the financial year, the acquisition would have contributed £5m to revenue and less than £1m to profit before taxation.

The provisional balance sheet at the date of acquisition is:

		Reflex Photonic Inc. £m
Non-current assets	- acquired intangible assets	14
	- plant and machinery	2
	- right of use assets	1
Current assets	- inventory	2
	- trade and other receivables	2
Current liabilities	- trade and other payables	(1)
Non-current liabilities	- lease liabilities	(1)
	- deferred tax	(3)
Net assets acquired		**16**
Goodwill on current period acquisitions		**8**
Cash paid during the period		24
Total consideration		**24**

Acquisitions in previous years

The Group acquired United Flexible in the prior year. Since the acquisition the Group has undertaken a thorough review of the business and has adjusted the fair value of assets and liabilities on the acquisition balance sheet, resulting in a £1m increase in the goodwill associated with this acquisition in the current year.

14 Dividends

The following dividends were declared and paid in the period:

	Six months ended 31 January 2020 £m	Six months ended 31 January 2019 £m
Ordinary final dividend of 31.80p for 2019 (2018: 30.75p) paid 15 November 2019	**126**	**122**

15 Cash-flow from operating activities

	Six months ended 31 January 2020			Six months ended 31 January 2019		
	Headline £m	Non-headline (note 3) £m	Total £m	Headline Restated £m	Non-headline (note 3) £m	Total Restated £m
Operating profit/(loss) - continuing operations	186	(41)	145	175	(48)	127
- discontinued operations	94	(11)	83	71	15	86
Amortisation of intangible assets	7	28	35	17	17	34
Depreciation of property, plant and equipment	20		20	27		27
Depreciation of right of use assets	16		16			
Loss on disposal of property, plant and equipment	1		1	1		1
Loss/(profit) on disposal of businesses		1	1		(17)	(17)
Share-based payment expense	8		8	7		7
Retirement benefits	4	(24)	(20)	3	15	18
(Increase) in inventories	(98)		(98)	(50)		(50)
Decrease\(increase) in trade and other receivables	149		149	(2)	3	1
(Decrease) in trade and other payables	(78)		(78)	(10)	(6)	(16)
(Decrease)/increase in provisions	(2)	3	1	(6)	(12)	(18)
Cash generated from operations	**307**	**(44)**	**263**	**233**	**(33)**	**200**
Interest paid	(17)		(17)	(29)		(29)
Interest received	1		1	4		4
Tax paid	(60)		(60)	(52)		(52)
Net cash inflow/(outflow) from operating activities	**231**	**(44)**	**187**	**156**	**(33)**	**123**
- continuing operations	177	(34)	143	75	(32)	43
- discontinued operations	54	(10)	44	81	(1)	80

The split of tax payments between headline and non-headline only considers the nature of payments made. No adjustment has been made for reductions in tax payments required as a result of tax relief received on non-headline items.

Headline cash measures – continuing operations

The Group measure of headline operating cash excludes interest and tax, and includes capital expenditure supporting organic growth.

	Six months ended 31 January 2020			Six months ended 31 January 2019		
	Headline £m	Non-headline £m	Total £m	Headline £m	Non-headline £m	Total £m
Net cash inflow/(outflow) from operating activities	177	(34)	143	75	(32)	43
Include:						
Expenditure on capitalised development, other intangible assets and property, plant and equipment	(37)		(37)	(29)		(29)
Investment in financial assets relating to operating activities and pensions financing				1		1
Free cash-flow			**106**			**15**
Exclude:						
Investment in financial assets relating to operating activities and pensions financing outstanding at the balance sheet				(1)		(1)
Interest paid	14		14	28		28
Interest received				(4)		(4)
Tax paid	48		48	39		39
Operating cash-flow – continuing operations	**202**	**(34)**	**168**	**109**	**(32)**	**77**

Headline cash conversion – continuing operations

Headline operating cash conversion for the Group's continuing operations is calculated as follows:

	Six months ended 31 January 2020 £m	Six months ended 31 January 2019 £m
Headline operating profit	186	175
Headline operating cash-flow	202	109
Headline operating cash conversion	**109%**	**63%**

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

	Six months ended 31 January 2020 £m	Six months ended 31 January 2019 £m
Free cash-flow – continuing operations	106	15
Free cash-flow – discontinued operations	26	56
Free cash-flow – total Group	**132**	**71**
Disposal of businesses		29
Acquisition of business	(24)	
Net cash-flow used in financing activities	(166)	(337)
Net decrease in cash and cash equivalents	**(58)**	**(237)**

16 Related party transactions

The related party transactions in the period were consistent with the nature and size of transactions disclosed in the Annual Report for the year ended 31 July 2019.

17 Discontinued operations and businesses held for distribution to owners

The Group is currently pursuing the demerger of the Smiths Medical business to list it separately on the UK Stock Exchange; accordingly the Smiths Medical business has been accounted for as a discontinued operation and as a business held for distribution to owners at 31 January 2020.

The previously announced separation of Smiths Medical was on track to be delivered by the end of the first half of 2020. However, it is simply not practicable to complete the separation in current circumstances. Therefore, the Board has decided to delay separation until conditions improve. See page 6 for further information.

Discontinued operations

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

	Six months ended 31 January 2020			Six months ended 31 January 2019		
	Headline £m	Non-headline (note 3) £m	Total £m	Headline Restated £m	Non-headline (note 3) £m	Total Restated £m
Revenue	434		434	430		430
Cost of sales	(186)		(186)	(204)		(204)
Gross profit	248		248	226		226
Sales and distribution costs	(89)		(89)	(89)		(89)
Administrative expenses	(65)	(11)	(76)	(66)	(2)	(68)
Profit on business disposal					17	17
Operating profit	**94**	**(11)**	**83**	**71**	**15**	**86**
Finance costs	(2)	68	66	(1)		(1)
Taxation	(22)	6	(16)	(16)	(2)	(18)
Profit from discontinued operations	**70**	**63**	**133**	**54**	**13**	**67**

Following the adoption of discontinued operations accounting for Smiths Medical, the Group has ceased depreciating or amortising the Smiths Medical business assets in the consolidated results. This has increased Smiths Medical headline operating profits by £23m in the current half year.

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

	Six months ended 31 January 2020 £m	Six months ended 31 January 2019 £m
Net cash inflow from operating activities	44	80
Net cash-flow used in investing activities	(18)	(7)
Net cash-flow used in financing activities	(48)	(78)
Net decrease in cash and cash equivalents	**(22)**	**(5)**

Businesses held for distribution to owners

The carrying value of the assets and liabilities of the Smiths Medical business as at 31 January 2020 and 31 July 2019 are as follows:

	31 January 2020 £m	31 July 2019 £m
Assets classified as held for distribution to owners:		
Intangible assets	703	746
Property, plant and equipment	132	135
Right of use assets	43	
Inventories	153	151
Deferred tax assets	12	13
Current tax receivable	4	2
Trade and other receivables	126	138
Cash and cash equivalents	41	26
Financial derivatives	5	5
Assets classified as held for distribution to owners	**1,219**	**1,216**
Liabilities classified as held for distribution to owners:		
Financial liabilities		
– borrowings	(19)	
– lease liabilities	(41)	(3)
– financial derivatives	(2)	(2)
Trade and other payables	(114)	(137)
Current tax payable	(15)	(11)
Deferred tax liabilities	(51)	(48)
Retirement benefit obligations	(5)	(6)
Provisions for liabilities and charges	(6)	(6)
Liabilities classified as held for distribution to owners	**(253)**	**(213)**

Additional segmental information for discontinued operations

The capital expenditure on property, plant and equipment, capitalised development and other intangible assets for discontinued operations is £18m (31 January 2019: £24m).

Revenue for the Smiths Medical discontinued operation is analysed by the following product lines: Infusion Systems £148m (31 January 2019: £151m), Vascular Access £145m (31 January 2019: £140m) and Vital Care/Other £141m (31 January 2019: £139m).

Pro-forma balance sheet of the Group excluding Smiths Medical

	31 January 2020 £m
Non-current assets	
Intangible assets	1,560
Property, plant and equipment	218
Right of use assets	92
Financial assets – other investments	21
Retirement benefit assets	486
Deferred tax assets	106
Trade and other receivables	53
Financial derivatives	40
	2,576
Current assets	
Inventories	470
Current tax receivable	30
Trade and other receivables	613
Cash and cash equivalents	206
Financial derivatives	2
	1,321
Total assets	**3,897**
Current liabilities	
Financial liabilities	
– borrowings	(18)
– lease liabilities	(26)
– financial derivatives	(3)
Provisions for liabilities and charges	(62)
Trade and other payables	(498)
Current tax payable	(62)
	(669)
Non-current liabilities	
Financial liabilities	
– borrowings	(1,386)
– lease liabilities	(67)
Provisions for liabilities and charges	(265)
Retirement benefit obligations	(138)
Corporation tax payable	(5)
Deferred tax liabilities	(44)
Trade and other payables	(49)
	(1,954)
Total liabilities	**(2,623)**
Net assets	**1,274**

18 Non-statutory capital and credit metrics

In addition to the non-statutory profit measures explained in note 3, the Group calculates credit metrics and return on capital employed incorporating the same adjustments. See the disclosures on presentation of results in accounting policies for an explanation of the adjustments.

Return on capital employed (ROCE)

The Group's ROCE is calculated over a rolling 12-month period and is the percentage which headline operating profit comprises of monthly average capital employed.

See note 2 for the divisional headline operating profit and average divisional capital employed used to calculate divisional ROCE.

Capital employed

Capital employed is a non-statutory measure of invested resources. It comprises statutory net assets adjusted to add goodwill recognised directly in reserves in respect of subsidiaries acquired before 1 August 1998 of £787m (31 January 2019: £787m) and eliminates post-retirement benefit assets and liabilities and litigation provisions relating to non-headline items, both net of related tax, and net debt.

	Notes	31 January 2020 £m	31 January 2019 £m
Net assets		**2,240**	**2,169**
Adjust for:			
Goodwill recognised directly in reserves		787	787
Post-retirement benefit assets and liabilities	6	(343)	(252)
Tax related to post-retirement benefit assets and liabilities		61	62
John Crane, Inc. litigation provision and related tax		174	172
Titeflex Corporation litigation provision and related tax		53	55
Net debt (including £19m of net debt in discontinued operations)		1,270	938
Capital employed		**4,242**	**3,931**

Return on capital employed

	Notes	31 January 2020 £m	31 January 2019 £m
Headline operating profit for previous twelve months		608	542
Monthly average capital employed	2	4,156	3,746
ROCE		**14.7%**	**14.5%**

Credit metrics – Total Group including discontinued operations

The Group monitors the ratio of net debt to headline earnings before interest, tax, depreciation and amortisation as part of its management of credit ratings. This ratio is calculated as follows:

Headline earnings before interest, tax, depreciation and amortisation ("headline EBITDA") – Total Group including discontinued operations

	Notes	Six months ended 31 January 2020 £m	Six months ended 31 January 2019 Restated £m
Headline operating profit	2	**186**	**175**
Include:			
– headline operating profit of discontinued operations	17	94	71
Exclude:			
– depreciation of property, plant and equipment	8	20	27
– depreciation of right of use assets	9	16	
– amortisation of development costs	7	3	11
– amortisation of software, patents and intellectual property	7	4	6
Headline EBITDA		**323**	**290**

Annualised headline EBITDA – Total Group including discontinued operations

	Notes	Six months ended 31 January 2020 £m	Six months ended 31 January 2019 Restated £m
Headline EBITDA for the period		323	290
Add:			
– headline EBITDA for the previous year		666	641
Exclude:			
– headline EBITDA for the first six months of the previous year		(290)	(298)
Annualised headline EBITDA		**699**	**633**

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

	31 January 2020 £m	31 January 2019 Restated £m
Annualised headline EBITDA	699	633
Net debt (including £19m of net debt in discontinued operations)	1,270	938
Ratio of net debt to headline EBITDA	**1.8**	**1.5**

19 COVID-19 subsequent event

The impact of the COVID-19 pandemic on the Group's operations and trading is discussed in the results overview section on page 4 and the principal risks section on page 13. The basis of preparation section in note 1 to these condensed interim financial statements summarises the severe but plausible downside scenario for COVID-19 that the Group has modelled.

Management have concluded that COVID-19 is a non-adjusting post balance sheet event as at 31 January 2020 on the basis that at that date:

- the World Health Organisation had not declared a global health emergency; and
- there was no significant spread of the virus outside China.

As a non-adjusting event, no adjustment has been made in respect of COVID-19 over and above what was known as at 31 January 2020.