Accounts

Larger packages, smaller space
Smiths Detection took on a customer's challenge to develop a mobile x-ray unit that could accommodate larger packages, but be available in a smaller vehicle. Applying continuous improvement techniques, we not only succeeded in producing the much smaller ScanVan, but also increased the efficiency, safety and throughput of the manufacturing process – cutting manufacturing costs by up to 50%.

Statement of directors' responsibilities

The directors are responsible for preparing the Annual Report and the Group and Parent Company financial statements in accordance with applicable law and regulations.

Company law requires the directors to prepare accounts for each financial year. Under company law the directors must not approve the accounts unless they are satisfied that they give a true and fair view of the state of affairs of the Group and the Company and of the profit or loss of the Group for that period. In preparing these accounts, the directors are required to:

- select suitable accounting policies and then apply them consistently;
- make judgements and accounting estimates that are reasonable and prudent;
- state whether the consolidated accounts comply with International Financial Reporting Standards ("IFRS"), and the Parent Company accounts comply with applicable UK Accounting Standards, subject to any material departures disclosed and explained in the accounts; and
- prepare the accounts on the going concern basis unless it is inappropriate to presume that the Group and the Company will continue in business.

The directors are responsible for keeping adequate accounting records that are sufficient to show and explain the Group's and the Company's transactions and disclose with reasonable accuracy at any time the financial position of the Group and the Company and enable them to ensure that the accounts and the Directors' remuneration report comply with the Companies Act 2006 and, as regards the Group financial statements, Article 4 of the IAS Regulation. They are also responsible for safeguarding the assets of the Group and the Company and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

Directors' responsibility statement

The directors consider that the Annual Report, taken as a whole, is fair, balanced and understandable and provides the information necessary for shareholders to assess the Group's position and performance, business model and strategy.

Each of the directors (who are listed on pages 72 to 74) confirms that to the best of his or her knowledge:

- the Group's financial statements have been prepared in accordance with IFRS as adopted by the European Union and give a true and fair view of the Group's assets, liabilities and financial position as at 31 July 2016 and of its profit for the financial year then ended; and
- the Group directors' report and Strategic report include a fair review of the development and performance of the business and the position and performance of the Group, together with a description of the principal risks and uncertainties that the Group faces.

Signed on behalf of the Board of directors:

Andy Reynolds Smith
Chief Executive
27 September 2016

Chris O'Shea
Chief Financial Officer

Independent auditors' report to the members of Smiths Group plc

Report on the Group financial statements

Our opinion

In our opinion, Smiths Group plc's Group accounts (the "financial statements"):

- give a true and fair view of the state of the Group's affairs as at 31 July 2016 and of its profit and cash flows for the year then ended;
- have been properly prepared in accordance with International Financial Reporting Standards ("IFRSs") as adopted by the European Union; and
- have been prepared in accordance with the requirements of the Companies Act 2006 and Article 4 of the IAS Regulation.

What we have audited

The financial statements, included within the Annual Report 2016 (the "Annual Report"), comprise:

- the consolidated balance sheet as at 31 July 2016;
- the consolidated income statement and consolidated statement of comprehensive income for the year then ended;
- the consolidated cash-flow statement for the year then ended;
- the consolidated statement of changes in equity for the year then ended;
- the accounting policies; and
- the notes to the financial statements, which include other explanatory information.

Certain required disclosures have been presented elsewhere in the Annual Report, rather than in the notes to the financial statements. These are cross-referenced from the financial statements and are identified as audited.

The financial reporting framework that has been applied in the preparation of the financial statements is IFRSs as adopted by the European Union, and applicable law.

Our audit approach

Overview

Materiality	• Overall Group materiality of £17 million.
Audit scope	• We conducted audit work in 13 countries covering 40 reporting units. • The reporting units where we performed audit work accounted for 75% (2015: 75%) of the Group's revenues and 79% (2015: 78%) of the Group's headline operating profit.
Areas of focus	• Revenue recognition (occurrence and cut off), together with accounting for complex programmes and contract accounting in the Smiths Detection and Smiths Interconnect Divisions. • Working capital and associated provisions. • Goodwill and intangible asset impairment assessments, particularly for the Smiths Interconnect, John Crane Production Solutions and Detection CGUs. • Product litigation provisions for asbestos in John Crane, Inc. and flexible gas piping product in Titeflex Corporation, a subsidiary of the Flex-Tek Division. • Taxation provisions and the recognition of deferred tax assets. • Defined benefit pension plan net assets and liabilities.

The scope of our audit and our areas of focus

We conducted our audit in accordance with International Standards on Auditing (UK and Ireland) ("ISAs (UK & Ireland)").

We designed our audit by determining materiality and assessing the risks of material misstatement in the financial statements. In particular, we looked at where the directors made subjective judgements, for example in respect of significant accounting estimates that involved making assumptions and considering future events that are inherently uncertain. As in all of our audits we also addressed the risk of management override of internal controls, including evaluating whether there was evidence of bias by the directors that represented a risk of material misstatement due to fraud.

The risks of material misstatement that had the greatest effect on our audit, including the allocation of our resources and effort, are identified as "areas of focus" in the table below. We have also set out how we tailored our audit to address these specific areas in order to provide an opinion on the financial statements as a whole, and any comments we make on the results of our procedures should be read in this context. Each of the areas of focus below is referred to in the Significant Judgements and Issues section of the Audit Committee Report on page 90 and in the Significant judgement, key assumptions and estimates section of the Accounting Policies on pages 137 to 138. This is not a complete list of all risks identified by our audit.

Revenue recognition (occurrence and cut off), together with accounting for complex programmes and contract accounting in the Smiths Detection and Smiths Interconnect Divisions

Area of focus

We focused on revenue recognition for all divisions in the final month of the financial year to check that revenue was recorded in the correct period.

In the Smiths Detection and Smiths Interconnect divisions we focused on the accounting for complex programmes and contract accounting. The recognition of revenue is largely dependent on the terms of the underlying contract with the customer, including the nature of separate deliverables within the contract, achieving milestones within those contracts and the mechanisms in the contract by which risks and rewards of goods and services are transferred to the customer.

These contracts are usually long term in nature, sometimes spanning a number of reporting periods. This means that the final profitability of a contract, which will be based upon forecast revenues and costs to complete, can be uncertain during the earlier phases. Judgement must therefore be applied in order to estimate the profit margins to recognise on revenue that is recorded.

Changes in conditions and circumstances over time can result in variations to the original contract terms or to the overall profitability of the contract. This can include cost overruns which require further negotiation and settlements resulting in the need for provisions.

How our audit addressed the area of focus

For all the divisions we assessed whether the Group's revenue recognition policies complied with IFRSs as adopted by the EU and tested the implementation of those policies. Specifically we considered whether revenue was recognised based on the transfer of the risks and rewards of ownership of goods to the customer or the accounting period in which services were rendered by testing a sample of revenue items to contract and shipping documents, with a specific focus on transactions which occurred near 31 July 2016.

Where appropriate we evaluated the relevant IT systems and tested the operating effectiveness of the internal controls over the recording of revenue in the correct period.

We also tested journal entries posted to revenue accounts to identify any unusual or irregular items, and the reconciliations between the systems used by the Group and its financial ledgers.

In the case of the Smiths Detection and Smiths Interconnect divisions, for a sample of contracts, we read extracts of the relevant customer agreements and tested the accounting for separate deliverables and contractual milestones. This testing included evaluating customer acceptance of the work done to establish whether contractual milestones had been achieved, assessing the impact of any ongoing disputes, and assessing the reasonableness of the directors' estimates of costs to complete the contract by comparing them to actual historical costs incurred on comparable contracts.

We did not identify any material exceptions from the audit work performed and we found estimates to be in line with our expectations.

Working capital and associated provisions

Area of focus

Refer also to notes 13, 14 and 15

We focused on this area because inventory provisions include subjective estimates and are influenced by assumptions concerning future selling prices and the level of sales activity, and the Group also has material amounts of trade receivables that are overdue and not impaired (as disclosed in note 14 to the financial statements).

We focused in particular on inventory levels in those parts of the business experiencing challenging trading environments. We also focused on divisions with inherent judgements associated with large programmes and complex contractual terms.

The key associated risks were recoverability of billed and unbilled trade receivables and the valuation of inventory.

How the scope of our audit addressed the area of focus

Where appropriate, we evaluated the directors' forecasted sales for each significant category of slow moving inventory by comparing them to historical sales and orders for future sales.

We compared the historical provision for bad debts to the actual amounts written off, to determine whether the directors' estimation techniques were reasonable and considered the adequacy of provisions for bad debts for significant customers at reporting unit level, taking into account specific credit risk assessments for each customer.

In addition, we performed the procedures documented above for revenue recognition in relation to the key long term revenue contracts.

As a result, we satisfied ourselves that both inventory and receivables provisions have been prepared in line with Group policy and we found the estimates to be in line with our expectation.

Goodwill and intangible asset impairment assessments, particularly in the Interconnect, JCPS and Detection CGUs

Area of focus

Refer also to note 11

The Group holds significant amounts of goodwill and intangible assets on the balance sheet, as detailed in note 10 to the financial statements. The risk is that these balances are overstated.

Goodwill and indefinite-lived intangible assets must be tested for impairment on at least an annual basis. The determination of recoverable amount, being the higher of value-in-use and fair value less costs to dispose, requires judgement in both identifying and then valuing the relevant CGUs.

The impairment assessment for these assets involves subjective judgements about future business performance, with key assumptions including cash flows, the overall long-term growth rates, discount rates used and to the extent relevant, the fair value less costs to dispose.

In the year ended 31 July 2016, an impairment charge of £23m was recognised in relation to the John Crane Production Solutions, Microwave Components and Microwave Telecoms cash generating units ("CGUs"). We focused, in particular, on the recoverable values of each of these CGUs in the context of challenging trading conditions.

We also focused on the estimated values in use of the Power CGU, which has a combined net book value of goodwill of £128m. As this CGU has a lower headroom between its carrying value and value in use, judgements in the valuation models are even more important.

How the scope of our audit addressed the area of focus

We evaluated the directors' future cash flow forecasts, and the process by which they were drawn up, including testing the underlying calculations and comparing them to the latest Board approved divisional budgets.

We challenged:

- the directors' key assumptions for long term growth rates in the forecasts by comparing them to historical results, and economic and industry forecasts; and
- the discount rate by assessing the cost of capital for the Group.

We found the assumptions to be consistent and in line with our expectations.

We evaluated the reasonableness of the directors' forecast performance by performing a sensitivity analysis around the key drivers of the cash flow forecasts, in particular:

- the current order book;
- the proportion of recent tenders which have been successful; and
- independent projections of the expected growth of key markets.

We also evaluated the directors' assessment of the fair value less costs of disposal by comparing it to external analyst valuations.

In respect of the John Crane Production Solutions and Microwave Components CGUs, we sensitised each key driver of the cash flow forecasts, including the underlying assumptions listed above, by determining what we considered to be a reasonable possible change in assumption, based on current market data and historical and current business performance. Through this we determined an appropriate range of value in use. In respect of the Microwave Telecoms CGU, we assessed the fair value less costs to sell assessment referencing analyses of peer companies and broker reports. We found the assumptions used in determining the £5m, £7m and £11m impairments to be within an appropriate range.

For the Power CGU, having ascertained the extent of change in the assumptions that either individually or collectively would be required for the goodwill to be impaired, we considered the likelihood of such a movement in those key assumptions and resulting sensitivity analyses set out in note 11.

We validated the appropriateness of the related disclosures in note 11 of the financial statements, including sensitivities provided with respect to the Power CGU.

Product litigation provisions for asbestos in John Crane, Inc. and flexible gas piping product in Titeflex Corporation, a subsidiary of the Flex-Tek Division

Area of focus

Refer also to note 22

John Crane, Inc., a US based subsidiary of the Group, is currently one of many co-defendants in litigation relating to products previously manufactured which contained asbestos.

A provision of £252m has been made for the future defence costs which the Group is expected to incur and the expected costs of future adverse judgments against John Crane, Inc.

Titeflex Corporation, another US based subsidiary of the Group, has received a number of claims from insurance companies seeking recompense on a subrogated basis for the effects of damage allegedly caused by lightning strikes in relation to its flexible gas piping product.

It has also received a number of product liability claims regarding this product, some in the form of purported class actions. A provision of £94m has been made for the costs which the Group is expected to incur in respect of these claims.

We focused on these areas because there is significant judgement involved in the assumptions used to estimate the provisions, in particular those relating to the US litigation environment such as the future level of claims and the cost of defence. As a result the provision may be subject to potentially material revisions from time to time.

How the scope of our audit addressed the area of focus

In John Crane Inc. we used our own internal experts to challenge management's assumptions underlying the adverse judgement and defence cost provisions. This included an examination of the model maintained by management's valuation expert and evaluation of the work of the expert, by considering the appropriateness of the methodology used, the reasonableness of assumptions (including the use of a rolling 10 year horizon) and considering alternative outcomes. In addition we tested the mathematical accuracy of the underlying calculations and the input data.

At Titeflex Corporation we challenged management's underlying assumptions supporting their provision. This included an evaluation of the valuation model, by testing the mathematical accuracy of the underlying calculations and the input data such as the average amount of settlements, the number of future settlements and the period over which expenditure can be reasonably estimated by testing them to historic claims.

We also discussed these matters with the Company's internal legal counsel, obtained letters from external counsel and evaluated the appropriateness of the disclosures made in the Group financial statements.

We found the assumptions to be consistent and in line with historical claims, that the provisions have been recognised in line with IAS 37 and that appropriate disclosures have been provided within the financial statements.

Taxation provisions and the recognition of deferred tax assets

Area of focus

Refer also to note 6

The Group has recognised £246m deferred tax assets on the balance sheet, the recognition of which involves judgement by management as to the likelihood of the realisation of these deferred tax assets. The expectation that the benefit of these assets will be realised is dependent on a number of factors, including appropriate taxable temporary timing differences, and whether there will be sufficient taxable profits in future periods to support recognition.

The Group has recognised provisions against uncertain tax positions, the valuation of which is an inherently judgemental area. The Group has a wide geographic footprint and is subject to tax laws in a number of jurisdictions.

How the scope of our audit addressed the area of focus

We evaluated the directors' assessment as to whether there will be sufficient taxable profits in future periods to support the recognition of deferred tax assets by evaluating the directors' future cash flow forecasts, and the process by which they were drawn up, including testing the underlying calculations and comparing them to the latest Board approved divisional budgets. We challenged:

- the directors' key assumptions for long term growth rates in the forecasts by comparing them to historical results, and economic and industry forecasts; and
- the discount rate by assessing the cost of capital for the Group.

We found the assumptions to be consistent and in line with our expectations.

We used our tax specialists to challenge management's assumptions underlying the provisions for uncertain tax positions. We discussed with management the known uncertain tax positions and read communications from taxation authorities to identify uncertain tax positions.

We assessed the adequacy of the directors' taxation provisions by considering factors such as whether the matter represents a permanent or temporary difference, and whether the provision addresses possible penalties and interest.

We did not identify any material exceptions from our audit work.

Defined benefit pension plan net assets and liabilities

Area of focus

Refer also to note 8

The Group has defined benefit pension plans with net post-retirement assets of £328m and net post-retirement liabilities of £249m, which are significant in the context of the overall balance sheet of the Group.

The valuation of the pension liabilities requires significant levels of judgement and technical expertise in choosing appropriate assumptions. A number of the key assumptions (including salary increases, inflation, discount rates and mortality) can have a material impact on the calculation of the liability.

The pension assets include significant pension asset investments, the fair value measurement of which includes some judgement.

The recognition of post-retirement plan net assets for accounting purposes is dependent on the rights of the employers to recover the surplus at the end of the life of the scheme.

How the scope of our audit addressed the area of focus

We evaluated the directors' assessment of the assumptions made in relation to the valuations of the liabilities and assets in the pension plans and the assumptions around salary increases and mortality rates by comparing them to national and industry averages.

We also focussed on the valuation of pension plan liabilities and the pension assets as follows:

- We agreed the discount and inflation rates used in the valuation of the pension liability to our internally developed benchmarks.
- We obtained third party confirmations on ownership and valuation of pension assets.
- We checked that the recognition of post retirement plan net assets complies with the Group's investment principles.
- Where new census data was available in the year we tested the controls at the scheme administrators and tested it on a sample basis to assess whether this data is accurate.
- We verified the basis of recognition of UK pension surplus.
- Where there was no new census data in the year we assessed the assumptions used by the actuaries.

We did not identify any material exceptions from our audit work.

How we tailored the audit scope

We tailored the scope of our audit to ensure that we performed enough work to be able to give an opinion on the financial statements as a whole, taking into account the geographic structure of the Group, the accounting processes and controls, and the industry in which the Group operates.

The Group is organised into five divisions: John Crane, Smiths Medical, Smiths Detection, Smiths Interconnect and Flex-Tek and is a consolidation of over 250 units.

In establishing the overall approach to the Group audit, we determined the type of work that needed to be performed at the reporting units by us, as the Group Engagement team, or component auditors within PwC UK and from other PwC network firms operating under our instruction. Where the work was performed by component auditors, we determined the level of involvement we needed to have in the audit work at those reporting units to be able to conclude whether sufficient appropriate audit evidence had been obtained as a basis for our opinion on the financial statements as a whole.

The Group's operating reporting units vary significantly in size and we identified 21 reporting units that, in our view, required an audit of their complete financial information, due to their size or risk characteristics. Specific audit procedures over certain balances and transactions were performed at a further 19 reporting units, to give appropriate coverage of material balances at both divisional and Group levels. Of these, one reporting unit has been determined to be financially significant based on its contribution to Group revenue or headline operating profit. We conducted work in 13 countries and the Group engagement team visited multiple reporting sites in North America and Europe, and participated in each of the divisional audit clearance meetings. Together, the reporting units subject to audit procedures accounted for 75% (2015: 75%) of the Group's revenues and 79% (2015: 78%) of the Group's headline operating profit.

Further specific audit procedures over IT controls, central functions such as treasury and areas of significant judgement, including taxation, goodwill, post-retirement benefits and material litigation, were performed at the local headquarters of each of the divisions and at the Group's Head Office.

Materiality

The scope of our audit was influenced by our application of materiality. We set certain quantitative thresholds for materiality. These, together with qualitative considerations, helped us to determine the scope of our audit and the nature, timing and extent of our audit procedures on the individual financial statement line items and disclosures and in evaluating the effect of misstatements, both individually and on the financial statements as a whole.

Based on our professional judgement, we determined materiality for the financial statements as a whole as follows:

Overall Group materiality	£17 million (2015: £18 million).
How we determined it	Approximately 3.5% of headline operating profit. Headline operating profit is operating profit adjusted for material non-recurring items or items considered non-operational in nature.
Rationale for benchmark applied	Consistent with last year, we applied this benchmark because, in our view, this is the metric against which the performance of the Group is most commonly measured.
Component materiality	For each component in our audit scope, we allocated a materiality that is less than our overall Group materiality. The range of materiality allocated across components was between £0.5 million and £15 million

We agreed with the Audit Committee that we would report to them misstatements identified during our audit above £0.5 million (2015: £0.5 million) as well as misstatements below that amount that, in our view, warranted reporting for qualitative reasons.

Going concern

Under the Listing Rules we are required to review the directors' statement, set out on page 116, in relation to going concern. We have nothing to report having performed our review.

Under ISAs (UK & Ireland) we are required to report to you if we have anything material to add or to draw attention to in relation to the directors' statement about whether they considered it appropriate to adopt the going concern basis in preparing the financial statements. We have nothing material to add or to draw attention to.

As noted in the directors' statement, the directors have concluded that it is appropriate to adopt the going concern basis in preparing the financial statements. The going concern basis presumes that the Group has adequate resources to remain in operation, and that the directors intend it to do so, for at least one year from the date the financial statements were signed. As part of our audit we have concluded that the directors' use of the going concern basis is appropriate. However, because not all future events or conditions can be predicted, these statements are not a guarantee as to the Group's ability to continue as a going concern.

Other required reporting

Consistency of other information

Companies Act 2006 opinion

In our opinion, the information given in the Strategic Report and the Group directors' report for the financial year for which the financial statements are prepared is consistent with the financial statements.

ISAs (UK & Ireland) reporting

Under ISAs (UK & Ireland) we are required to report to you if, in our opinion:

information in the Annual Report is: • materially inconsistent with the information in the audited financial statements; or • apparently materially incorrect based on, or materially inconsistent with, our knowledge of the Group acquired in the course of performing our audit; or • otherwise misleading.	We have no exceptions to report.
the statement given by the directors on page 86 in accordance with provision C.1.1 of the UK Corporate Governance Code (the "Code"), that they consider the Annual Report taken as a whole to be fair, balanced and understandable and provides the information necessary for members to assess the Group's position and performance, business model and strategy is materially inconsistent with our knowledge of the Group acquired in the course of performing our audit.	We have no exceptions to report.
the section of the Annual Report on page 90, as required by provision C.3.8 of the Code, describing the work of the Audit Committee does not appropriately address matters communicated by us to the Audit Committee.	We have no exceptions to report.

The directors' assessment of the prospects of the group and of the principal risks that would threaten the solvency or liquidity of the group

Under ISAs (UK & Ireland) we are required to report to you if we have anything material to add or to draw attention to in relation to:

• the directors' confirmation on page 52 of the Annual Report, in accordance with provision C.2.1 of the Code, that they have carried out a robust assessment of the principal risks facing the Group, including those that would threaten its business model, future performance, solvency or liquidity.	We have nothing material to add or to draw attention to.
• the disclosures in the Annual Report that describe those risks and explain how they are being managed or mitigated.	We have nothing material to add or to draw attention to.
• the directors' explanation on page 52 of the Annual Report, in accordance with provision C.2.2 of the Code, as to how they have assessed the prospects of the Group, over what period they have done so and why they consider that period to be appropriate, and their statement as to whether they have a reasonable expectation that the Group will be able to continue in operation and meet its liabilities as they fall due over the period of their assessment, including any related disclosures drawing attention to any necessary qualifications or assumptions.	We have nothing material to add or to draw attention to.

Under the Listing Rules we are required to review the directors' statement that they have carried out a robust assessment of the principal risks facing the Group and the directors' statement in relation to the longer-term viability of the Group. Our review was substantially less in scope than an audit and only consisted of making inquiries and considering the directors' process supporting their statements; checking that the statements are in alignment with the relevant provisions of the Code; and considering whether the statements are consistent with the knowledge acquired by us in the course of performing our audit. We have nothing to report having performed our review.

Adequacy of information and explanations received
Under the Companies Act 2006 we are required to report to you if, in our opinion, we have not received all the information and explanations we require for our audit. We have no exceptions to report arising from this responsibility.

Directors' remuneration
Under the Companies Act 2006 we are required to report to you if, in our opinion, certain disclosures of directors' remuneration specified by law are not made. We have no exceptions to report arising from this responsibility.

Corporate governance statement
Under the Listing Rules we are required to review the part of the Corporate Governance Statement relating to ten further provisions of the Code. We have nothing to report having performed our review.

Responsibilities for the financial statements and the audit
Our responsibilities and those of the Directors
As explained more fully in the Statement of directors' responsibilities set out on page 124, the directors are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view.

Our responsibility is to audit and express an opinion on the financial statements in accordance with applicable law and ISAs (UK & Ireland). Those standards require us to comply with the Auditing Practices Board's Ethical Standards for Auditors.

This report, including the opinions, has been prepared for and only for the company's members as a body in accordance with Chapter 3 of Part 16 of the Companies Act 2006 and for no other purpose. We do not, in giving these opinions, accept or assume responsibility for any other purpose or to any other person to whom this report is shown or into whose hands it may come save where expressly agreed by our prior consent in writing.

What an audit of financial statements involves
An audit involves obtaining evidence about the amounts and disclosures in the financial statements sufficient to give reasonable assurance that the financial statements are free from material misstatement, whether caused by fraud or error. This includes an assessment of:

- whether the accounting policies are appropriate to the Group's circumstances and have been consistently applied and adequately disclosed;
- the reasonableness of significant accounting estimates made by the directors; and
- the overall presentation of the financial statements.

We primarily focus our work in these areas by assessing the directors' judgements against available evidence, forming our own judgements, and evaluating the disclosures in the financial statements.

We test and examine information, using sampling and other auditing techniques, to the extent we consider necessary to provide a reasonable basis for us to draw conclusions. We obtain audit evidence through testing the effectiveness of controls, substantive procedures or a combination of both.

In addition, we read all the financial and non-financial information in the Annual Report to identify material inconsistencies with the audited financial statements and to identify any information that is apparently materially incorrect based on, or materially inconsistent with, the knowledge acquired by us in the course of performing the audit. If we become aware of any apparent material misstatements or inconsistencies we consider the implications for our report.

Other matter
We have reported separately on the company financial statements of Smiths Group plc for the year ended 31 July 2016 and on the information in the Directors' Remuneration Report that is described as having been audited.

Andrew Kemp (Senior Statutory Auditor)
for and on behalf of PricewaterhouseCoopers LLP
Chartered Accountants and Statutory Auditors
London

27 September 2016

(a) The maintenance and integrity of the Smiths Group plc website is the responsibility of the directors; the work carried out by the auditors does not involve consideration of these matters and, accordingly, the auditors accept no responsibility for any changes that may have occurred to the financial statements since they were initially presented on the website.

(b) Legislation in the United Kingdom governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

Consolidated income statement

	Notes	Year ended 31 July 2016 Headline £m	Year ended 31 July 2016 Non-headline (note 3) £m	Year ended 31 July 2016 Total £m	Year ended 31 July 2015 Headline £m	Year ended 31 July 2015 Non-headline (note 3) £m	Year ended 31 July 2015 Total £m
Continuing operations							
Revenue	1	2,949		2,949	2,897		2,897
Cost of sales		(1,600)		(1,600)	(1,564)		(1,564)
Gross profit		1,349		1,349	1,333		1,333
Sales and distribution costs		(403)		(403)	(406)		(406)
Administrative expenses		(436)	(139)	(575)	(416)	(117)	(533)
Other operating income			16	16			
Operating profit	2	**510**	**(123)**	**387**	**511**	**(117)**	**394**
Interest receivable		3		3	3		3
Interest payable		(62)		(62)	(55)		(55)
Other financing gains/(losses)			15	15		(9)	(9)
Other finance income/(charges) – retirement benefits	8		3	3		(8)	(8)
Finance costs	4	(59)	18	(41)	(52)	(17)	(69)
Profit before taxation		**451**	**(105)**	**346**	**459**	**(134)**	**325**
Taxation	6	(113)	28	(85)	(117)	40	(77)
Profit for the period		**338**	**(77)**	**261**	**342**	**(94)**	**248**
Attributable to							
Smiths Group shareholders		336	(77)	259	340	(94)	246
Non-controlling interests		2		2	2		2
		338	**(77)**	**261**	**342**	**(94)**	**248**
Earnings per share	5						
Basic				65.6p			62.4p
Diluted				64.9p			61.8p

References in the consolidated income statement, consolidated statement of comprehensive income, consolidated balance sheet, consolidated statement of changes in equity and consolidated cash-flow statement relate to notes on pages 137 to 184, which form an integral part of the consolidated accounts.

Consolidated statement of comprehensive income

	Notes	Year ended 31 July 2016 £m	Year ended 31 July 2015 £m
Profit for the period		**261**	**248**
Other comprehensive income			
Actuarial (losses)/gains on retirement benefits	8	(40)	60
Taxation recognised on actuarial movements	6	10	21
Other comprehensive income and expenditure which will not be reclassified to the consolidated income statement		**(30)**	**81**
Other comprehensive income which will be reclassified and reclassifications			
Exchange gains		420	9
Fair value gains/(losses) and reclassification adjustments			
– deferred on available for sale financial assets		(2)	11
– reclassified to income statement on available for sale financial assets	4	(19)	
– deferred in the period on cash-flow and net investment hedges		(238)	(6)
– reclassified to income statement on cash-flow and net investment hedges			1
Total other comprehensive income		**131**	**96**
Total comprehensive income		**392**	**344**
Attributable to			
Smiths Group shareholders		386	343
Non-controlling interests		6	1
		392	**344**

Consolidated balance sheet

	Notes	31 July 2016 £m	31 July 2015 £m
Non-current assets			
Intangible assets	10	1,742	1,518
Property, plant and equipment	12	315	259
Financial assets – other investments	16	9	156
Retirement benefit assets	8	328	170
Deferred tax assets	6	246	218
Trade and other receivables	14	51	40
Financial derivatives	19	29	4
		2,720	**2,365**
Current assets			
Inventories	13	478	454
Current tax receivable	6	62	30
Trade and other receivables	14	745	616
Cash and cash equivalents	17	431	495
Financial derivatives	19	13	20
		1,729	**1,615**
Assets of business held for sale	27	24	
Total assets		**4,473**	**3,980**
Non-current liabilities			
Financial liabilities			
– borrowings	17	(1,139)	(1,150)
– financial derivatives	19	(1)	(6)
Provisions for liabilities and charges	22	(305)	(253)
Retirement benefit obligations	8	(248)	(278)
Deferred tax liabilities	6	(95)	(71)
Trade and other payables	15	(29)	(24)
		(1,817)	**(1,782)**
Current liabilities			
Financial liabilities			
– borrowings	17	(270)	(163)
– financial derivatives	19	(19)	(12)
Provisions for liabilities and charges	22	(94)	(79)
Trade and other payables	15	(536)	(466)
Current tax payable	6	(72)	(50)
		(991)	**(770)**
Liabilities of business held for sale	27	(5)	
Total liabilities		**(2,813)**	**(2,552)**
Net assets		**1,660**	**1,428**
Shareholders' equity			
Share capital	23	148	148
Share premium account		352	349
Capital redemption reserve		6	6
Revaluation reserve		1	1
Merger reserve		235	235
Retained earnings		1,205	743
Hedge reserve	25	(301)	(63)
Total shareholders' equity		**1,646**	**1,419**
Non-controlling interest equity		14	9
Total equity		**1,660**	**1,428**

The accounts on pages 132 to 184 were approved by the Board of Directors on 27 September 2016 and were signed on its behalf by:

Andy Reynolds Smith
Chief Executive

Chris O'Shea
Chief Financial Officer

Consolidated statement of changes in equity

	Notes	Share capital and share premium £m	Other reserves £m	Retained earnings £m	Hedge reserve £m	Equity shareholders' funds £m	Non-controlling interest £m	Total equity £m
At 31 July 2015		497	242	743	(63)	1,419	9	1,428
Profit for the period				259		259	2	261
Other comprehensive income								
Actuarial loss on retirement benefits and tax				(30)		(30)		(30)
Exchange gains				416		416	4	420
Fair value gains/(losses)				(21)	(238)	(259)		(259)
Total comprehensive income for the period				**624**	**(238)**	**386**	**6**	**392**
Transactions relating to ownership interests								
Exercises of share options	23	3				3		3
Purchase of own shares	25			(8)		(8)		(8)
Dividends								
– equity shareholders	24			(163)		(163)		(163)
– non-controlling interests							(1)	(1)
Share-based payment	9			9		9		9
At 31 July 2016		**500**	**242**	**1,205**	**(301)**	**1,646**	**14**	**1,660**

	Notes	Share capital and share premium £m	Other reserves £m	Retained earnings £m	Hedge reserve £m	Equity shareholders' funds £m	Non-controlling interest £m	Total equity £m
At 31 July 2014		494	242	559	(58)	1,237	8	1,245
Profit for the year				246		246	2	248
Other comprehensive income								
Actuarial losses on retirement benefits and related tax				81		81		81
Exchange (losses)/gains				10		10	(1)	9
Fair value gains/(losses) and related tax				11	(5)	6		6
Total comprehensive income for the year				**348**	**(5)**	**343**	**1**	**344**
Transactions relating to ownership interests								
Exercises of share options	23	3				3		3
Taxation recognised on share options	6			(1)		(1)		(1)
Purchase of own shares	25			(11)		(11)		(11)
Dividends								
– equity shareholders	24			(160)		(160)		(160)
– non-controlling interest								
Share-based payment	9			8		8		8
At 31 July 2015		**497**	**242**	**743**	**(63)**	**1,419**	**9**	**1,428**

Consolidated cash-flow statement

	Notes	Year ended 31 July 2016 £m	Year ended 31 July 2015 £m
Net cash inflow from operating activities	26	**358**	**266**
Cash-flows from investing activities			
Expenditure on capitalised development		(23)	(18)
Expenditure on other intangible assets		(11)	(18)
Purchases of property, plant and equipment	12	(74)	(59)
Disposals of property, plant and equipment		1	11
Investment in financial assets		(9)	(27)
Acquisition of businesses		(8)	
Disposals of businesses			2
Net cash-flow used in investing activities		**(124)**	**(109)**
Cash-flows from financing activities			
Proceeds from exercise of share options	23	3	3
Purchase of own shares		(8)	(11)
Dividends paid to equity shareholders	24	(163)	(160)
Cash (outflow)/inflow from matured derivative financial instruments		(14)	4
Increase in new borrowings		1	568
Reduction and repayment of borrowings		(151)	(257)
Net cash-flow used in financing activities		**(332)**	**147**
Net (decrease)/increase in cash and cash equivalents		**(98)**	**304**
Cash and cash equivalents at beginning of year		495	189
Exchange differences		33	2
Cash and cash equivalents at end of year	17	**430**	**495**
Cash and cash equivalents at end of year comprise			
– cash at bank and in hand		161	104
– short-term deposits		270	391
– bank overdrafts		(1)	
		430	**495**
Included in cash and cash equivalents per the balance sheet		431	495
Included in overdrafts per the balance sheet		(1)	
		430	**495**

Reconciliation of net cash-flow to movement in net debt

	Notes	Year ended 31 July 2016 £m	Year ended 31 July 2015 £m
Net debt at start of year	17	**(818)**	**(804)**
Net (decrease)/increase in cash and cash equivalents		(98)	304
Increase in borrowings		(1)	(568)
Reduction and repayment of borrowings		151	257
Movement in net debt resulting from cash-flows		**52**	**(7)**
Capitalisation, interest accruals and unwind of capitalisation fees		(2)	(1)
Movement from fair value hedging		(23)	7
Exchange differences		(187)	(13)
Movement in net debt in the year		**(160)**	**(14)**
Net debt at end of year	17	**(978)**	**(818)**

Accounting policies

Basis of preparation
The accounts have been prepared in accordance with the Companies Act 2006 applicable to companies reporting under International Financial Reporting Standards (IFRS) and International Financial Reporting Interpretations Committee (IFRS IC) interpretations, as adopted by the European Union, on a going concern basis and under the historical cost convention modified to include revaluation of certain financial instruments, share options and pension assets and liabilities, held at fair value as described below.

The accounting policies adopted are consistent with those of the previous financial year.

Significant judgements, key assumptions and estimates
The preparation of the accounts in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the accounts and the reported amounts of revenues and expenses during the reporting period. Actual results may differ from these estimates. The key estimates and assumptions used in these consolidated financial statements are set out below.

Revenue recognition
The timing of revenue recognition on contracts depends on the assessed stage of completion of contract activity at the balance sheet date. This assessment requires the expected total contract revenues and costs to be estimated based on the current progress of the contract. Revenue of £42m (2015: £39m) has been recognised in the period in respect of contracts in progress at the period end with a total expected value of £175m (2015: £137m) and cumulative revenue recognised to date of £137m (2015: £100m). A 5% reduction in the proportion of the contract activity recognised in the current period would have reduced operating profit by less than £1m for both Smiths Detection and Smiths Interconnect (2015: less than £1m).

Smiths Detection also has multi-year contractual arrangements for the sale of goods and services. Where these contracts have separately identifiable components with distinct patterns of delivery and customer acceptance, revenue is accounted for separately for each identifiable component. Judgement is applied in the identification of the components of the contract, and the allocation of contract revenue to each component.

Smiths Medical has rebate arrangements in place with some distributors in respect of sales to end customers where sales prices have been negotiated by Smiths Medical. Rebates are estimated based on the level of discount derived from sales data from distributors, the amount of inventory held by distributors and the time lag between the initial sale to the distributor and the rebate being claimed. The rebate accrual at 31 July 2016 was £28m (2015: £21m).

Contract profitability
Smiths Detection has multi-year contractual arrangements for the sale of goods and services. Margins achieved on these contracts can reflect the impact of commercial decisions made in different economic circumstances. In addition, contract delivery is subject to commercial and technical risks which can affect the outcome of the contract. At 31 July 2016 there was £4m (2015: £7m) balance sheet liability in respect of ongoing onerous contracts and no other contracts had been assessed as at significant risk of becoming onerous.

Taxation
The Group has recognised deferred tax assets of £87m (2015: £28m) relating to losses and £120m (2015: £99m) relating to the John Crane, Inc. and Titeflex Corporation litigation provisions. The recognition of assets pertaining to these items involves judgement by management as to the likelihood of realisation of these deferred tax assets. This is based on a number of factors, which seek to assess the expectation that the benefit of these assets will be realised, including expected future levels of operating profit, expenditure on litigation, pension contributions and the timing of the unwind of other tax positions. It has been concluded that there are sufficient taxable profits in future periods to support recognition. A 5% reduction in expected future operating profits would reduce the level of deferred tax recognised by £9m (2015: £10m), and a 5% increase in expected future operating profits would increase the level of deferred tax recognised by £11m (2015: £10m). Further detail on the Group's deferred taxation position is included in note 6.

Retirement benefits
The consolidated financial statements include costs in relation to, and provision for, retirement benefit obligations. The costs and the present value of any related pension assets and liabilities depend on such factors as life expectancy of the members, the returns that plan assets generate and the discount rate used to calculate the present value of the liabilities. The Group uses previous experience and independent actuarial advice to select the values of critical estimates. The estimates, and the effect of variances in key estimates, are disclosed in note 8.

At 31 July 2016 there is a retirement benefit asset of £328m (2015: £170m), principally relating to UK schemes, which arises from the rights of the employers to recover the surplus at the end of the life of the scheme. If the pension schemes were wound up while they still had members, the schemes would need to buy out the benefits of all members. The buyouts would cost significantly more than the present value of the scheme liabilities calculated in accordance with IAS 19: Employee benefits.

Receivables provisions
If the carrying value of any receivable is higher than the fair value, the Group makes provisions writing down the balance to its fair value. The fair value of receivables is considered individually for each customer and incorporates past experience and progress with collecting receivables.

At 31 July 2016 the gross value of receivables partly provided for or more than three months overdue was £83m (2015: £57m) and there were provisions of £31m (2015: £22m) against these receivables. Consequently, these receivables were carried at a net value of £52m (2015: £35m). See note 14 for disclosures on credit risk and ageing of trade receivables.

Inventory provisions

The calculation of inventory provisions requires judgement by management of the expected value of future sales. If the carrying value of inventory is higher than the expected recoverable value, the Group makes provisions writing inventory down to its net recoverable value. Inventory is initially assessed for impairment by comparing inventory levels to recent utilisation rates and carrying values to historical selling prices. A detailed review is completed for inventory lines identified in the initial assessment considering sales activity, order flow, customer contracts and current selling prices.

At 31 July 2016, there were provisions of £70m (2015: £72m) against gross inventory of £548m (2015: £528m). See note 13 for a breakdown of inventory.

A 10% increase in the proportion of raw materials provided for would increase the provision by £20m (2015: £18m) and a 10% increase in the proportion of finished goods provided for would increase the provision by £23m (2015: £24m).

Impairment

Goodwill is tested at least annually for impairment and other assets, including intangible assets acquired in business combinations, are tested if there are any indications of impairment, in accordance with the accounting policy set out below. The recoverable amounts of cash generating units and assets are determined based on value in use calculations unless future trading projections cannot be adjusted to eliminate the impact of a major restructuring. The value in use calculations require the use of estimates including projected future cash-flows and other future events.

See note 11 for details of the critical assumptions made, including the sales and margin volatility in Smiths Interconnect and disclosures on the sensitivity of the impairment testing to these key assumptions, including details of the changes in assumptions which would be required to trigger an impairment in Smiths Interconnect Power.

Provisions for liabilities and charges

As previously reported, John Crane, Inc., a subsidiary of the Group, is currently one of many co-defendants in litigation relating to products previously manufactured which contained asbestos. Provision of £252m (2015: £216m) has been made for the future defence costs which the Group is expected to incur and the expected costs of future adverse judgments against John Crane, Inc. Whilst published incidence curves can be used to estimate the likely future pattern of asbestos related disease, John Crane, Inc.'s claims experience is significantly impacted by other factors which influence the US litigation environment. These can include: changing approaches on the part of the plaintiffs' bar; changing attitudes amongst the judiciary at both trial and appellate levels; and legislative and procedural changes in both the state and federal court systems. Therefore, because of the significant uncertainty associated with the future level of asbestos claims and of the costs arising out of the related litigation, there can be no guarantee that the assumptions used to estimate the provision will result in an accurate prediction of the actual costs that may be incurred. John Crane, Inc. takes account of the advice of an expert in asbestos liability estimation in quantifying the expected costs.

As previously reported, Titeflex Corporation, a subsidiary of the Group in the Flex-Tek division, has received a number of claims from insurance companies seeking recompense on a subrogated basis for the effects of damage allegedly caused by lightning strikes in relation to its flexible gas piping product. It has also received a number of product liability claims regarding this product, some in the form of purported class actions. Titeflex Corporation believes that its products are a safe and effective means of delivering gas when installed in accordance with the manufacturer's instructions and local and national codes; however some claims have been settled on an individual basis without admission of liability. Provision of £94m (2015: £71m) has been made for the costs which the Group is expected to incur in respect of these claims. However, because of the significant uncertainty associated with the future level of claims, there can be no guarantee that the assumptions used to estimate the provision will result in an accurate prediction of the actual costs that may be incurred.

The Group has on occasion been required to take legal action to protect its intellectual property and other rights against infringement. It has also had to defend itself against proceedings brought by other parties, including product liability and insurance subrogation claims. Provision is made for any expected costs and liabilities in relation to these proceedings where appropriate, though there can be no guarantee that such provisions (which may be subject to potentially material revision from time to time) will accurately predict the actual costs and liabilities that may be incurred.

All provisions may be subject to potentially material revisions from time to time if new information becomes available as a result of future events. See note 22 for details of the assumptions and disclosures on the sensitivity of the provision calculations.

Presentation of results

In order to provide users of the accounts with a clear and consistent presentation of the underlying performance of the Group's ongoing trading activity, Smiths Group plc presents its results in the income statements with amounts relating to costs of acquisitions and disposals, amortisation of acquired intangibles, impairments, legacy liabilities, significant restructuring, material one-off items and certain re-measurements in a separate column. See note 3 for a breakdown of the items excluded from headline operating profit and headline finance costs.

Measures of the underlying performance of the Group's ongoing trading activity are described as 'headline' and used by management to measure and monitor performance. See note 1 for disclosures of headline operating profit and note 28 for more information about the calculation of return on capital employed and credit metrics.

Accounting policies

Basis of consolidation

The consolidated accounts incorporate the financial statements of Smiths Group plc ("the Company") and its subsidiary undertakings, together with the Group's share of the results of its associates. A list of the subsidiaries of Smiths Group plc is provided on pages 206 to 209.

Subsidiaries are all entities controlled by the Company. Subsidiaries are fully consolidated from the date on which control is obtained by the Company to the date that control ceases.

Associates are entities over which the Group has significant influence but does not control, generally accompanied by a share of between 20% and 50% of the voting rights. Investments in associates are accounted for using the equity method.

Foreign currencies

The Company's presentational currency is sterling. The results and financial position of all subsidiaries and associates that have a functional currency different from sterling are translated into sterling as follows:

- assets and liabilities are translated at the rate of exchange at the date of that balance sheet;
- income and expenses are translated at average exchange rates for the period; and
- all resulting exchange differences are recognised as a separate component of equity.

On consolidation, exchange differences arising from the translation of the net investment in foreign entities, and of borrowings and other currency instruments designated as hedges of such investments, are taken to shareholders' equity. When a foreign operation is sold, the cumulative amount of such exchange differences is recognised in the income statement as part of the gain or loss on sale.

Exchange differences arising on transactions are recognised in the income statement. Those arising on trading are taken to operating profit; those arising on borrowings are classified as finance income or cost.

For the convenience of users, supplementary primary financial statements translated into US dollars have been presented after the Group financial record. Assets and liabilities have been translated into US dollars at the exchange rate at the date of that balance sheet and income, expenses and cash-flows are translated at average exchange rates for the period.

Revenue

Revenue is measured at the fair value of the consideration received, net of trade discounts (including distributor rebates) and sales taxes. Revenue is discounted only where the impact of discounting is material.

When the Group enters into complex contracts with multiple, separately identifiable components, the terms of the contract are reviewed to determine whether or not the elements of the contract should be accounted for separately. If a contract is being split into multiple components, the contract revenue is allocated to the different components at the start of the contract. The basis of allocation depends on the substance of the contract. The Group considers relative stand-alone selling prices, contractual prices and relative cost when allocating revenue.

Sale of goods

Revenue from the sale of goods is recognised when the risks and rewards of ownership have been transferred to the customer, the amount of revenue can be measured reliably and recovery of the consideration is probable. For established products with simple installation requirements, revenue is recognised when the product is delivered to the customer in accordance with the agreed delivery terms.
For products which are technically innovative, highly customised or require complex installation, revenue is recognised when the customer has completed its acceptance procedures.

Services

Revenue from services is recognised in accounting periods in which the services are rendered, by reference to completion of the specific transaction, assessed on the basis of the actual service provided as a proportion of the total services to be provided. Depending on the nature of the contract, revenue will be recognised on the basis of the proportion of the contract term completed, the proportion of the contract costs incurred or the specific services provided to date.

Construction contracts

Contracts for the construction of substantial assets are accounted for as construction contracts if the customer specifies major structural elements of the design, including the ability to amend the design during the construction process. These projects normally involve installing customised systems with site-specific integration requirements.

Where the outcome of a construction contract can be estimated reliably, revenue and costs are recognised by reference to the stage of completion of the contract activity at the balance sheet date. The Group uses the 'percentage of completion method' to determine the appropriate amount to recognise in a given period. The assessment of the stage of completion is dependent on the nature of the contract, but will generally be based on the estimated proportion of the total contract costs which have been incurred to date. If a contract is expected to be loss-making, a provision is recognised for the entire loss.

Leases

Leases in which a significant portion of the risks and rewards of ownership are retained by the lessor are classified as operating leases. Payments made under operating leases are charged to the income statement on a straight-line basis over the period of the lease.

Taxation

The charge for taxation is based on profits for the year and takes into account taxation deferred because of temporary differences between the treatment of certain items for taxation and accounting purposes.

Current income tax assets and liabilities are measured at the amount expected to be recovered from or paid to taxation authorities. Tax benefits are not recognised unless it is likely that the tax positions are sustainable. Once considered to be likely, tax benefits are reviewed to assess whether a provision should be made based on prevailing circumstances. Tax provisions are included in current tax liabilities, including any anticipated interest & penalties. The tax rates and tax laws used to compute the amount are those that are enacted or substantively enacted, at the reporting date in the countries where the Group operates and generates taxable income.

Deferred tax is provided in full using the balance sheet liability method. A deferred tax asset is recognised where it is probable that future taxable income will be sufficient to utilise the available relief. Tax is charged or credited to the income statement except when it relates to items charged or credited directly to equity, in which case the tax is also dealt with in equity.

Deferred tax is provided on temporary differences arising on investments in subsidiaries and associates, except where the timing of the reversal of the temporary differences is controlled by the Company and it is probable that the temporary difference will not reverse in the foreseeable future.

Deferred tax liabilities and assets are not discounted.

Employee benefits

Pension obligations and post-retirement benefits

The Group has defined benefit plans, defined contribution plans and post-retirement healthcare schemes.

For defined benefit plans and post-retirement healthcare schemes the liability for each scheme recognised in the balance sheet is the present value of the obligation at the balance sheet date less the fair value of any plan assets. The obligation is calculated annually by independent actuaries using the projected unit credit method. The present value is determined by discounting the estimated future cash outflows using interest rates of AA-rated corporate bonds that are denominated in the currency in which the benefits will be paid, and that have terms to maturity approximating to the terms of the related liability. Actuarial gains and losses arising from experience adjustments and changes in actuarial assumptions are recognised in full in the period in which they occur, outside of the income statement, and are presented in the statement of comprehensive income. Past service costs are recognised immediately in the income statement.

For defined contribution plans, the Group pays contributions to publicly or privately administered pension insurance plans on a mandatory, contractual or voluntary basis. Contributions are expensed as incurred.

Discontinued operations

A discontinued operation is a component of the Group's business that represents a separate major line of business or geographical area of operations that has been disposed of, has been abandoned or meets the criteria to be classified as held for sale.

Discontinued operations are presented on the income statement as a separate line and are shown net of tax.

Intangible assets

Goodwill

Goodwill represents the excess of the cost of an acquisition over the fair value of the Group's share of the identifiable net assets of the acquired subsidiary at the date of acquisition.

Goodwill arising from acquisitions of subsidiaries after 1 August 1998 is included in intangible assets, tested annually for impairment and carried at cost less accumulated impairment losses. Gains and losses on the disposal of an entity include the carrying amount of goodwill relating to the entity sold. Goodwill arising from acquisitions of subsidiaries before 1 August 1998 was set against reserves in the year of acquisition.

Goodwill is tested for impairment at least annually. Any impairment is recognised immediately in the income statement. Subsequent reversals of impairment losses for goodwill are not recognised.

Research and development

Expenditure on research and development is charged to the income statement in the year in which it is incurred with the exception of:

- amounts recoverable from third parties; and
- expenditure incurred in respect of the development of major new products where the outcome of those projects is assessed as being reasonably certain as regards viability and technical feasibility. Such expenditure is capitalised and amortised over the estimated period of sale for each product, commencing in the year that sales of the product are first made. Amortisation is charged straight line or based on the units produced, depending on the nature of the product and the availability of reliable estimates of production volumes.

The cost of development projects which are expected to take a substantial period of time to complete, and commenced after 1 August 2009, includes attributable borrowing costs.

Intangible assets acquired in business combinations
The identifiable net assets acquired as a result of a business combination may include intangible assets other than goodwill. Any such intangible assets are amortised straight line over their expected useful lives as follows:

Patents, licences and trademarks	up to 20 years
Technology	up to 12 years
Customer relationships	up to 7 years

The assets' useful lives are reviewed, and adjusted if appropriate, at each balance sheet date.

Software, patents and intellectual property
The estimated useful lives are as follows:

Software	up to 7 years
Patents and intellectual property	shorter of the economic life and the period the right is legally enforceable

The assets' useful lives are reviewed, and adjusted if appropriate, at each balance sheet date.

Property, plant and equipment
Property, plant and equipment is stated at historical cost less accumulated depreciation and any recognised impairment losses.

Land is not depreciated. Depreciation is provided on other assets estimated to write off the depreciable amount of relevant assets by equal annual instalments over their estimated useful lives. In general, the rates used are: Freehold and long leasehold buildings – 2%; Short leasehold property – over the period of the lease; Plant, machinery, etc. – 10% to 20%; Fixtures, fittings, tools and other equipment – 10% to 33%.

The cost of any assets which are expected to take a substantial period of time to complete and whose construction began after 1 August 2009 includes attributable borrowing costs.

The assets' residual values and useful lives are reviewed, and adjusted if appropriate, at each balance sheet date. An asset's carrying amount is written down immediately to its recoverable amount if the asset's carrying amount is greater than its estimated recoverable amount.

Inventories
Inventories are stated at the lower of cost and net realisable value. Cost is determined using the first-in, first-out (FIFO) method. The cost of finished goods and work in progress comprises raw materials, direct labour, other direct costs and related production overheads (based on normal operating capacity). The cost of items of inventory which take a substantial period of time to complete includes attributable borrowing costs for all items whose production began after 1 August 2009. Net realisable value is the estimated selling price in the ordinary course of business, less applicable variable selling expenses.

Trade and other receivables
Trade receivables are initially recognised at fair value and subsequently measured at amortised cost, less any appropriate provision for estimated irrecoverable amounts. A provision is established for irrecoverable amounts when there is objective evidence that amounts due under the original payment terms will not be collected.

Provisions
Provisions for warranties and product liability, disposal indemnities, restructuring costs, vacant leasehold property and legal claims are recognised when: the Company has a legal or constructive obligation as a result of a past event; it is probable that an outflow of resources will be required to settle the obligation; and the amount has been reliably estimated. Provisions are not recognised for future operating losses.

Provisions are discounted where the time value of money is material.

Where there are a number of similar obligations, for example where a warranty has been given, the likelihood that an outflow will be required in settlement is determined by considering the class of obligations as a whole. A provision is recognised even if the likelihood of an outflow with respect to any one item included in the same class of obligations may be small.

Assets and businesses held for sale
Assets and businesses classified as held for sale are measured at the lower of carrying amount and fair value less costs to sell. Impairment losses on initial classification as held for sale and gains or losses on subsequent remeasurements are included in the income statement. No depreciation is charged on assets and businesses classified as held for sale.

Assets and businesses are classified as held for sale if their carrying amount will be recovered or settled principally through a sale transaction rather than through continuing use. The asset or business must be available for immediate sale and the sale must be highly probable within one year.

Cash and cash equivalents

Cash and cash equivalents include cash at bank and in hand and highly liquid interest-bearing securities with maturities of three months or less.

In the cash-flow statement, cash and cash equivalents are shown net of bank overdrafts, which are included as current borrowings in liabilities on the balance sheet.

Financial assets

The classification of financial assets depends on the purpose for which the assets were acquired. Management determines the classification of an asset at initial recognition and re-evaluates the designation at each reporting date. Financial assets are classified as: loans and receivables, available for sale financial assets or financial assets where changes in fair value are charged (or credited) to the income statement.

Financial assets are initially recognised at transaction price when the Group becomes party to contractual obligations. The transaction price used includes transaction costs unless the asset is being fair valued through the income statement.

The subsequent measurement of financial assets depends on their classification. Loans and receivables are measured at amortised cost using the effective interest rate method. Available for sale financial assets are subsequently measured at fair value, with unrealised gains and losses being recognised in other comprehensive income. Financial assets where changes in fair value are charged (or credited) to the income statement are subsequently measured at fair value. Realised and unrealised gains and losses arising from changes in the fair value of the 'financial assets at fair value through the income statement' category are included in the income statement in the period in which they arise.

Financial assets are derecognised when the right to receive cash-flows from the assets has expired, or has been transferred, and the Company has transferred substantially all of the risks and rewards of ownership. When securities classified as available for sale are sold or impaired, the accumulated fair value adjustments previously taken to reserves are included in the income statement.

Financial assets are classified as current if they are expected to be realised within 12 months of the balance sheet date.

Financial liabilities

Borrowings are initially recognised at the fair value of the proceeds, net of related transaction costs. These transaction costs, and any discount or premium on issue, are subsequently amortised under the effective interest rate method through the income statement as interest over the life of the loan, and added to the liability disclosed in the balance sheet. Related accrued interest is included in the borrowings figure.

Borrowings are classified as current liabilities unless the Group has an unconditional right to defer settlement of the liability for at least one year after the balance sheet date.

Derivative financial instruments and hedging activities

Derivatives are initially recognised at fair value on the date a derivative contract is entered into and are subsequently remeasured at their fair value. The method of recognising any resulting gain or loss depends on whether the derivative is designated as a hedging instrument and, if so, the nature of the item being hedged.

Changes in the fair value of any derivative instruments that do not qualify for hedge accounting are recognised immediately in the income statement.

Fair value hedge

Changes in the fair values of derivatives that are designated and qualify as fair value hedges are recorded in the income statement, together with any changes in the fair values of the hedged assets or liabilities that are attributable to the hedged risk.

Net investment hedge

Hedges of net investments in foreign operations are accounted for similarly to cash-flow hedges. Any gain or loss on the hedging instrument relating to the effective portion of the hedge is recognised in other comprehensive income; the gain or loss relating to any ineffective portion is recognised immediately in the income statement.

When a foreign operation is disposed of, gains and losses accumulated in equity related to that operation are included in the income statement.

Cash-flow hedge

The effective portions of changes in the fair values of derivatives that are designated and qualify as cash-flow hedges are recognised in equity. The gain or loss relating to any ineffective portion is recognised immediately in the income statement.

Amounts accumulated in the hedge reserve are recycled in the income statement in the periods when the hedged items will affect profit or loss (for instance when the forecast sale that is hedged takes place). If a forecast transaction that is hedged results in the recognition of a non-financial asset (for example, inventory) or a liability, the gains and losses previously deferred in the hedge reserve are transferred from the reserve and included in the initial measurement of the cost of the asset or liability.

When a hedging instrument expires or is sold, or when a hedge no longer meets the criteria for hedge accounting, any cumulative gain or loss existing in the hedge reserve at that time remains in the reserve and is recognised when the forecast transaction is ultimately recognised in the income statement. When a forecast transaction is no longer expected to occur, the cumulative gain or loss that was reported in other comprehensive income is immediately transferred to the income statement.

Fair value of financial assets and liabilities

The fair values of financial assets and financial liabilities are the amounts at which the instrument could be exchanged in a current transaction between willing parties, other than in a forced or liquidation sale.

'IFRS 13: Fair value measurement' requires fair value measurements to be classified according to the following hierarchy:

- level 1 – quoted prices in active markets for identical assets or liabilities;
- level 2 – valuations in which all inputs are observable either directly (ie as prices) or indirectly (ie derived from prices); and
- level 3 – valuations in which one or more inputs that are significant to the resulting value are not based on observable market data.

See note 20 for information on the methods the Group uses to estimate the fair values of its financial instruments.

Dividends

Dividends are recognised as a liability in the period in which they are authorised. The interim dividend is recognised when it is paid and the final dividend is recognised when it has been approved by shareholders at the Annual General Meeting.

Recent accounting developments

The following standards and interpretations have been issued by the IASB and will affect future annual reports and accounts.

- 'IFRS 9: Financial instruments'
- 'IFRS 15: Revenue from contracts with customers'
- 'IFRS 16: Leases'

A review of the impact of these standards and interpretations is being undertaken, and the impact of adopting them will be determined once this review has been completed. In particular the review of the impact of 'IFRS 15: Revenue from contracts with customers' will require an assessment at contract level for the military and long-term service businesses, and the impact of adopting this standard cannot be reliably estimated until this work is substantially complete.

These standards are under review by the EU and Smiths currently applies IFRS as adopted by the EU. Smiths will confirm their adoption date when the standards are applicable to Smiths, depending on the EU approval process and developments in the relationship between the UK and the EU.

Parent Company

The ultimate parent company of the Group is Smiths Group plc, a company incorporated in England and Wales and listed on the London Stock Exchange.

The accounts of the Parent Company, Smiths Group plc, have been prepared in accordance with UK GAAP, applying Financial Reporting Standard 101, "Reduced Disclosure Framework". The Company accounts are presented in separate financial statements on pages 194 to 205. The principal subsidiaries of the Parent Company are listed in the above accounts.

Notes to the accounts

1 Segment information

Analysis by operating segment

The Group is organised into five divisions: John Crane, Smiths Medical, Smiths Detection, Smiths Interconnect and Flex-Tek. These divisions design and manufacture the following products:

- John Crane – mechanical seals, seal support systems, engineered bearings, power transmission couplings and specialist filtration systems;
- Smiths Medical – infusion systems, vascular access (including safety needles), patient airway and temperature management equipment and specialty devices in areas of in vitro fertilisation, diagnostics and emergency patient transport;
- Smiths Detection – sensors that detect and identify explosives, narcotics, weapons, chemical agents, biohazards and contraband;
- Smiths Interconnect – specialised electronic and radio frequency components and sub-systems that connect, protect and control critical systems;
- Flex-Tek – engineered components that heat and move fluids and gases, flexible hosing and rigid tubing.

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

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

Segment trading performance

							Year ended 31 July 2016
	John Crane £m	Smiths Medical £m	Smiths Detection £m	Smiths Interconnect £m	Flex-Tek £m	Corporate costs £m	Total £m
Revenue	830	874	526	435	284		2,949
Divisional headline operating profit	181	187	69	57	51		545
Corporate headline operating costs						(35)	(35)
Headline operating profit/(loss)	**181**	**187**	**69**	**57**	**51**	**(35)**	**510**
Items excluded from headline measures (note 3)	(30)	(21)	(6)	(31)	(14)	(21)	(123)
Operating profit/(loss)	**151**	**166**	**63**	**26**	**37**	**(56)**	**387**

							Year ended 31 July 2015
	John Crane £m	Smiths Medical £m	Smiths Detection £m	Smiths Interconnect £m	Flex-Tek £m	Corporate costs £m	Total £m
Revenue	905	836	467	420	269		2,897
Divisional headline operating profit	225	166	55	49	50		545
Corporate headline operating costs						(34)	(34)
Headline operating profit/(loss)	**225**	**166**	**55**	**49**	**50**	**(34)**	**511**
Items excluded from headline measures (note 3)	(60)	(24)	(10)	(21)	(9)	7	(117)
Operating profit/(loss)	**165**	**142**	**45**	**28**	**41**	**(27)**	**394**

1 Segment information continued

Analysis by operating segment continued

Segment trading performance continued

Divisional headline operating profit is stated after charging/(crediting) the following items:

	John Crane £m	Smiths Medical £m	Smiths Detection £m	Smiths Interconnect £m	Flex-Tek £m	Reconciling items £m	Total £m
							Year ended 31 July 2016
Depreciation	15	20	6	8	3	1	53
Amortisation of capitalised development		14	12				26
Amortisation of software, patents and intellectual property	2	4	3	2		6	17
Amortisation of acquired intangibles						15	15
Impairment of goodwill						23	23
Impairment of trade investments						2	2
Impairment of property, plant and equipment						6	6
Share-based payment	1	2	1	1	1	4	10

	John Crane £m	Smiths Medical £m	Smiths Detection £m	Smiths Interconnect £m	Flex-Tek £m	Reconciling items £m	Total £m
							Year ended 31 July 2015
Depreciation	14	18	4	9	3	1	49
Amortisation of capitalised development		13	10				23
Amortisation of software, patents and intellectual property	3	3	2	1		6	15
Amortisation of acquired intangibles						33	33
Impairment of goodwill						27	27
Share-based payment	2	1	1		1	4	9

The reconciling items are central costs and charges that are treated as non-headline (see note 3).

Segment assets and liabilities

Segment assets

	John Crane £m	Smiths Medical £m	Smiths Detection £m	Smiths Interconnect £m	Flex-Tek £m	Corporate and non-headline £m	Total £m
							31 July 2016
Property, plant, equipment, development projects, other intangibles and investments	100	221	95	46	33	15	510
Inventory, trade and other receivables	364	280	316	189	99	26	1,274
Segment assets	**464**	**501**	**411**	**235**	**132**	**41**	**1,784**

	John Crane £m	Smiths Medical £m	Smiths Detection £m	Smiths Interconnect £m	Flex-Tek £m	Corporate and non-headline £m	Total £m
							31 July 2015
Property, plant, equipment, development projects, other intangibles and investments	96	175	84	38	22	167	582
Inventory, trade and other receivables	351	247	260	160	83	9	1,110
Segment assets	**447**	**422**	**344**	**198**	**105**	**176**	**1,692**

1 Segment information continued

Analysis by operating segment continued

Segment assets and liabilities continued

Segment liabilities

	John Crane £m	Smiths Medical £m	Smiths Detection £m	Smiths Interconnect £m	Flex-Tek £m	Corporate and non-headline £m	Total £m
							31 July 2016
Divisional liabilities	(124)	(121)	(196)	(78)	(37)		(556)
Corporate and non-headline liabilities						(408)	(408)
Segment liabilities	**(124)**	**(121)**	**(196)**	**(78)**	**(37)**	**(408)**	**(964)**

	John Crane £m	Smiths Medical £m	Smiths Detection £m	Smiths Interconnect £m	Flex-Tek £m	Corporate and non-headline £m	Total £m
							31 July 2015
Divisional liabilities	(141)	(108)	(156)	(64)	(37)		(506)
Corporate and non-headline liabilities						(316)	(316)
Segment liabilities	**(141)**	**(108)**	**(156)**	**(64)**	**(37)**	**(316)**	**(822)**

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

Reconciliation to segment assets and liabilities to statutory assets and liabilities

	Assets		Liabilities	
	31 July 2016 £m	31 July 2015 £m	31 July 2016 £m	31 July 2015 £m
Segment assets and liabilities	**1,784**	**1,692**	**(964)**	**(822)**
Goodwill and acquired intangibles	1,556	1,351		
Derivatives	42	24	(20)	(18)
Current and deferred tax	308	248	(167)	(121)
Retirement benefit assets and obligations	328	170	(248)	(278)
Cash and borrowings	431	495	(1,409)	(1,313)
Assets and liabilities of business held for sale	24		(5)	
Statutory assets and liabilities	**4,473**	**3,980**	**(2,813)**	**(2,552)**

Segment capital expenditure

The capital expenditure for each division is:

	John Crane £m	Smiths Medical £m	Smiths Detection £m	Smiths Interconnect £m	Flex-Tek £m	Reconciling items £m	Total £m
Capital expenditure year ended 31 July 2016	14	53	19	12	9	3	**110**
Capital expenditure year ended 31 July 2015	19	44	11	12	5	6	**97**

The reconciling items include corporate capital expenditure through Smiths Business Information Services on IT equipment and software.

1 Segment information continued

Analysis by operating segment continued

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 £815m (31 July 2015: £815m) 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 28 for a reconciliation of net assets to capital employed.

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

31 July 2016	John Crane £m	Smiths Medical £m	Smiths Detection £m	Smiths Interconnect £m	Flex-Tek £m	Total £m
Average divisional capital employed	895	1,190	578	549	162	3,374
Average corporate capital employed						(50)
Average total capital employed						**3,324**

31 July 2015	John Crane £m	Smiths Medical £m	Smiths Detection £m	Smiths Interconnect £m	Flex-Tek £m	Total £m
Average divisional capital employed	872	1,126	577	535	148	3,258
Average corporate capital employed						(61)
Average total capital employed						**3,197**

Analysis of revenue

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

John Crane	First-fit £m	Aftermarket £m	Total £m
Revenue year ended 31 July 2016	338	492	**830**
Revenue year ended 31 July 2015	396	509	**905**

The detail in the John Crane revenue split has been reduced because the Group considers focusing on the split between First-Fit and Aftermarket revenue provides greater insight into trends affecting John Crane.

Smiths Medical	Infusion systems £m	Vascular access £m	Vital care £m	Specialty products £m	Total £m
Revenue year ended 31 July 2016	273	289	240	72	**874**
Revenue year ended 31 July 2015	262	279	225	70	**836**

Smiths Detection	Transportation £m	Ports and borders £m	Military £m	Critical infrastructure £m	Total £m
Revenue year ended 31 July 2016	235	89	79	123	**526**
Revenue year ended 31 July 2015	243	50	69	105	**467**

Smiths Interconnect	Connectors £m	Microwave £m	Power £m	Total £m
Revenue year ended 31 July 2016	155	192	88	**435**
Revenue year ended 31 July 2015 (restated)	149	192	79	**420**

The allocation of Smiths Interconnect revenue for the year ended 31 July 2015 has been restated following a reorganisation that moved a business from Power to Microwave.

Flex-Tek	Fluid Management £m	Flexible Solutions £m	Heat Solutions £m	Construction Products £m	Total £m
Revenue year ended 31 July 2016	72	54	66	92	**284**
Revenue year ended 31 July 2015	69	51	65	84	**269**

1 Segment information continued

Analysis of revenue continued

The Group's statutory revenue is analysed as follows:

	Year ended 31 July 2016 £m	Year ended 31 July 2015 £m
Sale of goods	2,607	2,600
Services	312	268
Contracts qualifying as construction contracts	30	29
	2,949	**2,897**

Analysis by geographical areas

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

	Revenue		Intangible assets and property plant and equipment	
	Year ended 31 July 2016 £m	Year ended 31 July 2015 £m	31 July 2016 £m	31 July 2015 £m
United Kingdom	114	121	129	119
Germany	131	128	325	270
France	85	81	17	16
Other European	291	290	70	58
Total European	**621**	**620**	**541**	**463**
United States of America	1,396	1,378	1,349	1,172
Canada	106	111	14	14
Other North American	33	40	10	9
Total North American	**1,535**	**1,529**	**1,373**	**1,195**
Japan	101	93	21	14
China (excluding Hong Kong)	95	98	63	57
Rest of the World	597	557	59	48
	2,949	**2,897**	**2,057**	**1,777**

2 Operating profit is stated after charging

	Year ended 31 July 2016 £m	Year ended 31 July 2015 £m
Research and development expense	87	84
Operating leases		
– land and buildings	30	31
– other	8	9

	Year ended 31 July 2016 £m	Year ended 31 July 2015 £m
Audit services		
Fees payable to the Company's auditors for the audit of the Company's annual financial statements	3	3
Fees payable to the Company's auditors and its associates for other services		
– the audit of the Company's subsidiaries	2	2
	5	**5**
All other services		1

Other services comprise audit-related assurance services £0.1m (2015: £nil), tax advisory services £0.1m (2015: £0.1m), tax compliance services £nil (2015: £0.1m), one-off IT and consulting projects £nil (2015: £0.4m) and other services £0.1m (2015: £nil). Total fees for non-audit services comprise 6% (2015: 12%) of audit fees. Audit-related assurance services include the review of the Interim Report.

3 Non-statutory profit measures

Headline profit measures

The Company seeks to present a measure of underlying 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 excluded items. The excluded items are referred to as 'non-headline' items.

Headline operating profit

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

	Notes	Year ended 31 July 2016 £m	Year ended 31 July 2015 £m
Restructuring programmes		(37)	(38)
Changes to post-retirement benefits		(9)	14
Acquisition and disposal costs and profits on disposal		(6)	2
Provision for Titeflex Corporation subrogation claims		(11)	(8)
Provision for John Crane, Inc. asbestos litigation		(23)	(19)
Cost recovery for John Crane, Inc. asbestos litigation		16	
Legacy retirement benefits administration costs	8	(7)	(8)
Impairment of goodwill, property, plant and equipment and trade investments		(31)	(27)
Amortisation of acquired intangible assets	10	(15)	(33)
Non-headline items in operating profit		**(123)**	**(117)**

Material items for the year ended 31 July 2016

Restructuring costs comprise £37m in respect of *Fuel for Growth*. This programme, which involves redundancy, relocation and consolidation of manufacturing, is considered a material non-recurring item by virtue of its size.

The £9m charge relating to post-retirement benefits comprises the £10m settlement cost for the buy-out of retiree liabilities completed by the US pension scheme on 14 August 2015, net of a £1m settlement gain on closing a small scheme in Holland.

An additional provision of £12m has been recognised by Titeflex Corporation in respect of changes to the estimated cost of future claims from insurance companies seeking recompense for damage allegedly caused by lightning strikes, and £1m overprovision for the costs of settling claims in the year has been released, generating a net charge of £11m.

The operating charge for John Crane, Inc. litigation comprises a charge of £8m in respect of the net increased provision for adverse judgments and legal defence costs, a charge of £7m arising from the decrease in US risk free rates, and £8m costs for litigation management, defence strategy and legal fees in connection with litigation against insurers. This is offset in the income statement by the recovery of £16m through a settlement with one insurer.

Impairments comprise £23m goodwill write-downs (see note 11), £6m on property plant and equipment and £2m on trade investments.

3 Non-statutory profit measures continued

Headline profit measures continued

Headline operating profit continued

Material items for the year ended 31 July 2015

Restructuring costs included £39m in respect of *Fuel for Growth* and a £1m credit for provisions relating to earlier restructuring programmes which were released in the period.

Gains of £14m on changes to post-retirement benefits arose from a settlement offer by the US defined benefit pension plans – allowing deferred members a one-off option to elect to cash out their retirement entitlements rather than receive a pension at retirement – which was completed in September 2014.

A charge of £8m was made by Titeflex Corporation in respect of changes to the estimated cost of future claims including those from insurance companies seeking recompense for damage allegedly caused by lightning strikes. The change comprised £7m in respect of movements in the gross provision and £1m relating to changes in discounting.

The operating charge in respect of John Crane, Inc. litigation comprised £14m in respect of increased provision, £4m in respect of litigation management and legal fees in connection with litigation against insurers, and £1m arising from the decrease in US risk-free rates.

Headline finance costs

The non-headline items included in statutory finance costs are as follows:

	Notes	Year ended 31 July 2016 £m	Year ended 31 July 2015 £m
Adjustment to discounted provisions	22	(5)	(5)
Fair value gain realised on contributing government bonds to Smiths Industries Pension Scheme	4	19	
Other financing gains/(losses)		1	(4)
Other finance income/(costs) – retirement benefits	8	3	(8)
Non-headline gains/(losses) in finance costs		**18**	**(17)**

See note 4 for an explanation of the fair value gain on bonds and note 8 for details of the impact of this transaction on the pension funding position.

4 Net finance costs

	Notes	Year ended 31 July 2016 £m	Year ended 31 July 2015 £m
Interest receivable		**3**	**3**
Interest payable			
– bank loans and overdrafts, including associated fees		(8)	(8)
– other loans		(54)	(47)
Interest payable		**(62)**	**(55)**
Other financing gains/(losses)			
– fair value (losses)/gains on hedged debt		(23)	8
– fair value gains/(losses) on fair value hedges		23	(8)
– fair value gain realised on contributing government bonds to Smiths Industries Pension Scheme		19	
– net foreign exchange gains/(losses)		1	(4)
– adjustment to discounted provisions		(5)	(5)
Other financing losses		**15**	**(9)**
Net interest income/(expense) on retirement benefit obligations	8	**3**	**(8)**
Net finance costs		**(41)**	**(69)**

The government bonds were accounted for as available for sale financial assets, and the cumulative fair value gains of £19m on these assets were recycled from other comprehensive income to the income statement when the bonds were contributed to the Smiths Industries Pension Scheme.

5 Earnings per share

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

	Year ended 31 July 2016 £m	Year ended 31 July 2015 £m
Profit attributable to equity shareholders for the year – total	259	246
Average number of shares in issue during the year	395,095,591	394,742,972

Diluted earnings per share are calculated by dividing the profit attributable to ordinary shareholders by 398,957,837 (2015: 398,552,818) ordinary shares, being the average number of ordinary shares in issue during the year adjusted by the dilutive effect of employee share schemes. For the year ended 31 July 2016, 223,993 options (2015: no options) were excluded from this calculation because their effect was anti-dilutive for continuing operations.

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

	Year ended 31 July 2016		Year ended 31 July 2015	
	£m	EPS (p)	£m	EPS (p)
Profit attributable to equity shareholders of the Parent Company	259	65.6	246	62.4
Exclude				
Non-headline items and related tax	77	19.6	94	23.7
Headline profit attributable to equity shareholders for the year	336	85.2	340	86.1
Statutory earnings per share – diluted (p)		64.9		61.8
Headline earnings per share – diluted (p)		84.3		85.3

6 Taxation

The Group's approach to taxation is set out in the CFO report. This note only provides information about corporate income taxes under IFRS. Smiths companies operate in over 50 countries across the world. They pay and collect many different taxes in addition to corporate income taxes including: payroll taxes; value added and sales taxes; property taxes; product-specific taxes and environmental taxes. The costs associated with these other taxes are included in profit before tax.

	Year ended 31 July 2016 £m	Year ended 31 July 2015 £m
The taxation charge in the consolidated income statement for the year comprises		
– current income tax charge	56	71
– current tax adjustments in respect of prior periods		(1)
Current taxation	**56**	**70**
– deferred taxation	29	7
Total taxation expense in the consolidated income statement	**85**	**77**

6 Taxation continued

Reconciliation of the tax charge

The tax expense on the profit for the year for continuing operations is different from the standard rate of corporation tax in the UK of 20.0% (2015: 20.7%). The difference is reconciled as follows:

	Year ended 31 July 2016 £m	Year ended 31 July 2015 £m
Profit before taxation – continuing operations	**346**	**325**
Notional taxation expense at UK rate of 20.0% (2015: 20.7%)	69	67
Different tax rates on non-UK profits and losses	9	6
Non-deductible expenses	16	10
Tax credits and non-taxable income	(11)	(16)
Adjustments to unrecognised deferred tax	2	11
Prior year true-up		(1)
	85	**77**
Comprising		
– taxation on headline profit	113	117
– tax on non-headline loss	(34)	(44)
– change in deferred tax recognition treated as non-headline	6	4
Taxation expense in the consolidated income statement	**85**	**77**

The head office of Smiths Group is domiciled in the UK, so the tax charge has been reconciled to UK tax rates. In recent years, Smiths has made substantial payments to its UK defined benefit pension plans, which generated significant UK tax losses.

	Year ended 31 July 2016 £m	Year ended 31 July 2015 £m
Tax on items charged/(credited) to equity		
Deferred tax charge/(credit)		
– retirement benefit schemes	(10)	(21)
– share options		1
	(10)	**(20)**

The net retirement benefit charge to equity includes £4m (2015: £nil) relating to UK schemes. The main UK defined benefit pension plans are now in surplus, producing a deferred tax liability

Current taxation

	Current tax £m
At 31 July 2014	(41)
(Charge)/credit to income statement	(70)
Tax paid	91
At 31 July 2015	(20)
Foreign exchange gains and losses	4
(Charge)/credit to income statement	(56)
Tax paid	62
At 31 July 2016	**(10)**
Current tax receivable	62
Current tax payable	(72)
At 31 July 2016	**(10)**

Provisions included in current tax liabilities are established based on reasonable estimates for the possible consequences of tax authority audits in the various countries in which the Group operates. Management judgement is used to determine the amount of such provisions based on an understanding of the relevant local tax law, taking into account the differences of interpretation that can arise on a wide variety of issues, depending on the prevailing circumstances, including the nature of current tax audits and the experience of previous enquiries.

6 Taxation continued

Deferred taxation

	Property, plant and equipment and intangible assets £m	Employment benefits £m	Losses carried forward £m	Provisions £m	Other £m	Total £m
At 1 August 2014	(106)	49	21	117	46	127
Credit/(charge) to income statement	(2)	(10)	5	1	(1)	(7)
Credit/(charge) to equity		20				20
Exchange adjustments	(8)	2	2	8	3	7
At 31 July 2015	**(116)**	**61**	**28**	**126**	**48**	**147**
Deferred tax assets	(23)	61	26	112	42	218
Deferred tax liabilities	(93)		2	14	6	(71)
At 31 July 2015	**(116)**	**61**	**28**	**126**	**48**	**147**
Credit/(charge) to income statement	(7)	(72)	53	(10)	7	(29)
Credit/(charge) to equity		10				10
Acquisitions	(1)					(1)
Exchange adjustments	(21)	9	6	24	6	24
At 31 July 2016	**(145)**	**8**	**87**	**140**	**61**	**151**
Deferred tax assets	(24)	8	84	134	44	246
Deferred tax liabilities	(121)		3	6	17	(95)
At 31 July 2016	**(145)**	**8**	**87**	**140**	**61**	**151**

The deferred tax asset relating to losses carried forward has been recognised on the basis:

- utilisation against offsetting deferred tax liabilities, including £49m relating to UK losses that has been recognised to offset an equivalent liability on the UK pension surplus; or
- evidence that operations show a consistent pattern of improving results and the Group has implemented plans to support continuing improvements or the losses relate to specific, identified non-recurring events.

Deferred tax relating to provisions includes £84m (2015: £72m) relating to the John Crane, Inc. litigation provision, and £36m (2015: £27m) relating to Titeflex Corporation. See note 22 for additional information on provisions; and

Included in other deferred tax balances above is a deferred tax asset of £25m (2015: £26m) relating to inventory where current tax relief is only available when the inventory is sold.

The Group has not recognised deferred tax relating to deductible temporary differences in the UK amounting to £402m (2015: £400m) and non-UK losses amounting to £93m (2015: £126m).

The expiry date of operating losses carried forward is dependent upon the law of the various territories in which the losses arise. A summary of expiry dates for losses in respect of which deferred tax has not been recognised is set out below.

Restricted losses

	2016 £m	Expiry of losses	2015 £m	Expiry of losses
Territory				
– Americas	36	2019-2036	36	2019-2035
– Asia	11	2017-2023	12	2016-2022
Total restricted losses	**47**		**48**	
Unrestricted losses				
– operating losses	211	No expiry	453	No expiry
Total	**258**		**501**	

7 Employees

	Year ended 31 July 2016 £m	Year ended 31 July 2015 £m
Staff costs during the period		
Wages and salaries	745	731
Social security	84	86
Share-based payment (note 9)	10	9
Pension costs (including defined contribution schemes) (note 8)	33	31
	872	**857**

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

	Year ended 31 July 2016	Year ended 31 July 2015
John Crane	6,550	6,950
Smiths Medical	7,600	7,950
Smiths Detection	2,050	2,150
Smiths Interconnect	3,400	3,850
Flex-Tek	2,050	2,050
Smiths Business Information Services	250	250
Corporate	100	50
	22,000	**23,250**

Smiths Business Information Services directly employs people working in its operations. All the costs of IT infrastructure and support, including these employment costs, are reflected in reported divisional operating profit.

Key management

The key management of the Group comprises Smiths Group plc Board directors and Executive Committee members. Their aggregate compensation is shown below. Details of directors' remuneration are contained in the report of the Remuneration Committee on pages 94 to 114.

	Year ended 31 July 2016 £m	Year ended 31 July 2015 £m
Key management compensation		
Salaries and short-term employee benefits	12.8	12.7
Cost of post-retirement benefits	0.1	
Cost of share-based incentive plans	4.5	2.7

No member of key management had any material interest during the period in a contract of significance (other than a service contract or a qualifying third-party indemnity provision) with the Company or any of its subsidiaries. Options and awards held at the end of the period by key management in respect of the Company's share-based incentive plans were:

	Year ended 31 July 2016		Year ended 31 July 2015	
	Number of instruments '000	Weighted average price	Number of instruments '000	Weighted average price
CIP	468		589	
ESOS			18	£10.97
LTIP	1,185		1,374	
Restricted stock	261			
SAYE	15	£8.99	11	£9.19

Related party transactions

The only related party transactions in the year ended 31 July 2016 were key management compensation (31 July 2015: no other transactions).

8 Post-retirement benefits

Smiths provides post-retirement benefits to employees in a number of countries. This includes defined benefit and defined contribution plans and, mainly in the United Kingdom (UK) and United States of America (US), post-retirement healthcare.

Defined contribution plans
The Group operates a number of defined contribution plans across many countries. In the UK a defined contribution plan has been offered since the closure of the UK defined benefit pension plans. In the US a 401k defined contribution plan operates. The total expense recognised in the consolidated income statement in respect of all these plans was £30m (2015: £28m).

Defined benefit and post-retirement healthcare plans
The principal defined benefit pension plans are in the UK and in the US and these have been closed so that no future benefits are accrued.

For all schemes, pension costs are assessed in accordance with the advice of independent, professionally qualified actuaries. These valuations have been updated by independent qualified actuaries in order to assess the liabilities of the schemes as at 31 July 2016. Scheme assets are stated at their market values. Contributions to the schemes are made on the advice of the actuaries, in accordance with local funding requirements.

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

	Year ended 31 July 2016 £m	Year ended 31 July 2015 £m
At beginning of period	(108)	(242)
Exchange adjustment	(31)	(3)
Reclassification of small unfunded obligations		(2)
Current service cost	(3)	(3)
Scheme administration costs	(7)	(8)
Past service cost, curtailments, settlements	(9)	14
Finance income/(charges) – retirement benefits	3	(8)
Contributions by employer	275	84
Actuarial (loss)/gain	(39)	60
Movement in surplus restriction	(1)	
Net retirement benefit asset/(liability)	**80**	**(108)**

UK pension schemes

Smiths funded UK pension schemes are subject to a statutory funding objective, as set out in UK pension legislation. Scheme trustees need to obtain regular actuarial valuations to assess the scheme against this funding objective. The trustees and sponsoring companies need to agree funding plans to improve the position of a scheme, when it is below the acceptable funding level.

The UK Pensions Regulator has extensive powers to protect the benefits of members, promote good administration and reduce the risk of situations arising which may require compensation to be paid from the Pension Protection Fund. These powers include imposing a schedule of contributions or the calculation of the technical provisions, where a trustee and company fail to agree appropriate calculations.

Smiths Industries Pension Scheme ("SIPS")

This scheme was closed to future accrual effective 1 November 2009. SIPS provides index-linked pension benefits based on final earnings at date of closure. SIPS is governed by a corporate trustee (SI Trustee Limited, a wholly owned subsidiary of Smiths Group plc). The board of trustee directors comprises five company-nominated trustees and four member-nominated trustees, with an independent chairman selected by Smiths Group plc. Trustee Directors are responsible for the management, administration, funding and investment strategy of the scheme.

The most recent actuarial valuation of this scheme has been performed using the Projected Unit Method as at 31 March 2015, and experience gains and losses identified during this valuation have been incorporated into the IAS 19 valuation. Under the funding plan for SIPS agreed in November 2015 Smiths pays cash contributions of £2m a month until June 2020. As part of this agreement, Smiths contributed the index-linked gilts previously held in an escrow account. Under the governing documentation of the SIPS, any future surplus would be returnable to Smiths Group plc by refund, assuming gradual settlement of the liabilities over the lifetime of the scheme.

SIPS will implement Guaranteed Minimum Pensions equalisation in respect of members contracted out of the State Earnings Related Pensions Scheme prior to 6 April 1997, once the government has completed its consultations and confirmed an approach. It is not yet possible to reliably quantify the impact of this adjustment.

The duration of the SIPS liabilities is around 23 years (2015: 23 years) for active deferred members, 24 years (2015: 23 years) for deferred members and 12 years (2015: 12 years) for pensioners and dependants.

8 Post-retirement benefits continued

Defined benefit and post-retirement healthcare plans continued

UK pension schemes continued

TI Group Pension Scheme ("TIGPS")

This scheme was closed to future accrual effective 1 November 2009. TIGPS provides index-linked pension benefits based on final earnings at the date of closure. TIGPS is governed by a corporate trustee (TI Pension Trustee Limited, an independent company). The board of trustee directors comprises five company-nominated trustees and four member-nominated trustees, with an independent trustee director selected by the Trustee. The Trustee is responsible for the management, administration, funding and investment strategy of the scheme.

The most recent actuarial valuation of this scheme has been performed using the Projected Unit Method as at 5 April 2015. Under the funding plan for TIGPS agreed in March 2016 Smiths pays cash contributions of £3m a year until April 2018. Under the governing documentation of the TIGPS, any future surplus would be returnable to Smiths Group plc by refund, assuming gradual settlement of the liabilities over the lifetime of the scheme.

TIGPS will implement Guaranteed Minimum Pensions equalisation in respect of members contracted out of the State Earnings Related Pensions Scheme prior to 6 April 1997, once the government has completed its consultations and confirmed an approach. It is not yet possible to reliably quantify the impact of this adjustment.

The duration of the TIGPS liabilities is around 25 years (2015: 21 years) for active deferred members, 24 years (2015: 19 years) for deferred members and 11 years (2015: 11 years) for pensioners and dependants.

US pension plans

The most recent valuations of the six principal US pension and post-retirement healthcare plans were performed at 1 January 2015.

The pension plans were closed with effect from 30 April 2009 and benefits were calculated as at that date and are not revalued. Governance of the US pension plans is managed by a Settlor Committee appointed by Smiths Group Services Corp, a wholly owned subsidiary.

The duration of the liabilities for the largest US plan is around 20 years (2015: 14 years) for active deferred members, 20 years (2015: 19 years) for deferred members and 12 years (2015: 10 years) for pensioners and dependants.

On 14 August 2015 the US funded plans completed a buy-out of retiree liabilities for $527m, transferring the obligation to pay pensions to Voya Retirement Insurance and Annuity Company. A settlement loss of £10m has been recognised on this transaction (see note 3). In August 2014, the US pension plans offered deferred members a one-off option to elect to cash out their retirement entitlements rather than receive a pension at retirement. Lump sum payments of $150m were made in August and September 2014. This programme generated a settlement gain of £14m in the year ended 31 July 2015.

Risk management

The pensions schemes are exposed to risks that:

- investment returns are below expectations, leaving the scheme with insufficient assets in future to pay all its pension obligations;
- members and dependants live longer than expected, increasing the value of the pensions the scheme has to pay;
- inflation rates are higher than expected, so amounts payable under index-linked pensions are higher than expected; and
- increased contributions may be required to meet regulatory funding targets if lower interest rates increase the current value of liabilities.

These risks are managed separately for each pension scheme. However Smiths has adopted a common approach of closing defined benefit schemes to cap members' entitlements and supporting trustees in adopting investment strategies which match assets to future obligations, after allowing for the funding position of the scheme.

TI Group Pension Scheme ("TIGPS")

TIGPS with a mature member profile, and a strong funding position, has been able to progress its matching strategy to the point where roughly 50% of liabilities are covered by matching annuities, eliminating investment return, longevity, inflation and funding risks.

Smiths Industries Pension Scheme ("SIPS")

In August 2014 SIPS adjusted the scheme investment strategy. The scheme has investments in diversified growth funds and a portfolio of exchange traded equity index futures managed by BlackRock. The risk and return characteristics of equity index futures are similar to physical equities, but provide the scheme with improved liquidity. As at 31 July 2016 the SIPS portfolio of exchange traded equity index futures generated a £163m (2015: £497m) exposure to equities.

Following the company contribution of £152m UK government bonds to SIPS in December 2015 and the resulting improvement in the funding position, the trustees have adopted a leveraged liability matching strategy. The scheme uses repurchase arrangements, total return swaps, inflation swaps and interest rate swaps to hedge the interest and inflation risks of the scheme liabilities. Repurchase agreements exchange government bonds held by the scheme for cash with an obligation to buy back the asset at a fixed future date and price. The cash is invested in liability matching assets, reducing funding risk. A total return swap exchanges the return on a specified asset (for example an index-linked bond) and an interest payment (fixed or floating). Contracts are spread across a panel of banks. To minimise the risk that counterparties fail to settle obligations, positions are collateralised. For repurchase agreements, collateral is the difference between the present value of the repurchase obligation and the value of the asset exchanged. For swaps, collateral is based on market values. At 31 July 2016 scheme assets were net of £720m (2015: £nil) repurchase obligations, and nominal exposure from interest rate swaps of £293m, inflation swaps of £263m and total return swaps of £14m.

8 Post-retirement benefits continued

Defined benefit and post-retirement healthcare plans continued

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

	2016 UK	2016 US	2016 Other	2015 UK	2015 US	2015 Other
Rate of increase in salaries	n/a	n/a	2.8%	n/a	n/a	2.6%
Rate of increase for active deferred members	3.6%	n/a	n/a	4.1%	n/a	n/a
Rate of increase in pensions in payment	2.7%	n/a	1.6%	3.2%	n/a	1.0%
Rate of increase in deferred pensions	2.7%	n/a	0.1%	3.2%	n/a	0.1%
Discount rate	2.3%	3.45%	2.8%	3.5%	4.35%	3.3%
Inflation rate	2.7%	n/a	2.3%	3.2%	n/a	1.6%
Healthcare cost increases	4.2%	n/a	1.4%	4.7%	n/a	2.1%

The assumptions used in calculating the costs and obligations of the Group's defined benefit pension plans are set by Smiths after consultation with independent professionally qualified actuaries. The assumptions used are estimates chosen from a range of possible actuarial assumptions which, due to the timescale covered, may not necessarily occur in practice. For countries outside the UK and USA assumptions are disclosed as a weighted average.

Discount rate assumptions

The UK schemes use a discount rate based on the yield on the iBOXX over 15-year AA-rated corporate bond index, adjusted if necessary to better reflect the shape of the yield curve considering the Aon Hewitt GBP Select AA curve. For the USA, the discount rate is based on the Towers Watson cash-flow matching models and set with reference to Moody's Aa annualised yield, the Citigroup High Grade Index and the Merrill Lynch 15+ years High Quality Index.

Mortality assumptions

The mortality assumptions used in the principal UK schemes are based on the new "SAPS S2" All Birth year tables with relevant scaling factors based on the recent experience of the schemes. The assumption allows for future improvements in life expectancy in line with the 2015 CMI projections, blended to a long-term rate of 1.25%. The mortality assumptions used in the principal US schemes are based on the RP-2014 table adjusted backward to 2006 with MP-2014 and projected forward using MP-2015 as of 31 July 2016. The table selected allows for future mortality improvements and applies an adjustment for job classification (blue collar versus white collar).

Expected further years of life				UK schemes				US schemes
	Male 31 July 2016	Female 31 July 2016	Male 31 July 2015	Female 31 July 2015	Male 31 July 2016	Female 31 July 2016	Male 31 July 2015	Female 31 July 2015
Member who retires next year at age 65	23	24	23	24	21	23	22	24
Member, currently 45, when they retire in 20 years' time	24	26	25	27	23	25	23	26

Sensitivity

Sensitivities in respect of the key assumptions used to measure the principal pension schemes as at 31 July 2016 are set out below. These sensitivities show the hypothetical impact of a change in each of the listed assumptions in isolation, with the exception of the sensitivity to inflation which incorporates the impact of certain correlating assumptions. In practice, such assumptions rarely change in isolation.

	Profit before tax for year ended 31 July 2016 £m	Increase/ (decrease) in scheme assets 31 July 2016 £m	(Increase)/ decrease in scheme liabilities 31 July 2016 £m	Profit before tax for year ended 31 July 2015 £m	Increase/ (decrease) in scheme assets 31 July 2015 £m	(Increase)/ decrease in scheme liabilities 31 July 2015 £m
Rate of mortality – 1 year increase in life expectancy	(3)	53	(183)	(4)	47	(157)
Rate of mortality – 1 year decrease in life expectancy	3	(53)	183	4	(47)	160
Rate of inflation – 0.25% increase	(2)	16	(119)	(3)	13	(89)
Discount rate – 0.25% increase	4	(19)	168	5	(19)	139
Market value of scheme assets – 2.5% increase	2	86		3	80	

The effect on profit before tax reflects the impact of current service cost and net interest cost. The value of the scheme assets is affected by changes in mortality rates, inflation and discounting because they affect the carrying value of the insurance assets.

Asset valuation

Liquidity funds, equities and bonds are valued using quoted market prices in active markets. Exchange traded equity index futures are valued at market prices.

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

Insured liabilities comprise annuity policies matching the scheme obligation to identified groups of pensioners. These assets are valued at the actuarial valuation of the corresponding liability, reflecting this matching relationship. Property is valued by specialists applying recognised property valuation methods incorporating current market data on rental yields and transaction prices.

8 Post-retirement benefits continued

Defined benefit and post-retirement healthcare plans continued

Retirement-benefit plan assets

	31 July 2016 £m				31 July 2015 £m			
	UK schemes	US schemes	Other countries	Total	UK schemes	US schemes	Other countries	Total
Cash and cash equivalents								
– cash	57	1		58	41	17		58
– liquidity funds	89			89	172	1		173
– cash collateral and liquidity funds held to support exchange traded futures	53			53	29			29
Equities								
– UK funds	111		3	114	123		1	124
– North American funds	124		2	126	129	110	2	241
– other regions and global funds	214		5	219	227	47	16	290
Government bonds								
– index-linked bonds	1,410			1,410	1,052			1,052
– fixed-interest bonds	599	70	20	689	171	71	11	253
Corporate bonds	861	145	5	1,011	284	199	2	485
Insured liabilities	802		1	803	783			783
Property								
– UK property	149			149	174			174
– other property			1	1				
Other								
– diversified growth funds and scheme receivables	285		25	310	338		17	355
– repurchase obligations	(720)			(720)				
Total market value	**4,034**	**216**	**62**	**4,312**	**3,523**	**445**	**49**	**4,017**

SIPS has a portfolio of exchange traded equity index futures, which are valued at market prices. These futures increase "leverage" in SIPS, creating additional asset exposure. At 31 July 2016, the gross equity exposure generated by these exchange traded futures was £163m (2015: £497m). At 31 July 2016 the aggregate value of this strategy, including cash received as collateral, was £9m (2015: a liability of less than £1m). The scheme was holding £44m (2015: £29m) in liquidity funds to meet potential future obligations to collateralise equity index futures.

UK other investments at 31 July 2016 included £162m (2015: £330m) of investments in diversified growth funds held by SIPS, £107m of investments in leveraged index linked UK government bond funds held by TIGPS and £9m (2015: £nil) SIPS interest and inflation swaps.

At 31 July 2016 SIPS assets were net of £720m (2015: £nil) repurchase obligations, and included £11m (2015: £nil) gains on interest rate swaps and £2m (2015: £nil) losses on inflation swaps. See risk management disclosures on page 156 for information on how the scheme is using repurchase arrangements and swap contracts to match the interest rate and inflation exposures of its assets to the interest rate and inflation exposures of the scheme liabilities. The scheme was holding £45m (2015: £nil) in liquidity funds to meet potential future obligations to collateralise repurchase arrangements or swap agreements.

The scheme assets do not include any property occupied by, or other assets used by, the Group. Equities include investments in broad-based equity indices, some of which hold ordinary equity shares in Smiths Group plc.

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

	31 July 2016 £m			31 July 2015 £m		
	SIPS	TIGPS	US schemes	SIPS	TIGPS	US schemes
Present value of funded scheme liabilities						
– Active deferred members	(82)	(82)	(124)	(92)	(76)	(102)
– Deferred members	(881)	(688)	(175)	(756)	(625)	(130)
– Pensioners	(1,086)	(869)	(16)	(995)	(823)	(336)
Present value of funded scheme liabilities	**(2,049)**	**(1,639)**	**(315)**	**(1,843)**	**(1,524)**	**(568)**
Market value of scheme assets	2,227	1,787	216	1,813	1,693	445
Surplus/(deficit)	**178**	**148**	**(99)**	**(30)**	**169**	**(123)**

8 Post-retirement benefits continued

Defined benefit and post-retirement healthcare plans continued

Net retirement benefit obligations

	UK schemes	US schemes	Other countries	31 July 2016 Total £m	UK schemes	US schemes	Other countries	31 July 2015 Total £m
Market value of scheme assets	4,034	216	62	4,312	3,523	445	49	4,017
Present value of funded scheme liabilities	(3,709)	(315)	(70)	(4,094)	(3,385)	(568)	(57)	(4,010)
Surplus/(deficit)	**325**	**(99)**	**(8)**	**218**	**138**	**(123)**	**(8)**	**7**
Unfunded pension plans	(56)	(8)	(52)	(116)	(52)	(7)	(37)	(96)
Post-retirement healthcare	(8)	(12)	(1)	(21)	(7)	(11)	(1)	(19)
Present value of unfunded obligations	**(64)**	**(20)**	**(53)**	**(137)**	**(59)**	**(18)**	**(38)**	**(115)**
Unrecognised asset due to surplus restriction			(1)	(1)				
Net pension liability	**261**	**(119)**	**(62)**	**80**	**79**	**(141)**	**(46)**	**(108)**
Post-retirement assets	327		1	328	169		1	170
Post-retirement liabilities	(66)	(119)	(63)	(248)	(90)	(141)	(47)	(278)
Net pension liability	**261**	**(119)**	**(62)**	**80**	**79**	**(141)**	**(46)**	**(108)**

Where any individual scheme shows a recoverable surplus under IAS 19, this is disclosed on the balance sheet as a retirement benefit asset. The IAS 19 surplus of any one scheme is not available to fund the IAS 19 deficit of another scheme. The retirement benefit asset disclosed arises from the rights of the employers to recover the surplus at the end of the life of the scheme.

Amounts recognised in the consolidated income statement

	Year ended 31 July 2016 £m	Year ended 31 July 2015 £m
Amounts charged/(credited) to operating profit		
Current service cost	3	3
Settlement loss/(gain)	9	(14)
Scheme administration costs	7	8
	19	**(3)**
The operating cost is charged/(credited) as follows:		
Cost of sales	1	1
Sales and distribution costs	1	1
Headline administrative expenses	1	1
Non-headline administrative expenses	16	(6)
	19	**(3)**
Amounts charged to finance costs		
Net interest (income)/cost	**(3)**	**8**

Amounts recognised directly in the consolidated statement of comprehensive income

	Year ended 31 July 2016 £m	Year ended 31 July 2015 £m
Actuarial gains/(losses)		
Difference between interest credit and return on assets	395	239
Experience gains and (losses) on scheme liabilities	58	46
Actuarial gains/(losses) arising from changes in demographic assumptions	47	(15)
Actuarial gains/(losses) arising from changes in financial assumptions	(539)	(210)
Movements in surplus restriction	(1)	
	(40)	**60**

8 Post-retirement benefits continued

Defined benefit and post-retirement healthcare plans continued

Changes in present value of funded scheme assets

	31 July 2016 £m				31 July 2015 £m			
	UK schemes	US schemes	Other countries	Total	UK schemes	US schemes	Other countries	Total
At beginning of period	3,523	445	49	4,017	3,249	500	51	3,800
Interest on assets	124	9	3	136	128	20	2	150
Actuarial gain on scheme assets	372	20	3	395	242	(6)	3	239
Employer contributions	199	68	2	269	53	23	3	79
Assets distributed on settlement		(360)		(360)			(1)	(1)
Scheme administration costs	(4)	(3)		(7)	(4)	(4)		(8)
Exchange adjustments		51	8	59		40	(5)	35
Benefits paid	(180)	(14)	(3)	(197)	(145)	(128)	(4)	(277)
At end of period	**4,034**	**216**	**62**	**4,312**	**3,523**	**445**	**49**	**4,017**

Changes in present value of funded defined benefit obligations

	31 July 2016 £m				31 July 2015 £m			
	UK schemes	US schemes	Other countries	Total	UK schemes	US schemes	Other countries	Total
At beginning of period	(3,385)	(568)	(57)	(4,010)	(3,275)	(595)	(65)	(3,935)
Current service cost			(1)	(1)			(1)	(1)
Interest on obligations	(115)	(12)	(2)	(129)	(128)	(23)	(3)	(154)
Actuarial (loss)/gain on liabilities	(389)	(31)	(3)	(423)	(127)	(43)	1	(169)
Liabilities extinguished on settlement		350	1	351		14		14
Exchange adjustments		(68)	(11)	(79)		(49)	7	(42)
Benefits paid	180	14	3	197	145	128	4	277
At end of period	**(3,709)**	**(315)**	**(70)**	**(4,094)**	**(3,385)**	**(568)**	**(57)**	**(4,010)**

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

	Assets		Obligations	
	Year ended 31 July 2016 £m	Year ended 31 July 2015 £m	Year ended 31 July 2016 £m	Year ended 31 July 2015 £m
At beginning of period			(115)	(107)
Reclassification of small unfunded obligations				(2)
Current service cost			(2)	(2)
Interest on obligations			(4)	(4)
Actuarial loss			(11)	(10)
Employer contributions	6	6		
Exchange adjustments			(11)	4
Benefits paid	(6)	(6)	6	6
At end of period			**(137)**	**(115)**

Cash contributions

Company contributions to the defined benefit pension plans and post-retirement healthcare plans for 2016 totalled £275m (2015: £84m). This comprised regular contributions to funded schemes of £32m (2015: £36m) to SIPS, £11m (2015: £17m) to TIGPS, £34m (2015: £23m) to US Schemes, £6m to other schemes and additional contributions of $50m to fund the buy-out arrangement for US pensioners in August 2015 and the contribution of £152m UK government bonds to SIPS in December 2015. In addition, £6m (2015: £6m) was spent on providing benefits under unfunded defined benefit pension and post-retirement healthcare plans.

In 2017 the following cash contributions to the Group's principal defined benefit schemes are expected: £24m to SIPS; £3m to TIGPS; approximately £29m to other defined benefit plans, including the US scheme; and £6m to unfunded schemes and post-retirement healthcare. Adding £4m planned buy-out funding for small UK and Canadian schemes, expected cash payments for 2017 total £66m.

9 Employee share schemes

The Group operates share schemes and plans for the benefit of employees. The nature of the principal schemes and plans, including general conditions, is set out below:

Long-Term Incentive Plan (LTIP)
The LTIP is a share plan under which an award over a capped number of shares will vest after the end of the three-year performance period if performance conditions are met. LTIP awards are made to selected senior executives, including the executive directors. Awards made prior to 2016 were made with different targets for corporate executives and divisional executives. From 2016 onwards, all LTIP awards will have one set of targets.

LTIP performance conditions
Each performance condition has a threshold below which no shares vest and a maximum performance target at or above which the award vests in full. For performance between 'threshold' and 'maximum', awards vest on a straight-line sliding scale. The performance conditions are assessed separately, so performance on one condition does not affect the vesting of the other elements of the award. To the extent that the performance targets are not met over the three-year performance period, awards will lapse. There is no re-testing of the performance conditions.

Group LTIP awards have performance conditions relating to underlying revenue growth, growth in headline EPS adjusted to exclude tax, ROCE, cash conversion and, for awards made before 2015, TSR relative to the FTSE 100 (excluding financial services companies).

Divisional LTIP awards have performance conditions relating to divisional performance against headline KPIs, including underlying revenue and operating profit growth, operating margins, ROCE, operating cash conversion, employee engagement and quality metrics.

Smiths Group Co-Investment Plan (CIP) and Smiths Share Matching Plan (SMP)
In 2015 the CIP was replaced by the SMP. Under the CIP and SMP participants are required to invest between 25% and 50% of their post-tax bonus purchasing the Company's shares at the prevailing market price. At the end of a three-year period, if the executive is still in office and provided the performance test is passed, matching shares will be awarded in respect of any invested shares retained for that period. The number of matching shares to be awarded is determined by the Remuneration Committee at the end of the year in which the bonus is earned by reference to annual bonus, and other corporate financial criteria. The maximum award will not exceed the value, before tax, of the bonus or salary invested in shares by the executive.

For the CIP, vesting of matching shares will occur, and the matching shares will be released, at the end of the three-year period if the Group's Return on Capital Employed ('ROCE') over the performance period exceeds the Group's weighted average cost of capital ('WACC') over the performance period by an average margin of at least 1% per annum. If ROCE exceeds WACC by an average margin of 3% per annum, the enhanced performance condition is met, and a second matching share will be issued for every purchased share. For the SMP, vesting of matching shares will occur, and the matching shares will be released, at the end of the three-year period depending on the performance of the Group LTIP issued for the same performance period. The first matching share is awarded if the Group LTIP vests under any performance condition.

No future awards will be made under the CIP or SMP.

Restricted stock
The restricted stock is used by the Remuneration Committee, as a part of the recruitment strategy, to make awards in recognition of incentive arrangements forfeited on leaving a previous employer. If an award is considered appropriate, the award will take account of relevant factors including the fair value of awards forfeited, any performance conditions attached, the likelihood of those conditions being met and the proportion of the vesting period remaining. See the Directors' Remuneration Report pages 94 to 114 for details of the awards made to executive directors recruited in the year.

	CIP	Long-term incentive plans	Restricted stock	Other share schemes	Total	Weighted average price £
Ordinary shares under option ('000)						
1 August 2014	1,568	2,695		1,744	6,007	£2.67
Granted	533	1,240		302	2,075	£1.31
Exercised	(580)	(258)		(418)	(1,256)	£2.62
Lapsed	(152)	(1,028)		(134)	(1,314)	£0.97
31 July 2015	1,369	2,649		1,494	5,512	£2.57
Granted	635	1,628	303	329	2,895	£0.99
Exercised	(530)	(199)	(30)	(380)	(1,139)	£2.95
Lapsed	(35)	(724)		(222)	(981)	£2.20
31 July 2016	**1,439**	**3,354**	**273**	**1,221**	**6,287**	**£1.83**

9 Employee share schemes continued

Options were exercised on an irregular basis during the period. The average closing share price over the financial year was 1,049.61p (2015: 1,176.19p). There has been no change to the effective option price of any of the outstanding options during the period.

Range of exercise prices	Total shares under option at 31 Jul 2016 ('000)	Weighted average remaining contractual life at 31 July 2016 (months)	Total shares under option at 31 Jul 2015 ('000)	Weighted average remaining contractual life at 31 July 2015 (months)	Options exercisable at 31 July 2016 ('000)	Exercisable weighted average exercise price for options exercisable at 31 July 2016	Options exercisable at 31 July 2015 ('000)	Exercisable weighted average exercise price for options exercisable at 31 July 2015
£0.00 – £2.00	5,066	18	4,018	15				
£2.01 – £6.00	17	6	18	17				
£6.01 – £10.00	924	33	1,091	27	60	£9.04	263	£8.97
£10.01 – £14.00	280	13	385	25	175	£10.95	257	£10.96

For the purposes of valuing options to arrive at the share-based payment charge, the Binomial option-pricing model has been used for most schemes and the Monte Carlo method is used for schemes with total shareholder return performance targets. The key assumptions used in the models for 2016 and 2015 are volatility of 25% to 30% (2015: 20% to 25%) and dividend yield of 3.75% (2015: 3.75%), based on historical data, for the period corresponding with the vesting period of the option. These generated a weighted average fair value for SMP/CIP of £10.34 (2015: £12.47), Group LTIP of £10.33 (2015: £10.78) and divisional LTIP of £10.33 (2015: £12.55), and restricted stock of £10.03 (2015: no grants). The fair value disclosed for the SMP/CIP award treats the two matching shares as separate options.

Included within staff costs is an expense arising from share-based payment transactions of £10m (2015: £9m), of which £9m (2015: £8m) relates to equity-settled share-based payment.

10 Intangible assets

	Goodwill £m	Development costs £m	Acquired intangibles (see table below) £m	Software, patents and intellectual property £m	Total £m
Cost					
At 1 August 2014	1,395	216	386	164	2,161
Exchange adjustments	26	9	19	2	56
Additions		20		18	38
Disposals		(8)	(2)	(7)	(17)
At 31 July 2015	**1,421**	**237**	**403**	**177**	**2,238**
Exchange adjustments	253	43	71	17	384
Business combinations	5		3		8
Additions		25		11	36
Disposals		(3)		(6)	(9)
At 31 July 2016	**1,679**	**302**	**477**	**199**	**2,657**
Amortisation					
At 1 August 2014	86	102	313	116	617
Exchange adjustments	2	4	14	1	21
Charge for the year		23	33	15	71
Impairment charge	27				27
Disposals		(8)	(2)	(6)	(16)
At 31 July 2015	**115**	**121**	**358**	**126**	**720**
Exchange adjustments	24	22	65	11	122
Charge for the year		26	15	17	58
Impairment charge	23				23
Disposals		(3)		(5)	(8)
At 31 July 2016	**162**	**166**	**438**	**149**	**915**
Net book value at 31 July 2016	**1,517**	**136**	**39**	**50**	**1,742**
Net book value at 31 July 2015	1,306	116	45	51	1,518
Net book value at 1 August 2014	1,309	114	73	48	1,544

10 Intangible assets continued

In addition to goodwill, the acquired intangible assets comprise:

	Patents, licences and trademarks £m	Technology £m	Customer relationships £m	Total acquired intangibles £m
Cost				
At 1 August 2014	68	128	190	386
Exchange adjustments	4	10	5	19
Disposals		(2)		(2)
At 31 July 2015	**72**	**136**	**195**	**403**
Exchange adjustments	13	24	34	71
Business combinations			3	3
At 31 July 2016	**85**	**160**	**232**	**477**
Amortisation				
At 1 August 2014	41	101	171	313
Exchange adjustments	2	8	4	14
Charge for the year	6	13	14	33
Disposals		(2)		(2)
At 31 July 2015	**49**	**120**	**189**	**358**
Exchange adjustments	9	22	34	65
Charge for the year	3	7	5	15
At 31 July 2016	**61**	**149**	**228**	**438**
Net book value at 31 July 2016	**24**	**11**	**4**	**39**
Net book value at 31 July 2015	23	16	6	45
Net book value at 1 August 2014	27	27	19	73

11 Impairment testing

Goodwill

Goodwill is not amortised but is tested for impairment at least annually. Value in use or fair value less cost to sell calculations are used to determine the recoverable amount of goodwill held allocated to each group of cash generating units (CGU). Value in use is calculated as the net present value of the projected risk-adjusted cash-flows of the CGU. These forecast cash-flows are based on the 2017 budget, the five-year strategic plan approved by the Board and detailed divisional strategic projections, where these have been prepared and approved by the Board. Fair value less cost to sell is calculated using available information on past and expected future profitability, valuation multiples for comparable quoted companies (adjusted as required for significant differences) and information on costs of similar transactions. Fair value less costs to sell models are used when trading projections in the strategic plan cannot be adjusted to eliminate the impact of a major restructuring

Goodwill is allocated by division as follows:

	2016 £m	2016 Number of CGUs	2015 £m	2015 Number of CGUs
John Crane	108	3	92	3
Smiths Medical	591	1	508	1
Smiths Detection	410	1	343	1
Smiths Interconnect	381	5	340	5
Flex-Tek	27	2	23	2
	1,517	**12**	**1,306**	**12**

The goodwill allocated to Smiths Interconnect Power has been split, and part of it allocated to Smiths Interconnect Microwave Telecoms, following the transfer of the protection business from Smiths Interconnect Power to Smiths Interconnect Microwave Telecoms to increase synergies from the customer base of these businesses. Goodwill was also reallocated from Smiths Interconnect Microwave Subsystems to Smiths Interconnect Microwave Components when a business was transferred between the two business units. These changes were made to reflect how the businesses were being managed. If goodwill had not been reallocated, the impairment recognised for Smiths Interconnect Microwave Telecoms and Smiths Interconnect Microwave Components would have been smaller.

11 Impairment testing continued

Goodwill continued

Goodwill impairment

John Crane Production Solutions ("JCPS")

JCPS is a business unit of John Crane focused on the servicing and provision of onshore down-hole 'artificial lift' pumping hardware and systems. Goodwill of £nil (2015: £5m) is allocated to JCPS. An impairment test was carried out following completion of the annual strategic planning process because the significant decline in oil prices had adversely affected JCPS customers. JCPS anticipate that customers will continue to scale back expansion plans and reduce running costs. Following this impairment test, the JCPS goodwill has been impaired by £5m (2015: £27m) and property, plant and equipment where the value is expected to be recovered at a CGU level has been impaired by £5m (2015: no impairment). The impairment has occurred because JCPS is now expected to have lower levels of trading activity, operating margins and growth in the future, significantly reducing the value in use of the business.

The impairment loss has been recognised in John Crane administration expenses, and excluded from headline operating profit for the division.

	Year ended 31 July 2016	Year ended 31 July 2015
Impairment loss recognised	**£5m**	**£27m**
Property, plant the equipment impairment loss	**£5m**	
Basis of valuation	value in use	value in use
Discount rate used for impairment test	13.7%	12.9%
Long-term growth rates	2.3%	2.2%

Sales assumptions for JCPS are based on:

- anticipated levels of maintenance and repair activities based on the current forward curve for oil prices; and
- expected North American drilling activity.

The gross margins included in the projections are lower than historical due to lower levels of activity. As required by 'IAS 36: Impairment of assets', margin projections for JCPS are based on the current fixed cost base, and do not incorporate any future restructuring.

At 31 July 2016 the Artificial lift business, comprising the US and Romanian activities of JCPS, was classified as held for sale (see note 27).

Smiths Interconnect Microwave Components

Goodwill of £66m (2015: £52m) is allocated to Smiths Interconnect Microwave Components. The underlying increase in goodwill is due to a reorganisation that moved a business from Smiths Interconnect Microwave Subsystems to Smiths Interconnect Microwave Components. An impairment test was carried out following the completion of the annual strategic planning process, which identified increased execution risks affecting the long-term strategy.

	Year ended 31 July 2016	Year ended 31 July 2015
Impairment loss recognised	**£7m**	
Basis of valuation	value in use	value in use
Discount rate used for impairment test	13.6%	15.6%
Long-term growth rates	2.3%	2.4%

Sales assumptions for Smiths Interconnect Microwave Components are based on:

- the current order book;
- sales projections from major customers; and
- developments in key customer markets including smartphone testing equipment.

Margin projections for Smiths Interconnect Microwave Components incorporate the variable cost structure of the current production capacity.

11 Impairment testing continued

Goodwill continued

Goodwill impairment continued

Smiths Interconnect Microwave Telecoms

Goodwill of £11m (2015: £7m) is allocated to Smiths Interconnect Microwave Telecoms. The underlying increase in goodwill is due to a reorganisation that moved the protection business from Smiths Interconnect Power to Smiths Interconnect Microwave Telecoms. An impairment test was carried out following the completion of the annual strategic planning process, which identified execution risks affecting this CGU. The impairment testing used a fair value less costs to sell model to value the businesses, because the Board approved forecasts for this business fundamentally incorporated significant reorganisation activity.

	Year ended 31 July 2016	Year ended 31 July 2015
Impairment loss recognised	**£11m**	
Basis of valuation	fair value	value in use
Discount rate used for impairment test	n/a	14.1%
Long-term growth rates	n/a	2.2%

The estimate of fair value less costs to sell incorporated projected 2017 revenue and profitability. Sales assumptions for Smiths Interconnect Microwave Telecoms are based on the current order book, sales projections from major customers, technology developments, and competitor strategies.

Fair value was calculated using a level 3 valuation model. Valuation multiples were based on adjusted valuation multiples for listed comparator companies, validated against publically available information on transaction multiples. Costs to sell were estimated based on Group experience of transactions involving businesses of a similar size.

Impairment testing assumptions

John Crane and Smiths Medical have strong aftermarket and consumables businesses, with consistent sales trends. Smiths Detection and Smiths Interconnect have greater sales and margin volatility due to lower levels of recurring revenue and involvement in government-funded programmes, particularly defence, and customer-led technology innovation. The key assumptions used in value in use calculations are:

- Sales: projected sales are built up with reference to markets and product categories. They incorporate past performance, historical growth rates and projections of developments in key markets.
- Margins: projected margins reflect historical performance and the impact of all completed projects to improve operational efficiency and leverage scale. The projections do not include the impact of future restructuring projects to which the Group is not yet committed.
- Discount rate: the discount rates have been calculated based on the Group's weighted average cost of capital and risks specific to the CGU being tested. The discount rates disclosed incorporate risk adjustments where the projected sales and margins are affected by significant delivery risks. Pre-tax rates of 11.0% to 14.3% (2015: 10.7% to 16.2%) have been used for the impairment testing.
- Long-term growth rates: as required by IAS 36, growth rates for the period after the detailed forecasts are based on the long-term GDP projections of the primary market for the CGU. The average growth rate used in the testing was 2.19% (2015: 2.16%). These rates do not reflect the long-term assumptions used by the Group for investment planning.

The assumptions used in the impairment testing of significant CGUs are as follows:

	Year ended 31 July 2016					
	John Crane	Smiths Medical	Smiths Detection	Smiths Interconnect		
	Core Rotating Equipment			Microwave Subsystems	Connectors	Power
Net book value of goodwill (£m)	**104**	**591**	**410**	**75**	**100**	**128**
Discount rate	13.4%	11.0%	13.9%	11.8%	13.5%	11.7%
Period covered by management projections	5 years	5 years	5 years	5 years	5 years	5 years
Long-term growth rates	2.3%	2.1%	2.0%	2.3%	2.0%	2.3%

11 Impairment testing continued

Goodwill continued

Impairment testing assumptions continued

	Year ended 31 July 2015					
	John Crane	Smiths Medical	Smiths Detection	Smiths Interconnect		
	Core Rotating Equipment			Microwave Subsystems	Connectors	Power
Net book value of goodwill (£m)	**82**	**508**	**343**	**72**	**85**	**123**
Discount rate	11.9%	10.7%	14.4%	12.6%	15.4%	12.2%
Period covered by management projections	5 years	5 years	5 years	5 years	5 years	5 years
Long-term growth rates	2.0%	2.2%	2.2%	2.5%	1.5%	2.5%

The remaining balance of the goodwill represents smaller individual amounts which have been allocated to smaller CGUs.

Sensitivity analysis

Smiths Interconnect Power

Smiths Interconnect Power's value in use exceeds its carrying value by £1m (2015: £14m). Sensitivity analysis performed around the base case assumptions has indicated that for Smiths Interconnect Power, the following changes in assumptions (in isolation), would cause the value in use to fall below the carrying value. The 2015 sensitivities relate to the combined business of Smiths Interconnect Power and Smiths Interconnect Microwave Telecoms Protection, since they were only split in the current year.

	Year ended 31 July 2016 Change required to trigger impairment	Year ended 31 July 2015 Change required to trigger impairment
Forecast revenue	1% reduction	10% reduction
Forecast margins	10 basis points lower	120 basis points lower
Discount rate	10 basis points higher	100 basis points higher
Long-term growth rates	10 basis points lower	190 basis points lower

Sales assumptions for Smiths Interconnect Power are based on:

- the current order book;
- proportion of recent tenders which have been successful; and
- independent projections of the expected growth of the data centre market in North America.

Margin projections for Smiths Interconnect Power are based on current variable costs and production capacity, and the expected costs of increasing capacity to support higher levels of sales.

The directors also reviewed the fair value less costs to sell for the division when considering the results of the impairment testing, which also supported the conclusion that the Smiths Interconnect Power goodwill was not impaired.

Other CGUs

For the other CGUs, sensitivity analysis performed around the base case assumptions has indicated that no reasonable changes in key assumptions would cause the carrying amount of any of the CGUs to exceed their respective recoverable amounts.

Other intangible assets

The Group has no indefinite life intangible assets other than goodwill. During the year impairment tests were carried out for development projects which have not yet started to be amortised and acquired intangibles where there were indications of impairment. Value in use calculations were used to determine the recoverable values of these assets.

No impairment charges have been incurred (2015: £nil).

Property, plant and equipment

Impairment charges of £5m for property, plant and equipment of John Crane Production Solutions have been recognised in the year, principally relating to property. Please see disclosures above under goodwill for an explanation of the circumstances affecting this business.

There are £1m impairment charges for sites affected by the *Fuel for Growth* restructuring (see note 3).

12 Property, plant and equipment

	Land and buildings £m	Plant and machinery £m	Fixtures, fittings, tools and equipment £m	Total £m
Cost or valuation				
At 1 August 2014	184	520	212	916
Exchange adjustments	3	13	(3)	13
Additions	7	37	15	59
Disposals	(13)	(33)	(25)	(71)
Business disposals		(1)		(1)
At 31 July 2015	**181**	**536**	**199**	**916**
Exchange adjustments	31	91	30	152
Additions	19	42	13	74
Disposals	(2)	(35)	(21)	(58)
Transfers to disposal group held for sale at the year end	(6)	(3)	(1)	(10)
At 31 July 2016	**223**	**631**	**220**	**1,074**
Depreciation				
At 1 August 2014	95	393	170	658
Exchange adjustments	2	11	(2)	11
Charge for the year	7	28	14	49
Disposals	(7)	(28)	(25)	(60)
Business disposals		(1)		(1)
At 31 July 2015	**97**	**403**	**157**	**657**
Exchange adjustments	16	68	24	108
Charge for the year	8	31	14	53
Impairments (note 11)	5	1		6
Disposals	(1)	(34)	(20)	(55)
Transfers to disposal group held for sale at the year end	(6)	(3)	(1)	(10)
At 31 July 2016	**119**	**466**	**174**	**759**
Net book value at 31 July 2016	**104**	**165**	**46**	**315**
Net book value at 31 July 2015	84	133	42	259
Net book value at 1 August 2014	89	127	42	258

13 Inventories

	31 July 2016 £m	31 July 2015 £m
Inventories comprise		
Raw materials and consumables	174	157
Work in progress	102	96
Finished goods	202	203
	478	**456**
Less: payments on account		(2)
	478	**454**

The Group consumed £1,319m (2015: £1,293m) of inventories during the period. In the year to 31 July 2016, £16m (2015: £13m) was charged for the write-down of inventory and £4m (2015: £4m) was released from inventory provisions no longer required.

Inventory provisioning

	31 July 2016 £m	31 July 2015 £m
Gross inventory carried at full value	436	415
Gross value of inventory partly or fully provided for	112	113
	548	**528**
Inventory provision	(70)	(72)
Inventory after provisions	**478**	**456**

14 Trade and other receivables

	31 July 2016 £m	31 July 2015 £m
Non-current		
Trade receivables	31	29
Accrued income	3	5
Prepayments	1	
Other receivables	16	6
	51	**40**
Current		
Trade receivables	665	560
Accrued income	18	17
Prepayments	21	14
Other receivables	41	25
	745	**616**

Trade receivables include unbilled balances of £47m (2015: £27m) relating to Smiths Detection contracts, where revenue recognition does not align with the agreed billing schedule. The Group also has cash received of £41m (2015: £38m) deferred in trade and other payables relating to these Smiths Detection contracts.

Trade receivables do not carry interest. Management considers that the carrying value of trade and other receivables approximates to the fair value. Trade and other receivables, including prepayments, accrued income and other receivables qualifying as financial instruments are classified as 'loans and receivables'. The maximum credit exposure arising from these financial assets is £745m (2015: £611m).

Trade receivables are disclosed net of provisions for bad and doubtful debts. The provisions for bad and doubtful debts are based on specific risk assessment and reference to past default experience.

Credit risk is managed separately for each customer and, where appropriate, a credit limit is set for the customer based on previous experience of the customer and third party credit ratings. The Group has no significant concentration of credit risk, with exposure spread over a large number of customers. The largest single customer is the US Federal Government, representing less than 5% (2015: less than 5%) of Group revenue.

Ageing of trade receivables

	31 July 2016 £m	31 July 2015 £m
Trade receivables which are not impaired and not yet due	535	468
Trade receivables which are not impaired and less than three months overdue	109	86
Trade receivables which are not impaired and more than three months overdue	45	32
Gross value of partially and fully provided receivables	38	25
	727	**611**
Provision for bad and doubtful debts	(31)	(22)
Trade receivables	**696**	**589**

15 Trade and other payables

	31 July 2016 £m	31 July 2015 £m
Non-current		
Other payables	**29**	**24**
Current		
Trade payables	202	192
Other payables	11	11
Other taxation and social security costs	25	18
Accruals	231	191
Deferred income	67	54
	536	**466**

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

16 Financial assets

The Group invests in early stage businesses that are developing or commercialising related technology. In the current year £2m was invested in Detection businesses. In 2015 £2m was invested in John Crane and £1m was invested in interconnect businesses.

In December 2015, £152m of UK government bonds previously held as available for sale financial assets were contributed to Smiths Industries Pension Scheme. At 31 July 2015, the Group held £147m UK government bonds as part of the deficit-funding plan agreed with the trustee of this pension schemes. See note 8 for additional details.

17 Borrowings and net debt

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

	31 July 2016 £m	31 July 2015 £m
Cash and cash equivalents		
Net cash and deposits	**431**	**495**
Short-term borrowings		
Bank overdrafts	(1)	
£150m 7.25% Sterling Eurobond 2016		(150)
€300m 4.125% Eurobond 2017	(255)	
Bank and other loans	(1)	(1)
Interest accrual	(13)	(12)
	(270)	**(163)**
Long-term borrowings		
€300m 4.125% Eurobond 2017		(214)
$175m 7.37% US$ Private placement 2018	(132)	(112)
$250m 7.20% US$ Guaranteed notes 2019	(189)	(159)
$400m 3.625% US$ Guaranteed notes 2022	(304)	(253)
€600m 1.25% Eurobond 2023	(512)	(410)
Bank and other loans	(2)	(2)
	(1,139)	**(1,150)**
Borrowings	**(1,409)**	**(1,313)**
Net debt	**(978)**	**(818)**

Borrowings are accounted for at amortised cost and are categorised as other financial liabilities. See note 18 for a maturity analysis of borrowings.

Interest of £47m (2015: £42m) was charged to the consolidated income statement in this period in respect of public bonds.

Net cash and cash equivalents

	31 July 2016 £m	31 July 2015 £m
Cash at bank and in hand	161	104
Short-term deposits	270	391
Cash and cash equivalents	**431**	**495**
Bank overdrafts	(1)	
Net cash and cash equivalents	**430**	**495**

Cash and cash equivalents include highly liquid investments with maturities of three months or less.

Netting

Cash and overdraft balances in interest compensation cash pooling systems are reported gross on the balance sheet. The cash pooling agreements incorporate a legally enforceable right of net settlement. However, there is no intention to settle the balances net, so these arrangements do not qualify for net presentation. At 31 July 2016 and 31 July 2015 the total value of overdrafts on accounts in interest compensation cash pooling systems was less than £1m.

The balances held in zero balancing cash pooling arrangements have daily settlement of balances, so netting is not relevant.

17 Borrowings and net debt continued

Movements in net debt

	Net cash and cash equivalents £m	Other short-term borrowings £m	Long-term borrowings £m	Net debt £m
At 31 July 2015	495	(163)	(1,150)	(818)
Foreign exchange gains and losses	33		(220)	(187)
Net cash outflow	(98)			(98)
Repayment of borrowings		151		151
Drawdown of borrowings			(1)	(1)
Capitalisation, interest accruals and unwind of capitalised fees		(1)	(1)	(2)
Fair value movement from interest rate hedging			(23)	(23)
Change in maturity analysis		(256)	256	
At 31 July 2016	**430**	**(269)**	**(1,139)**	**(978)**

Secured loans

Loans amounting to £3m (2015: £3m) were secured on plant and equipment with a book value of £3m (2015: £3m).

18 Financial risk management

The Group's international operations and debt financing expose it to financial risks which include the effects of changes in foreign exchange rates, changes in debt market prices, interest rates, credit risks and liquidity risks.

Treasury and risk management policies are set by the Board. The policy sets out specific guidelines to manage foreign exchange risk, interest rate risk, credit risk and the use of financial instruments to manage risk. The instruments and techniques used to manage exposures include foreign currency derivatives, debt and other interest rate derivatives. The central treasury function monitors financial risks and compliance with risk management policies. The management of operational credit risk is discussed in note 14.

(a) Foreign exchange risk

Transactional currency exposure

The Group is exposed to foreign currency risks arising from sales or purchases by businesses in currencies other than their functional currency. It is Group policy that, when the net foreign exchange exposure to known future sales and purchases is material, this exposure is hedged using forward foreign exchange contracts. The net exposure is calculated by adjusting the expected cash-flow for payments or receipts in the same currency linked to the sale or purchase. This policy minimises the risk that the profits generated from the transaction will be affected by foreign exchange movements which occur after the price has been determined.

Hedge accounting documentation and effectiveness testing are only undertaken if it is cost effective.

The following table shows the currency of financial instruments. It excludes loans and derivatives designated as net investment hedges.

					At 31 July 2016
	Sterling £m	US$ £m	Euro £m	Other £m	Total £m
Financial assets and liabilities					
Financial instruments included in trade and other receivables	38	391	136	180	745
Financial instruments included in trade and other payables	(48)	(203)	(72)	(79)	(402)
Cash and cash equivalents	189	129	41	72	431
Borrowings not designated as net investment hedges	1	(12)	(5)	(1)	(17)
	180	305	100	172	757
Exclude balances held in operations with the same functional currency	(180)	(188)	(101)	(167)	(636)
Exposure arising from intra-group loans		(165)	(70)	(77)	(312)
Forward foreign exchange contracts	(286)	112	119	55	
	(286)	**64**	**48**	**(17)**	**(191)**

18 Financial risk management continued

(a) Foreign exchange risk continued

Transactional currency exposure continued

					At 31 July 2015
	Sterling £m	US$ £m	Euro £m	Other £m	Total £m
Financial assets and liabilities					
Financial instruments included in trade and other receivables	34	316	111	150	611
Financial instruments included in trade and other payables	(41)	(185)	(55)	(55)	(336)
Cash and cash equivalents	311	115	20	49	495
Borrowings not designated as net investment hedges	(151)	(11)	(3)		(165)
	153	235	73	144	605
Exclude balances held in operations with the same functional currency	(155)	(149)	(72)	(138)	(514)
Exposure arising from intra-group loans		(101)	(28)	(49)	(178)
Forward foreign exchange contracts	(163)	48	79	36	
	(165)	**33**	**52**	**(7)**	**(87)**

Financial instruments included in trade and other receivables comprise trade receivables, accrued income and other receivables which qualify as financial instruments. Similarly, financial instruments included in trade and other payables comprise trade payables, accrued expenses and other payables that qualify as financial instruments.

Based on the assets and liabilities held at the year-end, if the specified currencies were to strengthen 10% while all other market rates remained constant, the change in the fair value of financial instruments not designated as net investment hedges would have the following effect:

	Impact on profit for the year 31 July 2016 £m	Gain/(loss) recognised in reserves 31 July 2016 £m	Impact on profit for the year 31 July 2015 £m	Gain/(loss) recognised in reserves 31 July 2015 £m
US dollar	3	2	4	(2)
Euro	(6)	(3)		4
Sterling	16	(2)	1	

These sensitivities were calculated before adjusting for tax and exclude the effect of quasi-equity intra-group loans.

Cash-flow hedging

The Group uses foreign currency contracts to hedge future foreign currency sales and purchases. At 31 July 2016 contracts with a nominal value of £393m (2015: £317m) were designated as hedging instruments. In addition, the Group had outstanding foreign currency contracts with a nominal value of £529m (2015: £314m) which were being used to manage transactional foreign exchange exposures, but were not accounted for as cash-flow hedges. The fair value of the contracts is disclosed in note 19.

The majority of hedged transactions will be recognised in the consolidated income statement in the same period that the cash flows are expected to occur, with the only differences arising because of normal commercial credit terms on sales and purchases. Of the foreign exchange contracts designated as hedging instruments 91% are for periods of 12 months or less (2015: 92%).

The movements in the cash-flow hedge reserve during the period are summarised in the table below:

	Year ended 31 July 2016 £m	Year ended 31 July 2015 £m
Brought forward cash-flow hedge reserve at start of year	3	
Gains/(losses) on effective cash-flow hedges recognised in equity	(10)	2
Amounts removed from the hedge reserve and recognised in the following lines on the income statement		
– revenue	(1)	
– cost of sales	1	1
Carried forward cash-flow hedge reserve at end of year	**(7)**	**3**

18 Financial risk management continued

(a) Foreign exchange risk continued

Translational currency exposure

The Group has significant investments in overseas operations, particularly in the United States and Europe. As a result, the sterling value of the Group's balance sheet can be significantly affected by movements in exchange rates. The Group seeks to mitigate the effect of these translational currency exposures by matching the net investment in overseas operations with borrowings denominated in their functional currencies, except where significant adverse interest differentials or other factors would render the cost of such hedging activity uneconomic. This is achieved by borrowing primarily in the relevant currency or in some cases indirectly using forward foreign exchange contracts and cross-currency swaps.

Net investment hedges

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

					At 31 July 2016
	Sterling £m	US$ £m	Euro £m	Other £m	Total £m
Loans designated as net investment hedges		(625)	(767)		(1,392)
Cross-currency swap contracts		(358)	373		15
Currency swap contracts	111			(111)	
	111	**(983)**	**(394)**	**(111)**	**(1,377)**

					At 31 July 2015
	Sterling £m	US$ £m	Euro £m	Other £m	Total £m
Loans designated as net investment hedges		(524)	(624)		(1,148)
Cross-currency swap contracts		(306)	302		(4)
Currency swap contracts	90			(90)	
	90	**(830)**	**(322)**	**(90)**	**(1,152)**

At 31 July 2016 swap contracts hedged the Group's exposure to Canadian dollars, Japanese yen and Chinese renminbi (31 July 2015: Canadian dollars, Japanese yen and Chinese renminbi).

All the currency swap contracts designated as net investment hedges are current (2015: current). The cross-currency swap contracts will mature in April 2023.

The gains and losses that have been deferred in the net investment hedge reserve are shown in the table below:

	Year ended 31 July 2016 £m	Year ended 31 July 2015 £m
Brought forward net investment hedge reserve at start of year	(66)	(58)
Amounts deferred in the period on effective net investment hedges	(228)	(8)
Carried forward net investment hedge reserve at end of year	**(294)**	**(66)**

The fair values of these net investment hedges are subject to exchange rate movements. Based on the hedging instruments in place at the year-end, if the specified currencies were to strengthen 10% while all other market rates remained constant, it would have the following effect:

	Loss recognised in hedge reserve 31 July 2016 £m	Loss recognised in hedge reserve 31 July 2015 £m
US dollar	98	80
Euro	35	35

These movements would be fully offset by an opposite movement on the retranslation of the net assets of the overseas subsidiaries. These sensitivities were calculated before adjusting for tax.

18 Financial risk management continued

(b) Interest rate risk

The Group operates an interest rate policy designed to optimise interest cost and reduce volatility in reported earnings. The Group's current policy is to require interest rates to be fixed for greater than 70% of the level of gross debt. This is achieved through fixed rate borrowings and interest rate swaps. At 31 July 2016 59% (2015: 57%) of the Group's gross borrowings were at fixed interest rates, after adjusting for interest rate swaps and the impact of short maturity derivatives designated as net investment hedges. The Group monitors its fixed rate risk profile against both gross and net debt. For medium-term planning, it now focuses on gross debt to eliminate the fluctuations of variable cash levels over the cycle.

The weighted average interest rate on borrowings and cross-currency swaps at 31 July 2016, after interest rate swaps, is 3.68% (2015: 3.98%).

Interest rate profile of financial assets and liabilities and the fair value of borrowings

The following table shows the interest rate risk exposure of investments, cash and borrowings, with the borrowings adjusted for the impact of interest rate hedging. The other financial assets and liabilities do not earn or bear interest and for all financial instruments except for borrowings the carrying value is not materially different from their fair value.

	Available for sale investments 31 July 2016 £m	Cash and cash equivalents 31 July 2016 £m	Borrowings 31 July 2016 £m	Fair value of borrowings 31 July 2016 £m	Available for sale investments 31 July 2015 £m	Cash and cash equivalents 31 July 2015 £m	Borrowings 31 July 2015 £m	Fair value of borrowings 31 July 2015 £m
Fixed interest								
Less than one year			(153)	(158)			(151)	(158)
Between one and five years			(322)	(362)			(399)	(443)
Greater than five years			(353)	(362)	147		(296)	(290)
Total fixed interest financial assets/(liabilities)			**(828)**	**(882)**	**147**		**(846)**	**(891)**
Floating rate interest financial assets/(liabilities)		390	(581)	(581)		467	(467)	(467)
Total interest-bearing financial assets/(liabilities)		**390**	**(1,409)**	**(1,463)**	**147**	**467**	**(1,313)**	**(1,358)**
Non-interest-bearing assets/(liabilities) in the same category	9	41			9	28		
Total	**9**	**431**	**(1,409)**	**(1,463)**	**156**	**495**	**(1,313)**	**(1,358)**

Interest rate hedging

At 31 July 2016 and 31 July 2015 the Group has designated the following fair value hedges:

- US$150m interest rate swap which matures on 12 October 2022 partially hedging the US$ 2022 Guaranteed notes;
- €120m interest rate swaps which mature on 5 May 2017 partially hedging the € 2017 Eurobond; and
- the fixed/floating element of €400m of €/US$ interest rate swaps which mature on 28 April 2023 partially hedging the € 2023 Eurobond.

These positions hedge the risk of variability in the fair value of borrowings arising from fluctuations in base rates.

The fair values of the hedging instruments are disclosed in note 19. The effect of the swaps is to convert £552m (2015: £462m) debt from fixed rate to floating rate.

Sensitivity of interest charges to interest rate movements

The Group has exposure to sterling, US dollar and euro interest rates. However the Group does not have a significant exposure to interest rate movements for any individual currency. Based on the composition of net debt and foreign exchange rates at 31 July 2016, and taking into consideration all fixed rate borrowings and interest rate swaps in place, a one percentage point (100 basis points) change in average floating interest rates for all three currencies would have a £2.1m (2015: £0.2m) impact on the Group's profit before tax.

Following the contribution of the UK Gilts to the pension scheme, the sensitivity of investments to changes in interest rates is no longer material.

18 Financial risk management continued

(c) Financial credit risk

The Group is exposed to credit-related losses in the event of non-performance by counterparties to financial instruments, but does not currently expect any counterparties to fail to meet their obligations. Credit risk is mitigated by the Board-approved policy of only placing cash deposits with highly rated relationship bank counterparties within counterparty limits established by reference to their Standard & Poor's long-term debt rating. In the normal course of business, the Group operates cash pooling systems, where a legal right of set-off applies.

The maximum credit risk exposure in the event of other parties failing to perform their obligations under financial assets, excluding trade and other receivables and derivatives, totals £440m at 31 July 2016 (2015: £651m).

	31 July 2016 £m	31 July 2015 £m
UK government bonds with at least a AA credit rating (note 16)		147
Cash at banks with at least a AA- credit rating	215	268
Cash at banks with a A+ credit rating	126	194
Cash at other banks	90	33
Other investments	9	9
	440	**651**

At 31 July 2016 the maximum exposure with a single bank for deposits and cash is £97m (2015: £108m), whilst the maximum mark to market exposure for derivatives is £10m (2015: £4m). These banks have AA- and AA- credit rating, respectively (2015: AA- and AA-).

(d) Liquidity risk

Borrowing facilities

The Board policy specifies the maintenance of unused committed credit facilities of at least £200m at all times to ensure it has sufficient available funds for operations and planned development, which is provided by a multi-currency revolving credit facility.

On 19 February 2014 Smiths completed the refinancing of its existing $800m Revolving Credit Facility. The two uncommitted extension options have been exercised on 4 February 2015 and 3 February 2016. The facility now matures on 19 February 2021. At the balance sheet date, the Group had the following undrawn credit facilities:

	31 July 2016 £m	31 July 2015 £m
Expiring within one year		
Expiring between one and two years		
Expiring after more than two years	605	512
	605	**512**

Cash deposits

As at 31 July 2016, £270m (2015: £391m) of cash and cash equivalents was on deposit with various banks of which £119m (2015: £301m) was on deposit in the UK.

Gross contractual cash-flows for borrowings

	Borrowings (Note 17) 31 July 2016 £m	Fair value adjustments 31 July 2016 £m	Contractual interest payments 31 July 2016 £m	Total contractual cash-flows 31 July 2016 £m	Borrowings (Note 17) 31 July 2015 £m	Fair value adjustments 31 July 2015 £m	Contractual interest payments 31 July 2015 £m	Total contractual cash-flows 31 July 2015 £m
Less than one year	(270)	2	(39)	(307)	(163)	(1)	(41)	(205)
Between one and two years	(133)		(41)	(174)	(215)	3	(43)	(255)
Between two and three years	(190)	(1)	(32)	(223)	(113)		(34)	(147)
Between three and four years			(18)	(18)	(159)	(1)	(26)	(186)
Between four and five years			(18)	(18)			(15)	(15)
Greater than five years	(816)	8	(30)	(838)	(663)	(16)	(39)	(718)
Total	**(1,409)**	**9**	**(178)**	**(1,578)**	**(1,313)**	**(15)**	**(198)**	**(1,526)**

The figures presented in the borrowings column include the non-cash adjustments which are highlighted in the adjacent column. The contractual interest reported for borrowings is before the effect of interest rate swaps.

18 Financial risk management continued

(d) Liquidity risk continued

Gross contractual cash-flows for derivative financial instruments

	Receipts 31 July 2016 £m	Payments 31 July 2016 £m	Net cash-flow 31 July 2016 £m	Receipts 31 July 2015 £m	Payments 31 July 2015 £m	Net cash-flow 31 July 2015 £m
Assets						
Less than one year	425	(415)	10	326	(304)	22
Greater than one year	378	(374)	4	20	(18)	2
Liabilities						
Less than one year	467	(485)	(18)	470	(483)	(13)
Greater than one year	28	(29)	(1)	326	(320)	6
Total	**1,298**	**(1,303)**	**(5)**	**1,142**	**(1,125)**	**17**

This table presents the undiscounted future contractual cash-flows for all derivative financial instruments. For this disclosure, cash-flows in foreign currencies are translated using the spot rates at the balance sheet date. The fair values of these financial instruments are presented in note 19.

Gross contractual cash-flows for other financial liabilities

The contractual cash-flows for financial liabilities included in trade and other payables are: £388m (2015: £324m) due in less than one year, £9m (2015: £7m) due between one and five years and £5m (2015: £5m) due after more than five years.

19 Derivative financial instruments

The tables below set out the nominal amount and fair value of derivative contracts held by the Group, identifying the derivative contracts which qualify for hedge accounting treatment:

				At 31 July 2016
	Contract or underlying nominal amount			Fair value
	£m	Assets £m	Liabilities £m	Net £m
Foreign exchange contracts (cash-flow hedges)	393	8	(15)	(7)
Foreign exchange contracts (not hedge accounted)	529	3	(4)	(1)
Total foreign exchange contracts	**922**	**11**	**(19)**	**(8)**
Currency swaps (net investment hedges)	**111**		**(1)**	**(1)**
Cross currency swaps (fair value and net investment hedges)	326	25		25
Interest rate swaps (fair value hedges)	214	6		6
Total financial derivatives	**1,573**	**42**	**(20)**	**22**
Balance sheet entries				
Non-current	473	29	(1)	28
Current	1,100	13	(19)	(6)
Total financial derivatives	**1,573**	**42**	**(20)**	**22**

19 Derivative financial instruments continued

	At 31 July 2015			
	Contract or underlying nominal amount	Fair value		
	£m	Assets £m	Liabilities £m	Net £m
Foreign exchange contracts (cash-flow hedges)	317	8	(5)	3
Foreign exchange contracts (not hedge accounted)	314	2	(2)	
Total foreign exchange contracts	**631**	**10**	**(7)**	**3**
Currency swaps (net investment hedges)	97	7		7
Currency swaps (not hedge accounted)	157	3	(5)	(2)
Total currency swaps	**254**	**10**	**(5)**	**5**
Cross currency swaps (fair value and net investment hedges)	276		(4)	(4)
Interest rate swaps (fair value hedges)	180	4	(2)	2
Total financial derivatives	**1,341**	**24**	**(18)**	**6**
Balance sheet entries				
Non-current		4	(6)	(2)
Current		20	(12)	8
Total financial derivatives		**24**	**(18)**	**6**

Currency swaps not hedge accounted

These contracts comprise derivatives which were previously part of the net investment hedging programme and matching contracts to eliminate this exposure. There is no further net exposure arising from these contracts.

Accounting for other derivative contracts

Any foreign exchange contracts which are not formally designated as hedges and tested are classified as 'held for trading' and not hedge accounted.

Netting

International Swaps and Derivatives Association (ISDA) master netting agreements are in place with derivative counterparties except for contracts traded on a dedicated international electronic trading platform used for operational foreign exchange hedging. Under these agreements if a credit event occurs, all outstanding transactions under the ISDA are terminated and only a single net amount per counterparty is payable in settlement of all transactions. The ISDA agreements do not meet the criteria for offsetting, since the offsetting is enforceable only if specific events occur in the future, and there is no intention to settle the contracts on a net basis.

	Assets 31 July 2016 £m	Liabilities 31 July 2016 £m	Assets 31 July 2015 £m	Liabilities 31 July 2015 £m
Gross value of assets and liabilities	42	(20)	24	(18)
Related assets and liabilities subject to master netting agreements	(2)	2	(4)	4
Net exposure	**40**	**(18)**	**20**	**(14)**

20 Fair value of financial instruments

	Notes	Carrying value 31 July 2016 £m	Fair value 31 July 2016 £m	Carrying value 31 July 2015 £m	Fair value 31 July 2015 £m
Level 1 valuations					
Financial assets – other investments	16			147	147
Level 2 valuations					
Financial derivatives – assets	19	42	42	24	24
Borrowings	17	(1,409)	(1,463)	(1,313)	(1,358)
Financial derivatives – liabilities	19	(20)	(20)	(18)	(18)
Level 3 valuations					
Financial assets – other investments	16	9	9	9	9

Investments with level 1 valuations at 31 July 2015 comprise quoted government bonds.

Derivatives, including forward exchange contracts, currency swaps, interest rate instruments, and embedded derivatives, are valued at the net present value of the future cash-flows calculated using market data at the balance sheet date (principally exchange rates and yield curves).

Borrowings are valued at the net present value of the future cash-flows using credit spreads and yield curves derived from market data. Borrowings are carried on the balance sheet at amortised cost adjusted for fair value interest rate hedging. The fair value of fixed rate borrowings is only used for supplementary disclosures.

Cash, trade receivables and trade payables are excluded from this table because carrying value is a reasonable approximation to fair value for all these assets and liabilities.

21 Commitments

Operating lease commitments – minimum lease payments

The minimum uncancellable lease payments which the Group is committed to make are:

	31 July 2016		31 July 2015	
	Land and buildings £m	Other £m	Land and buildings £m	Other £m
Payments due				
– not later than one year	35	7	31	7
– later than one year and not later than five years	76	6	57	7
– later than five years	22		22	
	133	**13**	**110**	**14**

Other commitments

At 31 July 2016, commitments, comprising bonds and guarantees arising in the normal course of business, amounted to £174m (2015: £159m), including pension commitments of £54m (2015: £54m).

22 Provisions and contingent liabilities

	Trading	Non-headline and legacy			Total
	£m	John Crane, Inc. litigation £m	Titeflex Corporation litigation £m	Other £m	£m
Current liabilities	21	27	17	14	79
Non-current liabilities	5	189	54	5	253
At 31 July 2015	**26**	**216**	**71**	**19**	**332**
Exchange adjustments	5	39	14	2	60
Provision charged	21	16	12	15	64
Provision released	(4)	(1)	(1)	(2)	(8)
Unwind of provision discount		4	1		5
Utilisation	(16)	(22)	(3)	(13)	(54)
At 31 July 2016	**32**	**252**	**94**	**21**	**399**
Current liabilities	26	32	20	16	94
Non-current liabilities	6	220	74	5	305
At 31 July 2016	**32**	**252**	**94**	**21**	**399**

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

Trading

Warranty provision and product liability

At 31 July 2016 there are warranty and product liability provisions of £29m (2015: £24m). Warranties over the Group's products typically cover periods of between one and three years. Provision is made for the likely cost of after-sales support based on the recent past experience of individual businesses.

Commercial disputes and litigation in respect of ongoing business activities

The Group has on occasion been required to take legal action to protect its intellectual property and other rights against infringement. It has also had to defend itself against proceedings brought by other parties, including product liability and insurance subrogation claims. Provision is made for any expected costs and liabilities in relation to these proceedings where appropriate, though there can be no guarantee that such provisions (which may be subject to potentially material revision from time to time) will accurately predict the actual costs and liabilities that may be incurred. Trading provisions include £1m (2015: £1m) in connection with ongoing price audits of overhead cost recovery charges associated with certain historical supply arrangements and royalty claims linked to customer funded development projects.

Contingent liabilities

In the ordinary course of its business, the Group is subject to commercial disputes and litigation such as government price audits, product liability claims, employee disputes and other kinds of lawsuits, and faces different types of legal issues in different jurisdictions. The high level of activity in the US, for example, exposes the Group to the likelihood of various types of litigation commonplace in that country, such as 'mass tort' and 'class action' litigation, legal challenges to the scope and validity of patents, and product liability and insurance subrogation claims. These types of proceedings (or the threat of them) are also used to create pressure to encourage negotiated settlement of disputes. Any claim brought against the Group (with or without merit), could be costly to defend. These matters are inherently difficult to quantify. In appropriate cases a provision is recognised based on best estimates and management judgement but there can be no guarantee that these provisions (which may be subject to potentially material revision from time to time) will result in an accurate prediction of the actual costs and liabilities that may be incurred. There are also contingent liabilities in respect of litigation for which no provisions are made.

The Group operates in some markets where the risk of unethical or corrupt behaviour is material and has procedures, including an employee 'Ethics Alertline', to help it identify potential issues. Such procedures will, from time to time, give rise to internal investigations, sometimes conducted with external support, to ensure that Smiths Group properly understands risks and concerns and can take steps both to manage immediate issues and to improve its practices and procedures for the future. The Group also co-operates with relevant authorities in investigating business conduct issues whenever requested to. The Group is not aware of any issues which are expected to generate material financial exposures.

Non-headline and legacy

John Crane, Inc.

John Crane, Inc. ("JCI") is one of many co-defendants in numerous lawsuits pending in the United States in which plaintiffs are claiming damages arising from alleged exposure to, or use of, products previously manufactured which contained asbestos. Until 2006, the awards, the related interest and all material defence costs were met directly by insurers. In 2007, JCI secured the commutation of certain insurance policies in respect of product liability. Provision is made in respect of the expected costs of defending known and predicted future claims and of adverse judgments in relation thereto, to the extent that such costs can be reliably estimated.

The JCI products generally referred to in these cases consist of industrial sealing product, primarily packing and gaskets. The asbestos was encapsulated within these products in such a manner that causes JCI to believe, based on tests conducted on its behalf, that the products were safe. JCI ceased manufacturing products containing asbestos in 1985.

22 Provisions and contingent liabilities continued

Non-headline and legacy continued

John Crane, Inc. continued

John Crane, Inc. litigation provision

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. JCI has recognised the recovery of £16m through a settlement with an insurer (see note 3) but this agreement does not provide any cover for future costs. The calculation of the provision does not take account of any potential recoveries from insurers.

JCI continues to actively monitor the conduct and effect of its current and expected asbestos litigation, including the most efficacious presentation of its 'safe product' defence, and intends to continue to resist these asbestos claims based upon this defence. Approximately 247,000 claims (2015: 242,000 claims) against JCI have been dismissed before trial over the last 37 years. JCI is currently a defendant in cases involving approximately 74,000 claims (2015: 76,000 claims). Despite the large number of claims brought against JCI, since the inception of the litigation it has had final judgments against it, after appeals, in 137 cases (2015: 133 cases) over the period, and has had to pay awards amounting to approximately US$158m (2015: US$153m). JCI has also incurred significant additional defence costs. The litigation involves claims for a number of allegedly asbestos related diseases, with awards, when made, for mesothelioma tending to be larger than those for the other diseases JCI's ability to defend mesothelioma cases successfully is, therefore, likely to have a significant impact on its annual aggregate adverse judgment and defence costs. The provision is based on past history and published tables of asbestos incidence projections and is determined using asbestos valuation experts, Bates White LLC. Whilst published incidence curves can be used to estimate the likely future pattern of asbestos related disease, John Crane, Inc.'s claims experience is significantly impacted by other factors which influence the US litigation environment. These can include: changing approaches on the part of the plaintiffs' bar; changing attitudes amongst the judiciary at both trial and appellate levels; and legislative and procedural changes in both the state and federal court systems. The projections use a 10 year time horizon on the basis that Bates White LLC consider that there is substantial uncertainty in the asbestos litigation environment so probable expenditures are not reasonably estimable beyond this time horizon.

The assumptions made in assessing the appropriate level of provision include: the period over which the expenditure can be reliably estimated; the future trend of legal costs; the rate of future claims filed; the rate of successful resolution of claims; and the average amount of judgments awarded.

The provision in respect of JCI is a discounted pre-tax provision using discount rates, being the risk-free rate on US debt instruments for the appropriate period. The deferred tax asset related to this provision is shown within the deferred tax balance (note 6). Set out below is the gross, discounted and post-tax information relating to this provision:

	31 July 2016 £m	31 July 2015 £m
Gross provision	267	236
Discount	(15)	(20)
Discounted pre-tax provision	**252**	**216**
Deferred tax	(84)	(72)
Discounted post-tax provision	**168**	**144**

John Crane, Inc. litigation provision sensitivities

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

Statistical analysis of the provision indicates that there is a 50% probability that the total future spend will fall between £250m and £280m (2015: between £221m and £248m), compared to the gross provision value of £267m (2015: £236m).

The projections use a 10 year time horizon. Reducing the time horizon by one year would reduce the provision by £18m (2015: £15m) and reducing it by five years would reduce the provision by £107m (2015: £91m).

John Crane, Inc. contingent liabilities

Provision has been made for future defence costs and the cost of adverse judgments expected to occur. JCI's claims experience is significantly impacted by other factors which influence the US litigation environment. These can include: changing approaches on the part of the plaintiffs' bar; changing attitudes amongst the judiciary at both trial and appellate levels; and legislative and procedural changes in both the state and federal court systems. As a result, whilst the Group anticipates that asbestos litigation will continue beyond the period covered by the provision, the uncertainty surrounding the US litigation environment beyond this point is such that the costs cannot be reliably estimated.

Although the methodology used to calculate the JCI litigation provision can in theory be applied to show claims and costs for longer periods, the Directors consider, based on advice from Bates White, that the level of uncertainty regarding the factors used in estimating future costs is too great to provide for reasonable estimation of the numbers of future claims, the nature of such claims or the cost to resolve them for years beyond the 10 year time horizon.

22 Provisions and contingent liabilities continued

Non-headline and legacy continued

Titeflex Corporation

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

The assumptions made in assessing the appropriate level of provision, which are based on past experience, include: the period over which expenditure can be reliably estimated; the number of future settlements; the average amount of settlements; and the impact of statutes of repose and safe installation initiatives on the expected number of future claims. This is the first year that the company has had sufficient evidence of the impact of statutes of repose and safe installation initiatives to incorporate them into the provision calculation. Reflecting work completed in the year on streamlining the settlement process, and dismissing claims covered by statutes of repose, the Directors consider that the pattern of resolution of future potential claims by Titeflex Corporation is now more predictable. As a result, the provision model has been extended. Incorporating the two additional assumptions and extending the time period generated a net £16m increase in the provision.

The provision of £94m (2015: £71m) is a discounted pre-tax provision using discount rates, being the risk-free rate on US debt instruments for the appropriate period. The deferred tax asset related to this provision is shown within the deferred tax balance (note 6).

	31 July 2016 £m	31 July 2015 £m
Gross provision	140	77
Discount	(46)	(6)
Discounted pre-tax provision	**94**	**71**
Deferred tax	(36)	(27)
Discounted post-tax provision	**58**	**44**

Titeflex Corporation litigation provision sensitivities

However, because of the significant uncertainty associated with the future level of claims and of the costs arising out of related litigation, there can be no guarantee that the assumptions used to estimate the provision will result in an accurate prediction of the actual costs that may be incurred and, as a result, 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 about the impact of safe installation initiatives on the level of future claims. If the assumed annual benefit of bonding and grounding initiatives was 0.5% higher the provision would be £6m lower, and if the benefit was 0.5% lower, the provision would increase by £7m.

Other non-headline and legacy

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

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

Reorganisation and property

At 31 July 2016 there were provisions of £11m (2015: £6m) related to *Fuel for Growth*, £3m (2015: £6m) related to onerous leases and dilapidations provisions, and £2m (2015: £1m) related to actual and potential environmental issues for sites which were no longer occupied by Smiths operations.

The *Fuel for Growth* provisions are expected to be utilised in 2017.

Disposal

Other provisions include disposal provisions of £3m (2015: £3m) relating to warranties and other obligations in respect of the disposal of the Marine Systems and Aerospace businesses. Most of the balance is expected to be utilised within the next three years.

23 Share capital

	Number of shares	Issued capital £m	Consideration £m
Ordinary shares of 37.5p each			
Total share capital at 31 July 2014	394,456,135	148	
Exercise of share options	403,869		3
Total share capital at 31 July 2015	**394,860,004**	**148**	
Exercise of share options	363,068		3
Total share capital at 31 July 2016	**395,223,072**	**148**	

At 31 July 2016 all of the issued share capital was in free issue. All issued shares are fully paid.

24 Dividends

The following dividends were declared and paid in the period:

	Year ended 31 July 2016 £m	Year ended 31 July 2015 £m
Ordinary final dividend of 28.00p for 2015 (2014: 27.50p) paid 20 November 2015	111	108
Ordinary interim dividend of 13.25p for 2016 (2015: 13.00p) paid 22 April 2016	52	52
	163	**160**

The final dividend for the year ended 31 July 2016 of 28.75p per share was recommended by the Board on 27 September 2016 and will be paid to shareholders on 18 November 2016, subject to approval by the shareholders. This dividend has not been included as a liability in these accounts and is payable to all shareholders on the register of Members at close of business on 21 October 2016.

25 Reserves

Retained earnings include the value of Smiths Group plc shares held by the Smiths Industries Employee Benefit Trust. In the year the Company issued nil (2015: nil) shares to the Trust, and the Trust purchased 760,218 shares (2015: 838,032 shares) in the market. At 31 July 2016 the Trust held 852 (2015: 852) ordinary shares.

The capital redemption reserve, revaluation reserve and merger reserve arose from: share repurchases; revaluations of property, plant and equipment; and merger accounting for business combinations before the adoption of IFRS, respectively.

Capital management

Capital employed comprises total equity adjusted for goodwill recognised directly in reserves, net post-retirement benefit related assets and liabilities, net litigation provisions relating to non-headline items and net debt. The efficiency of the allocation of the capital to the divisions is monitored through the return on capital employed (ROCE). This ratio is calculated over a rolling 12-month period and is the percentage that headline operating profit comprises of monthly average capital employed. The ROCE was 15.3% (2015: 16.0%), see note 28.

The capital structure is based on the directors' judgement of the balance required to maintain flexibility while achieving an efficient cost of capital.

The ratio of net debt to headline EBITDA of 1.6 (2015: 1.4) is within the Group's stated policy of less than 2.0 over the medium term. The Group's robust balance sheet and record of strong cash generation is more than able to fund the immediate investment needs and other legacy obligations.

As part of its capital management the Group strategy is to maintain a solid investment grade credit rating to ensure access to the widest possible sources of financing and to minimise the resulting cost of capital. At 31 July 2016 the Group had a credit rating of BBB+/Baa2 (2015: BBB+/Baa2) with Standard & Poor's and Moody's respectively.

The Board has a progressive dividend policy for future payouts, with the aim of increasing dividends in line with the long-term underlying growth in earnings. In setting the level of dividend payments, the Board will take into account prevailing economic conditions and future investment plans, along with the objective to maintain minimum dividend cover of around 2.0.

25 Reserves continued

Hedge reserve

	31 July 2016 £m	31 July 2015 £m
The hedge reserve on the balance sheet comprises		
– cash-flow hedge reserve	(7)	3
– net investment hedge reserve	(294)	(66)
	(301)	**(63)**

See transactional currency exposure risk management disclosures in note 18 for additional details of cash-flow hedges, and translational currency exposure risk management disclosure also in note 18 for additional details of net investment hedges.

26 Cash-flow

Cash-flow from operating activities

	Year ended 31 July 2016			Year ended 31 July 2015		
	Headline £m	Non-headline £m	Total £m	Headline £m	Non-headline £m	Total £m
Operating profit	510	(123)	387	511	(117)	394
Amortisation of intangible assets	43	15	58	38	33	71
Impairment of intangible assets		23	23		27	27
Impairment of trade investments		2	2			
Depreciation of property, plant and equipment	53		53	49		49
Impairment of property, plant and equipment		6	6			
Loss on disposal of property, plant and equipment	2		2	1		1
Loss/(profit) on disposal of business					1	1
Share-based payment expense	9		9	8		8
Retirement benefits	1	(104)	(103)	2	(87)	(85)
Decrease/(increase) in inventories	30		30	(30)		(30)
(Increase)/decrease in trade and other receivables	(21)	(16)	(37)	11		11
Increase/(decrease) in trade and other payables	1		1	(4)		(4)
Increase/(decrease) in provisions	(1)	3	2	(15)	(7)	(22)
Cash generated from operations	**627**	**(194)**	**433**	**571**	**(150)**	**421**
Interest paid	(61)		(61)	(56)	(10)	(66)
Interest received	3	45	48	2		2
Tax paid	(62)		(62)	(91)		(91)
Net cash inflow from operating activities	**507**	**(149)**	**358**	**426**	**(160)**	**266**

Retirement benefit contributions comprise cash contributions of £123m and a non-cash transaction where £152m of financial assets were contributed to the Smiths Industries Pension Scheme. See note 8 for details.

Interest received in the period includes £41m cash inflows (2015: interest paid includes £10m cash outflows) on foreign exchange contracts hedging exposures on intra-group loans, and £4m exchange gains realised on internal interest.

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

26 Cash-flow continued

Headline cash measures

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

	Year ended 31 July 2016			Year ended 31 July 2015		
	Headline £m	Non-headline £m	Total £m	Headline £m	Non-headline £m	Total £m
Net cash inflow from operating activities	**507**	**(149)**	**358**	**426**	**(160)**	**266**
Include						
Expenditure on capitalised development, other intangible assets and property, plant and equipment	(108)		(108)	(95)		(95)
Disposals of property, plant and equipment	1		1	8	3	11
Investment in financial assets relating to pensions financing		(8)	(8)		(24)	(24)
Headline free cash-flow	**400**	**(157)**	**243**	**339**	**(181)**	**158**
Exclude						
Interest paid	61		61	56	10	66
Interest received	(3)	(45)	(48)	(2)		(2)
Tax paid	62		62	91		91
Headline operating cash-flow	**520**	**(202)**	**318**	**484**	**(171)**	**313**

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

	Year ended 31 July 2016 £m	Year ended 31 July 2015 £m
Headline free cash-flow	**400**	**339**
Non-headline free cash-flows	(157)	(181)
Investment in other financial assets	(1)	(3)
Acquisition of businesses	(8)	
Disposal of businesses		2
Net cash-flow used in financing activities	(332)	147
Net (decrease)/increase cash and cash equivalents	**(98)**	**304**

27 Business held for sale

At 31 July 2016 the Group had invited offers for the purchase of the John Crane Artificial lift business. Agreement to sell the business was announced on 23 September 2016 and, subject to regulatory clearance, the disposal is expected to complete in the first half of 2016/17. In the year ended 31 July 2016 the business had headline losses of $10m (2015: $2m) on sales of $53m (2015: $91m).

As required by IFRS 5, the assets and liabilities to be sold have been disclosed as held for sale in the consolidated balance sheet as at 31 July 2016. No impairment loss was recognised on writing assets down to fair value less disposal costs although impairments were recognised earlier in the year relating to this business, see notes 11 and 12.

	31 July 2016 £m
Current assets	
Inventories	17
Trade and other receivables	7
Total assets of business held for sale	**24**
Current liabilities	
Trade and other payables	(5)
Total liabilities of business held for sale	**(5)**

28 Non-statutory capital and credit metrics

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

Return on capital employed (ROCE)

Smiths ROCE is calculated over a rolling 12-month period and is the percentage that headline operating profit comprises of monthly average capital employed.

See note 1 for the divisional headline operating profit and average divisional capital employed used to calculate divisional ROCE.

Capital employed

Capital employed is a non-statutory measure of invested resources. It comprises statutory net assets adjusted to add goodwill recognised directly in reserves in respect of subsidiaries acquired before 1 August 1998 of £815m (31 July 2015: £815m) and eliminate post-retirement benefit assets and liabilities and litigation provisions relating to non-headline items, both net of related tax, and net debt.

	Notes	31 July 2016 £m	31 July 2015 £m
Net assets		**1,660**	**1,428**
Adjust for			
Goodwill recognised directly in reserves		815	815
Post-retirement benefit assets and liabilities	8	(80)	108
Tax related to post retirement benefit assets and liabilities		(4)	(55)
Investments related to post retirement benefit assets and liabilities			(147)
John Crane, Inc. litigation provisions and related tax	22	168	144
Titeflex Corporation litigation provisions and related tax	22	58	44
Net debt	17	978	818
Capital employed		**3,595**	**3,155**

Return on capital employed

	Notes	Year ended 31 July 2016 £m	Year ended 31 July 2015 £m
Headline operating profit for previous twelve months		510	511
Average capital employed	1	3,324	3,197
ROCE		**15.3%**	**16.0%**

Credit metrics

Smiths Group monitors the ratio of net debt to Headline EBITDA as part of its management of credit ratings, see note 25 for details. This ratio is calculated as follows.

Headline earnings before interest, tax, depreciation and amortisation (Headline EBITDA)

	Notes	Year ended 31 July 2016 £m	Year ended 31 July 2015 £m
Headline operating profit		**510**	**511**
Exclude			
– depreciation	12	53	49
– amortisation of development costs	10	26	23
– amortisation of software, patents and intellectual property	10	17	15
Headline EBITDA		**606**	**598**

Ratio of net debt to headline EBITDA

	Notes	Year ended 31 July 2016 £m	Year ended 31 July 2015 £m
Headline EBITDA		606	598
Net debt	17	978	818
Ratio of net debt to headline EBITDA		**1.6**	**1.4**

Unaudited Group financial record 2012-2016

	Year ended 31 July 2016 £m	Year ended 31 July 2015 £m	Year ended 31 July 2014 £m	Year ended 31 July 2013 £m	Year ended 31 July 2012 £m
Income statement metrics – headline					
Revenue	2,949	2,897	2,952	3,109	3,038
Headline operating profit	510	511	504	560	554
Headline profit before tax	451	459	445	498	497
Income statement metrics – statutory					
Operating profit	387	394	378	487	407
Profit before taxation	346	325	302	396	366
Profit after taxation	261	248	235	317	258
Balance sheet metrics					
Net borrowings	(978)	(818)	(804)	(744)	(791)
Shareholders' equity	1,646	1,419	1,237	1,486	973
Average capital employed	3,324	3,197	3,218	3,362	3,349
Ratios					
Headline operating profit: revenue (%)	17.3	17.6	17.1	18.0	18.2
Headline effective tax rate (%)	25.0	25.5	27.0	26.5	26.5
Return on capital employed (%)	15.3	16.0	15.7	16.6	16.5
Return on shareholders' funds (%)	14.3	15.8	14.9	17.8	18.3
Cash-flow					
Headline operating cash	520	484	490	548	549
Headline operating cash conversion (%)	102	95	97	98	99
Headline free cash-flow	400	339			
Headline free cash-flow per share (p)	101.2	85.9			
Earnings per share					
Headline earnings per share (p)	85.2	86.1	81.8	92.7	92.6
Dividends					
Pence per share	42.00	41.00	40.25	39.50	38.00
Special dividend				30.00	
Headline dividend cover	2.0	2.1	2.0	2.3	2.4
Number of employees (000s)					
United Kingdom	1.5	1.7	1.8	1.9	1.9
Overseas	20.5	21.6	21.4	21.4	21.3
	22.0	23.3	23.2	23.3	23.2

*The year ending 2012 has not been restated for the adoption of IAS 19 (revised 2011). As a result, the statutory operating profit is higher, since it does not include administration costs for retirement benefit schemes, and statutory finance costs are lower, since they benefit from higher interest credits on pension assets. There is no impact on figures reported on a headline basis.

Unaudited supplementary consolidated income statement – US dollar translation

		Year ended 31 July 2016			Year ended 31 July 2015		
	Notes	Headline $m	Non-headline (note 3) $m	Total $m	Headline $m	Non-headline (note 3) $m	Total $m
Continuing operations							
Revenue	1	4,315		4,315	4,525		4,525
Cost of sales		(2,342)		(2,342)	(2,443)		(2,443)
Gross profit		1,973		1,973	2,082		2,082
Sales and distribution costs		(589)		(589)	(634)		(634)
Administrative expenses		(637)	(203)	(840)	(650)	(182)	(832)
Other operating income			23	23			
Operating profit	2	**747**	**(180)**	**567**	**798**	**(182)**	**616**
Interest receivable		5		5	5		5
Interest payable		(91)		(91)	(86)		(86)
Other financing gains/(losses)			21	21		(14)	(14)
Other finance charges – retirement benefits	8		4	4		(12)	(12)
Finance costs	4	(86)	25	(61)	(81)	(26)	(107)
Profit before taxation		**661**	**(155)**	**506**	**717**	**(208)**	**509**
Taxation	6	(165)	41	(124)	(183)	62	(121)
Profit for the period		**496**	**(114)**	**382**	**534**	**(146)**	**388**
Attributable to							
Smiths Group shareholders		493	(114)	379	531	(146)	385
Non-controlling interests		3		3	3		3
		496	**(114)**	**382**	**534**	**(146)**	**388**
Earnings per share	5						
Basic				95.9c			97.5c
Diluted				95.1c			96.5c

Assets and liabilities have been translated into US dollars at the exchange rate at the date of that balance sheet and income, expenses and cash-flows are translated at average exchange rates for the period. This reflects the accounting approach that Smiths Group plc would use if the Group moved to reporting in US dollars without making any changes to its Group structure or financing arrangements.

Unaudited supplementary consolidated statement of comprehensive income – US dollar translation

	Notes	Year ended 31 July 2016 $m	Year ended 31 July 2015 $m
Profit for the period		**382**	**388**
Other comprehensive income			
Actuarial (losses)/gains on retirement benefits	8	(59)	95
Taxation recognised on actuarial movements	6	15	31
Other comprehensive income and expenditure which will not be reclassified to the consolidated income statement		**(44)**	**126**
Other comprehensive income which will be reclassified and reclassifications			
Exchange gains/(losses)		240	(143)
Fair value gains/(losses) and reclassification adjustments			
– deferred on available for sale financial assets		(3)	
– reclassified to income statement on available for sale financial assets	4	(28)	17
– deferred in the period on cash-flow and net investment hedges		(348)	(9)
– reclassified to income statement on cash-flow and net investment hedges			1
Total other comprehensive income		**(183)**	**(8)**
Total comprehensive income		**199**	**380**
Attributable to			
Smiths Group shareholders		192	380
Non-controlling interests		7	
		199	**380**

Unaudited supplementary consolidated balance sheet – US dollar translation

	Notes	31 July 2016 $m	31 July 2015 $m
Non-current assets			
Intangible assets	10	2,304	2,371
Property, plant and equipment	12	417	404
Financial assets – other investments	16	12	244
Retirement benefit assets	8	434	266
Deferred tax assets	6	326	341
Trade and other receivables	14	67	63
Financial derivatives	19	38	7
		3,598	**3,696**
Current assets			
Inventories	13	632	710
Current tax receivable	6	82	47
Trade and other receivables	14	986	962
Cash and cash equivalents	17	571	774
Financial derivatives	19	16	31
		2,287	**2,524**
Assets of businesses held for sale	27	31	
Total assets		**5,916**	**6,220**
Non-current liabilities			
Financial liabilities			
– borrowings	17	(1,506)	(1,797)
– financial derivatives	19	(1)	(10)
Provisions for liabilities and charges	22	(403)	(395)
Retirement benefit obligations	8	(329)	(433)
Deferred tax liabilities	6	(126)	(112)
Trade and other payables	15	(38)	(38)
		(2,403)	**(2,785)**
Current liabilities			
Financial liabilities			
– borrowings	17	(359)	(255)
– financial derivatives	19	(23)	(19)
Provisions for liabilities and charges	22	(124)	(123)
Trade and other payables	15	(708)	(728)
Current tax payable	6	(95)	(78)
		(1,309)	**(1,203)**
Liabilities of businesses held for sale	27	(7)	
Total liabilities		**(3,719)**	**(3,988)**
Net assets		**2,197**	**2,232**
Shareholders' equity			
Share capital	23	196	231
Share premium account		466	546
Capital redemption reserve		7	9
Revaluation reserve		2	3
Merger reserve		311	367
Retained earnings		1,594	1,161
Hedge reserve	25	(398)	(98)
Total shareholders' equity		**2,178**	**2,219**
Non-controlling interest equity		19	13
Total equity		**2,197**	**2,232**

Unaudited supplementary consolidated statement of changes in equity – US dollar translation

	Notes	Share capital and share premium $m	Other reserves $m	Retained earnings $m	Hedge reserve $m	Equity shareholders' funds $m	Non-controlling interest $m	Total equity $m
At 31 July 2015		777	379	1,161	(98)	2,219	13	2,232
Profit for the period				379		379	3	382
Other comprehensive income								
Exchange gains		(120)	(59)	367	48	236	4	240
Actuarial gains on retirement benefits and tax				(44)		(44)		(44)
Fair value gains/(losses)				(31)	(348)	(379)		(379)
Total comprehensive income for the period		**(120)**	**(59)**	**671**	**(300)**	**192**	**7**	**199**
Transactions relating to ownership interests								
Exercises of share options	23	5				5		5
Taxation recognised on share options	6							
Purchase of own shares	25			(12)		(12)		(12)
Dividends								
– equity shareholders	24			(239)		(239)		(239)
– non-controlling interests							(1)	(1)
Share-based payment	9			13		13		13
At 31 July 2016		**662**	**320**	**1,594**	**(398)**	**2,178**	**19**	**2,197**

	Notes	Share capital and share premium $m	Other reserves $m	Retained earnings $m	Hedge reserve $m	Equity shareholders' funds $m	Non-controlling interest $m	Total equity $m
At 31 July 2014		835	409	943	(97)	2,090	14	2,104
Profit for the year				385		385	3	388
Other comprehensive income								
Actuarial losses on retirement benefits and related tax				126		126		126
Exchange (losses)/gains		(63)	(30)	(54)	7	(140)	(3)	(143)
Fair value gains/(losses) and related tax				17	(8)	9		9
Total comprehensive income for the year		**(63)**	**(30)**	**474**	**(1)**	**380**		**380**
Transactions relating to ownership interests								
Exercises of share options	23	5				5		5
Taxation recognised on share options	6			(2)		(2)		(2)
Purchase of own shares	25			(17)		(17)		(17)
Dividends								
– equity shareholders	24			(250)		(250)		(250)
– non-controlling interest							(1)	(1)
Share-based payment	9			13		13		13
At 31 July 2015		**777**	**379**	**1,161**	**(98)**	**2,219**	**13**	**2,232**

Unaudited supplementary consolidated cash-flow statement – US dollar translation

	Notes	Year ended 31 July 2016 $m	Year ended 31 July 2015 $m
Net cash inflow from operating activities	26	**524**	**416**
Cash-flows from investing activities			
Expenditure on capitalised development		(34)	(28)
Expenditure on other intangible assets		(16)	(28)
Purchases of property, plant and equipment	12	(108)	(92)
Disposals of property, plant and equipment		1	17
Investment in financial assets		(13)	(42)
Acquisition of businesses		(12)	
Disposals of businesses			3
Net cash-flow used in investing activities		**(182)**	**(170)**
Cash-flows from financing activities			
Proceeds from exercise of share options	23	4	5
Purchase of own shares		(12)	(17)
Dividends paid to equity shareholders	24	(239)	(250)
Dividends paid to non-controlling interests		(1)	(1)
Cash (outflow)/ inflow from matured derivative financial instruments		(19)	7
Increase in new borrowings		1	887
Reduction and repayment of borrowings		(221)	(402)
Net cash-flow used in financing activities		**(487)**	**229**
Net increase/(decrease) in cash and cash equivalents		**(145)**	**475**
Cash and cash equivalents at beginning of year		774	319
Exchange differences		(60)	(20)
Cash and cash equivalents at end of year	17	**569**	**774**
Cash and cash equivalents at end of year comprise			
– cash at bank and in hand		213	163
– short-term deposits		358	611
– bank overdrafts		(2)	
		569	**774**
Included in cash and cash equivalents per the balance sheet		571	774
Included in overdrafts per the balance sheet		(2)	
		569	**774**

Reconciliation of net cash-flow to movement in net debt

	Notes	Year ended 31 July 2016 $m	Year ended 31 July 2015 $m
Net debt at start of year	17	**(1,278)**	**(1,358)**
Net (decrease)/increase in cash and cash equivalents		(145)	475
Increase in borrowings		(1)	(887)
Reduction and repayment of borrowings		221	402
Movement in net debt resulting from cash-flows		**75**	**(10)**
Capitalisation, interest accruals and unwind of capitalisation fees		(3)	(2)
Movement from fair value hedging		(33)	12
Exchange differences		(55)	80
Movement in net debt in the year		**(16)**	**80**
Net debt at end of year	17	**(1,294)**	**(1,278)**

Unaudited Group US dollar financial record 2013-2016

	Year ended 31 July 2016 $m	Year ended 31 July 2015 $m	Year ended 31 July 2014 $m	Year ended 31 July 2013 $m
Income statement metrics – headline				
Revenue	4,315	4,525	4,849	4,866
Headline operating profit	747	798	828	876
Headline profit before tax	661	717	730	780
Income statement metrics – statutory				
Operating profit	567	616	620	762
Profit before taxation	506	509	496	620
Profit after taxation	382	388	385	496
Balance sheet metrics				
Net borrowings	(1,294)	(1,278)	(1,358)	(1,129)
Shareholders' equity	2,178	2,219	2,090	2,255
Average capital employed	4,864	4,994	5,287	5,263
Ratios				
Headline operating profit: revenue (%)	17.3	17.6	17.1	18.0
Headline effective tax rate (%)	25.0	25.5	27.0	26.5
Return on capital employed (%)	15.3	15.9	15.8	16.7
Return on shareholders' funds (%)	14.6	15.3	15.1	18.1
Cash-flow				
Headline operating cash	760	756	804	858
Headline operating cash conversion (%)	102	95	97	98
Headline free cash-flow	585	530		
Headline free cash-flow per share (c)	148.2	134.2		
Earnings per share				
Headline earnings per share (c)	124.6	134.5	134.4	145.1
Dividends				
Cents per share (c)	61.5	64.0	66.1	61.8
Special dividend (c)				49.3
Headline dividend cover	2.0	2.1	2.0	2.3
Number of employees (000s)				
United States of America	7.9	8.4	8.3	8.5
Rest of World	14.1	14.9	14.9	14.8
	22.0	23.3	23.2	23.3

Independent auditors' report to the members of Smiths Group plc

Report on the Company financial statements

Our opinion

In our opinion, Smiths Group plc's Company financial statements (the "financial statements"):

- give a true and fair view of the state of the Company's affairs as at 31 July 2016;
- have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice; and
- have been prepared in accordance with the requirements of the Companies Act 2006.

What we have audited

The financial statements comprise:

- the Company balance sheet as at 31 July 2016;
- the Company statement of changes in equity for the year then ended;
- the accounting policies; and
- the notes to the financial statements, which include other explanatory information.

Certain required disclosures have been presented elsewhere in the Annual Report, rather than in the notes to the Company accounts. These are cross-referenced from the financial statements and are identified as audited.

The financial reporting framework that has been applied in the preparation of the financial statements is United Kingdom Accounting Standards, comprising FRS 101 "Reduced Disclosure Framework", and applicable law (United Kingdom Generally Accepted Accounting Practice).

Other required reporting

Consistency of other information

Companies Act 2006 opinion

In our opinion, the information given in the Strategic Report and the Group directors' report for the financial year for which the financial statements are prepared is consistent with the financial statements.

ISAs (UK & Ireland) reporting

Under International Standards on Auditing (UK and Ireland) ("ISAs (UK & Ireland)") we are required to report to you if, in our opinion, information in the Annual Report is:

- materially inconsistent with the information in the audited financial statements; or
- apparently materially incorrect based on, or materially inconsistent with, our knowledge of the Company acquired in the course of performing our audit; or
- otherwise misleading.

We have no exceptions to report arising from this responsibility.

Adequacy of accounting records and information and explanations received

Under the Companies Act 2006 we are required to report to you if, in our opinion:

- we have not received all the information and explanations we require for our audit; or
- adequate accounting records have not been kept by the Company, or returns adequate for our audit have not been received from branches not visited by us; or
- the financial statements and the part of the Directors' Remuneration Report to be audited are not in agreement with the accounting records and returns.

We have no exceptions to report arising from this responsibility.

Directors' remuneration

Directors' remuneration report – Companies Act 2006 opinion

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

Other Companies Act 2006 reporting

Under the Companies Act 2006 we are required to report to you if, in our opinion, certain disclosures of directors' remuneration specified by law are not made. We have no exceptions to report arising from this responsibility.

Responsibilities for the financial statements and the audit

Our responsibilities and those of the directors

As explained more fully in the Statement of directors responsibilities set out on page 124, the directors are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view.

Our responsibility is to audit and express an opinion on the financial statements in accordance with applicable law and ISAs (UK & Ireland). Those standards require us to comply with the Auditing Practices Board's Ethical Standards for Auditors.

This report, including the opinions, has been prepared for and only for the Company's members as a body in accordance with Chapter 3 of Part 16 of the Companies Act 2006 and for no other purpose. We do not, in giving these opinions, accept or assume responsibility for any other purpose or to any other person to whom this report is shown or into whose hands it may come save where expressly agreed by our prior consent in writing.

What an audit of financial statements involves

We conducted our audit in accordance with ISAs (UK & Ireland). An audit involves obtaining evidence about the amounts and disclosures in the financial statements sufficient to give reasonable assurance that the financial statements are free from material misstatement, whether caused by fraud or error. This includes an assessment of:

- whether the accounting policies are appropriate to the Company's circumstances and have been consistently applied and adequately disclosed;
- the reasonableness of significant accounting estimates made by the directors; and
- the overall presentation of the financial statements.

We primarily focus our work in these areas by assessing the directors' judgements against available evidence, forming our own judgements, and evaluating the disclosures in the financial statements.

We test and examine information, using sampling and other auditing techniques, to the extent we consider necessary to provide a reasonable basis for us to draw conclusions. We obtain audit evidence through testing the effectiveness of controls, substantive procedures or a combination of both.

In addition, we read all the financial and non-financial information in the Annual Report to identify material inconsistencies with the audited financial statements and to identify any information that is apparently materially incorrect based on, or materially inconsistent with, the knowledge acquired by us in the course of performing the audit. If we become aware of any apparent material misstatements or inconsistencies we consider the implications for our report.

Other matter

We have reported separately on the Group financial statements of Smiths Group plc for the year ended 31 July 2016.

Andrew Kemp (Senior Statutory Auditor)
for and on behalf of PricewaterhouseCoopers LLP
Chartered Accountants and Statutory Auditors
London

27 September 2016

(a) The maintenance and integrity of the Smiths Group plc website is the responsibility of the directors; the work carried out by the auditors does not involve consideration of these matters and, accordingly, the auditors accept no responsibility for any changes that may have occurred to the financial statements since they were initially presented on the website.

(b) Legislation in the United Kingdom governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

Company balance sheet

	Notes	31 July 2016 £m	31 July 2015 (restated) £m
Fixed assets			
Intangible assets	2		
Tangible assets	3	1	
Investments and advances	4	3,487	3,486
Available for sale financial assets	5		147
		3,488	**3,633**
Current assets			
Retirement benefit assets			
– amounts falling due after more than one year	11	327	169
Debtors			
– amounts falling due within one year	6	59	60
Cash at bank and on deposit	8	207	330
Financial derivatives			
– amounts falling due within one year	9	4	12
– amounts falling due after more than one year	9	29	4
		626	**575**
Creditors: amounts falling due within one year	7	(363)	(229)
Financial derivatives: amounts falling due within one year	9	(3)	(7)
Net current assets		**260**	**339**
Total assets less current liabilities		**3,748**	**3,972**
Creditors: amounts falling due after more than one year	8	(1,137)	(1,148)
Provisions for liabilities and charges	10	(2)	(2)
Retirement benefit liabilities	11	(65)	(90)
Financial derivatives: amounts falling due after more than one year	9		(6)
Net assets including pension liabilities		**2,544**	**2,726**
Capital and reserves			
Called up share capital	12	148	148
Share premium account	12	352	349
Capital redemption reserve	12	6	6
Other reserves	12	181	181
Profit and loss account	12	1,857	2,042
Shareholders' equity		**2,544**	**2,726**

The accounts on pages 194 to 205 were approved by the Board of Directors on 27 September 2016 and were signed on its behalf by:

Andy Reynolds Smith
Chief Executive

Chris O'Shea
Chief Financial Officer

Smiths Group plc – registered number 137013

Company statement of changes in equity

	Share capital £m	Share premium £m	Capital redemption reserve £m	Other reserves £m	Retained profit £m	Shareholders' equity £m
At 31 July 2015	148	349	6	181	2,042	2,726
Profit for the period					17	17
Other comprehensive income						
Actuarial loss on retirement benefits					(21)	(21)
Taxation recognised on retirement benefits					4	4
Fair value losses on available for sale financial assets					(4)	(4)
Fair value gains reclassified to the income statement on available for sale financial assets					(19)	(19)
Total comprehensive income					**(23)**	**(23)**
Transactions with owners						
Exercise of share options		3				3
Purchase of own shares					(8)	(8)
Dividends paid to equity shareholders					(163)	(163)
Share-based payment					9	9
Total transactions with owners recognised in equity		**3**			**(162)**	**(159)**
At 31 July 2016	**148**	**352**	**6**	**181**	**1,857**	**2,544**

	Share capital £m	Share premium £m	Capital redemption reserve £m	Other reserves £m	Retained profit £m	Shareholders' equity £m
At 31 July 2014	148	346	6	181	1,886	2,567
Profit for the period					194	194
Other comprehensive income						
Actuarial gain on retirement benefits					113	113
Fair value gains on available for sale financial assets					11	11
Total comprehensive income					**318**	**318**
Transactions with owners						
Exercise of share options		3				3
Purchase of own shares					(11)	(11)
Dividends paid to equity shareholders					(160)	(160)
Share-based payment					9	9
Total transactions with owners recognised in equity		**3**			**(162)**	**(159)**
At 31 July 2015	**148**	**349**	**6**	**181**	**2,042**	**2,726**

Company accounting policies

Basis of preparation
The accounts have been prepared in accordance with the Companies Act 2006 and Financial Reporting Standard 101, "Reduced Disclosure Framework" (FRS 101).

These accounts have been prepared on a going concern basis and under the historical cost convention modified to include revaluation of certain financial instruments, share options and pension assets and liabilities held at fair value.

As permitted by Section 408(3) of the Companies Act 2006, the Company's income statement and statement comprehensive income have not been presented. As permitted by Section 408(2), information about the Company's employee numbers and costs is not presented.

This is the Company's first year reporting under FRS 101. All comparative amounts have been restated from the previously applicable accounting standards in the United Kingdom. The impact of this restatement is disclosed in more detail in note 16. Tables are marked restated where the comparative numbers presented under FRS 101 are different from the amounts previously reported, to highlight the impact of adopting FRS 101.

Exemptions from the requirements of IFRS applied in accordance with FRS 101
The following exemptions from the requirements of IFRS have been applied in the preparation of these financial statements, in accordance with FRS 101:

- Paragraphs 45(b) and 46 to 52 of IFRS 2, 'Share-based payment' (details of the number and weighted-average exercise prices of share options, and how the fair value of goods or services received was determined)
- IFRS 7, 'Financial Instruments: Disclosures'
- Paragraphs 91 to 99 of IFRS 13, 'Fair value measurement' (disclosure of valuation techniques and inputs used for fair value measurement of assets and liabilities)
- Paragraph 38 of IAS 1, 'Presentation of financial statements' comparative information requirements in respect of:
  - paragraph 79(a)(iv) of IAS 1;
  - paragraph 73(e) of IAS 16 'Property, plant and equipment';
- The following paragraphs of IAS 1, 'Presentation of financial statements':
  - 10(d), (statement of cash flows),
  - 16 (statement of compliance with all IFRS),
  - 38A (requirement for minimum of two primary statements, including cash flow statements),
  - 38B-D (additional comparative information),
  - 111 (cash flow statement information), and
  - 134-136 (capital management disclosures)
- IAS 7, 'Statement of cash flows'
- Paragraph 30 and 31 of IAS 8 'Accounting policies, changes in accounting estimates and errors' (requirement for the disclosure of information when an entity has not applied a new IFRS that has been issued but is not yet effective)
- Paragraph 17 of IAS 24, 'Related party disclosures' (key management compensation)
- The requirements in IAS 24, 'Related party disclosures' to disclose related party transactions entered into between two or more members of a group.

Significant judgements, key assumptions and estimates
The preparation of the accounts in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the accounts and the reported amounts of revenues and expenses during the reporting period. Actual results may differ from these estimates. The key estimates and assumptions used in these parent company financial statements are set out below.

Taxation
The Company has not recognised deferred tax assets of £nil (2015: £27m) relating to losses and £19m (2015: £3m) relating to other temporary differences. The Company derecognised UK tax assets relating to revenue losses brought forward and other temporary differences due to the impact of the pension contributions on the outlook for the UK tax base. The treatment of these assets is reviewed regularly and is dependent on the ability to recover them against forecast UK taxable profits of the tax group. Further detail on the Company's deferred taxation position is included in note 13.

Retirement benefits
The financial statements include costs in relation to, and provision for, retirement benefit obligations. The costs and the present value of any related pension assets and liabilities depend on such factors as life expectancy of the members, the returns that plan assets generate and the discount rate used to calculate the present value of the liabilities. The Company uses previous experience and independent actuarial advice to select the values of critical estimates. The estimates, and the effect of variances in key estimates, are disclosed in note 8 to the consolidated accounts.

At 31 July 2016 there is a retirement benefit asset of £327m (2015: £169m) which arises from the rights of the employers to recover the surplus at the end of the life of the scheme. If the pension schemes were wound up while they still had members, the schemes would need to buy out the benefits of all members. The buyouts would cost significantly more than the present value of the scheme liabilities calculated in accordance with IAS 19: Employee benefits.

Investment carrying value
Investments in subsidiary undertakings and loans due from subsidiaries are reviewed regularly, and tested if there are any indications of impairment, or problems with recoverability. The recoverable amounts of investments are determined based on valuations of the underlying trading operations. The recoverability of loans is assessed by looking at the credit quality of the subsidiary and any support available to the subsidiary. These calculations require the use of estimates including projected future cash-flows and other future events.

Foreign currencies
Foreign currency transactions are recorded at the exchange rate ruling on the date of transaction. Foreign exchange gains and losses resulting from the settlement of such transactions, and from the retranslation at year-end exchange rates of monetary assets and liabilities denominated in foreign currencies, are recognised in the profit and loss account.

Operating leases
Payments made under operating leases are charged to the profit and loss account as incurred over the term of the lease.

Where a leasehold property is vacant, or sub-let under terms such that the rental income is insufficient to meet all outgoings, provision is made for the anticipated future shortfall up to termination of the lease.

Property, plant and equipment
Depreciation is provided at rates estimated to write off the relevant assets by equal annual amounts over their expected useful lives. In general, the rates used are: Freehold and long leasehold property – 2%; Short leasehold property – over the period of the lease; Plant, machinery, etc. – 10% to 20%; Fixtures, fittings, tools and other equipment – 10% to 33%.

Investments in shares in Group companies
The Company's investments in shares in Group companies are stated at cost less provision for impairment. Any impairment is charged to the profit and loss account as it arises.

Financial instruments
The policies disclosed in the Group accounting policies on pages 139 to 143 for recognition, measurement and presentation of financial instruments are applied in the Company accounts.

Taxation

Deferred tax is provided using the balance sheet liability method. A deferred tax asset is recognised where it is probable that future taxable income will be sufficient to utilise the available relief.

Deferred tax is provided on temporary differences arising on investments in subsidiaries, except where the timing of the reversal of the temporary difference is controlled by the Company and it is probable that the temporary difference will not reverse in the foreseeable future.

Provisions

Provisions for disposal indemnities, restructuring costs, vacant leasehold property and legal claims are recognised when: the Company has a legal or constructive obligation as a result of a past event; it is probable that an outflow of resources will be required to settle the obligation; and the amount has been reliably estimated. Provisions are not recognised for future operating losses.

Provisions are discounted where the time value of money is material.

Post-retirement benefits

The Company has both defined benefit and defined contribution plans.

For defined benefit plans the liability for each scheme recognised in the balance sheet is the present value of the defined benefit obligation at the balance sheet date less the fair value of plan assets. The defined benefit obligation is calculated annually by independent actuaries using the projected unit credit method. The present value of the defined benefit obligation is determined by discounting the estimated future cash outflows using interest rates of AA corporate bonds that are denominated in the currency in which the benefits will be paid, and that have terms to maturity approximating to the terms of the related pension liability. Actuarial gains and losses arising from experience adjustments and changes in actuarial assumptions are recognised in full when they occur and presented in the statement of other comprehensive income.

For defined contribution plans, the Company pays contributions to publicly or privately administered pension insurance plans on a mandatory, contractual or voluntary basis. Contributions are expensed as incurred.

The Company also has post-retirement healthcare schemes that are accounted for on a similar basis to the defined benefit plans.

Share-based payment

The Company operates a number of equity-settled and cash-settled share-based compensation plans.

The fair value of the shares or share options granted is recognised over the vesting period to reflect the value of the employee services received. The charge relating to grants to employees of the Company is recognised as an expense in the profit and loss account and the charge for grants to employees of other group companies is recognised as an investment in the relevant subsidiary.

The fair value of options granted, excluding the impact of any non-market vesting conditions, is calculated using established option pricing models, principally binomial models. The probability of meeting non-market vesting conditions, which include profitability targets, is used to estimate the number of share options that are likely to vest.

For cash-settled share-based payment schemes, a liability is recognised based on the fair value of the payment earned by the balance sheet date. For equity-settled share-based payment schemes, the corresponding credit is recognised directly in reserves.

Dividends

Dividends are recognised as a liability in the period in which they are authorised. The interim dividend is recognised when it is paid and the final dividend is recognised when it has been approved by shareholders at the Annual General Meeting.

1 Audit fee

The audit fee for the Parent Company was £0.1m (2015: £0.1m).

2 Intangible assets

	Software £m
Cost or valuation	
At 31 July 2015 and 31 July 2016	**5**
Depreciation	
At 31 July 2015 and 31 July 2016	**5**
Net book value at 31 July 2016	
Net book value at 31 July 2015	

Intangible assets comprise computer software.

3 Tangible assets

	Plant and equipment £m
Cost or valuation	
At 31 July 2015	2
Additions	1
At 31 July 2016	**3**
Depreciation	
At 31 July 2015	2
Disposals	
At 31 July 2016	**2**
Net book value at 31 July 2016	**1**
Net book value at 31 July 2015	

Plant and equipment comprises plant, machinery, fixtures, fittings, tools and equipment, including computer hardware.

4 Investments and advances

	Shares in subsidiary undertakings £m	Loans due from subsidiaries £m	Total £m
Cost or valuation			
At 31 July 2015	2,391	1,106	3,497
Exchange adjustments		207	207
Contribution through share options	6		6
Increases in advances due from/(due to) subsidiaries		(212)	(212)
At 31 July 2016	**2,397**	**1,101**	**3,498**
Provision for impairment			
At 31 July 2015 and 31 July 2016	**10**	**1**	**11**
Net book value at 31 July 2016	**2,387**	**1,100**	**3,487**
Net book value at 31 July 2015	2,381	1,105	3,486

Loans due to subsidiaries are offset against loans due from subsidiaries to the extent that there is a legal right of set off and an intention to settle the balances net. At 31 July 2016, £1,372m of loans payable are offset against loans receivable (2015: £996m). The Company has large offsetting loan balances because it uses loans to reduce its foreign currency exposures and separately monitor net cash generated from trading activities.

The Company's subsidiaries are largely held according to business lines by the following holding companies, which are incorporated in England:

Smiths Group International Holdings Limited
Smiths Detection Group Limited
John Crane Group Limited
Smiths Medical Group Limited
Smiths Interconnect Group Limited

The principal subsidiaries and their countries of incorporation are:

England
Smiths Detection – Watford Ltd
Smiths Medical International Limited
John Crane UK Limited

Europe
Smiths Heimann SAS (France)
Smiths Heimann GmbH (Germany)
Smiths Medical France SA (France)
Smiths Medical Deutschland GmbH (Germany)
John Crane Italia SpA (Italy)

Other
Smiths Detection (Asia-Pacific) Pte Ltd (Singapore)
Smiths Medical Japan Limited (Japan)
John Crane Middle East FZE (UAE)

United States
Smiths Detection, Inc.
Smiths Medical ASD, Inc.
John Crane, Inc.
Titeflex Corporation
Flexible Technologies, Inc.
Tutco, Inc.
Hypertronics Corporation
Transtector Systems, Inc.
Interconnect Devices, Inc.
Power Distribution, Inc.
JC Production Solutions, Inc.

Of the companies above, Smiths Group International Holdings Limited is 100% owned directly by the Company. The others are 100% owned through intermediate holding companies. Shareholdings are of ordinary shares or common stock. All subsidiaries operate in their country of incorporation.

See pages 206 to 209 for a complete list of subsidiary undertakings.

5 Available for sale financial assets

In December 2015, £152m of UK government bonds previously held as available for sale financial assets were contributed to Smiths Industries Pension Scheme. At 31 July 2015, the Group held £147m UK government bonds as part of the deficit-funding plan agreed with the trustee of this pension scheme. See note 8 of the Group accounts for additional details.

6 Trade and other receivables

	31 July 2016 £m	31 July 2015 £m
Amounts falling due within one year		
Amounts owed by subsidiaries	55	56
Other receivables	4	4
	59	**60**

7 Creditors: amounts falling due within one year

	31 July 2016 £m	31 July 2015 £m
Amounts falling due within one year		
Term loans due within one year (note 8)	255	150
Amounts owed to subsidiaries	80	55
Other creditors	18	16
Accruals and deferred income	10	8
	363	**229**

8 Borrowings and net debt

	31 July 2016 £m	31 July 2015 £m
Cash at bank	7	2
Short term deposits	200	328
Cash and cash equivalents	**207**	**330**
Term loans due within one year (note 7)	(255)	(150)
Term loans due after more than one year	(1,137)	(1,148)
Borrowings	**(1,392)**	**(1,298)**
Net debt	**(1,185)**	**(968)**

Term loans

The currency and coupons for the term loans are disclosed in note 17 of the Group accounts.

	31 July 2016 £m	31 July 2015 £m
Less than one year	255	150
Between one and two years	132	214
Between two and three years	189	112
Between three and four years		159
Between four and five years		
Greater than five years	816	663
Smiths Group plc term loans	**1,392**	**1,298**

See the liquidity risk disclosures in note 18 in the Group accounts for information on the cash and borrowing facilities available to the Group. The Company can borrow an additional $800m under the US$800m multi-currency revolving credit facility, which matures in February 2021.

9 Derivatives

The tables below set out the nominal amount and fair value of derivative contracts held by the Company:

	Contract or underlying nominal amount	Fair value		
At 31 July 2016	£m	Assets £m	Liabilities £m	Net £m
Foreign exchange contracts (not hedge accounted)	437	2	(2)	
Currency swaps (net investment hedges)	111		(1)	(1)
Cross currency swaps (fair value and net investment hedges)	326	25		25
Interest rate swaps (fair value hedges)	214	6		6
Total financial derivatives	**1,088**	**33**	**(3)**	**30**
Balance sheet entries				
Non-current		29		29
Current		4	(3)	1
Total financial derivatives		**33**	**(3)**	**30**

	Contract or underlying nominal amount	Fair value		
At 31 July 2015	£m	Assets £m	Liabilities £m	Net £m
Foreign exchange contracts (not hedge accounted)	254	2	(2)	
Currency swaps (net investment hedges)	97	7		7
Currency swaps (not hedge accounted)	157	3	(5)	(2)
Cross currency swaps (fair value and net investment hedges)	276		(4)	(4)
Interest rate swaps (fair value hedges)	180	4	(2)	2
Total financial derivatives	**964**	**16**	**(13)**	**3**
Balance sheet entries				
Non-current		4	(6)	(2)
Current		12	(7)	5
Total financial derivatives		**16**	**(13)**	**3**

10 Provisions for liabilities and charges

	At 31 July 2015 £m	Charged against profit £m	Utilisation £m	At 31 July 2016 £m
Disposals	2			2
	2			**2**

The closing disposal provision relates to warranties and other obligations in respect of a past disposal and is expected to be utilised within the next five years.

11 Post-retirement benefits

The Company is the principal employer for the two major defined benefit plans in the UK. Following the adoption of FRS 101, the Company is accounting for all the UK defined benefit schemes (funded and unfunded) and virtually all of the post-retirement healthcare schemes.

The retirement benefit assets and liabilities comprise:

	31 July 2016 £m	31 July 2015 (restated) £m
Market value of scheme assets	4,034	3,523
Present value of funded scheme liabilities	(3,709)	(3,385)
Surplus	325	138
Unfunded pension plans	(56)	(52)
Post-retirement healthcare	(7)	(7)
Present value of unfunded obligations	(63)	(59)
Net pension asset/(liability)	**262**	**79**
Retirement benefit assets	327	169
Retirement benefit liabilities	(65)	(90)
Net pension asset/(liability)	**262**	**79**

See the disclosures for UK schemes in note 8 to the consolidated accounts for the circumstances of the major schemes, risk management, principal assumptions, assets and liabilities and the funding position of the two major schemes.

12 Share capital and reserves

Share capital

	Number of shares	Issued capital £m	Consideration £m
Ordinary shares of 37.5p each			
At 31 July 2015	394,860,004	148	
Exercise of share options	363,068		3
Total share capital at 31 July 2016	**395,223,072**	**148**	

At 31 July 2016, all of the issued share capital was in free issue. All issued shares are fully paid.

See note 9 to the consolidated accounts for information about share schemes, including total shares under options and options exercisable at the balance sheet date.

During the year, the Company received £3m (2015: £3m) on the issue of shares in respect of the exercise of options awarded under various share option schemes.

Smiths Industries Employee Benefit Trust
The retained earnings include the purchase of Smiths Group plc shares by the Smiths Industries Employee Benefit Trust, and the issue of these shares upon the exercise of share options. The consideration paid was £8m (2015: £11m) and £nil (2015: £nil) was received as a result of the issue of shares. At 31 July 2016 the Trust held 852 (2015: 852) ordinary shares.

Distributable profits
The Company's profit and loss reserve of £1,857m (2015: £2,042m) comprised £913m (2015: £908m) not available for distribution as a dividend and £944m (2015: £1,134m) available for distribution. See note 25 in the Group accounts for a discussion of capital management and the factors the Board consider when proposing dividends.

Other reserves
Other reserves arose from the cancellation of the share premium arising from an equity-funded acquisition in the year ended 30 July 1988.

13 Deferred tax

The Company has recognised the following deferred tax assets and liabilities:

	Share-based payment £m	Retirement benefit obligations £m	Losses carried forward £m	Other £m	Total £m
At 31 July 2015		**(17)**	**17**		
Credit/(charge) to income statement	2	(35)	27	2	(4)
Credit/(charge) to equity		4			4
At 31 July 2016	**2**	**(48)**	**44**	**2**	

The Company is part of a UK tax group including all its UK-based subsidiaries. The Company derecognised UK tax assets relating to revenue losses brought forward and other temporary differences due to the impact of the pension contributions on the outlook for the UK tax base. The treatment of these assets is reviewed regularly and is dependent on the ability to recover them against forecast UK taxable profits of the tax group.

At 31 July 2016 the Company has unrecognised deferred tax assets of £19m (2015: £30m) relating to:

- retirement benefit obligations £19m (2015: £nil)
- losses carried forward £nil (2015: £27m);
- share-based payments £nil (2015: £1m); and
- other timing differences £nil (2015: £2m).

These tax allowances remain available to the Company and can be utilised should the UK tax base improve.

14 Contingent liabilities

The Company has provided guarantees and arranged letter of credit facilities to support the Group's pension plans. The current amount outstanding under letters of credit is £54m (2015: £54m).

The Company has guaranteed the US$800m revolving credit facility available to a subsidiary.

15 Post balance sheet event

The directors propose a final dividend of 28.75p per share (totalling approximately £114m) for the year ended 31 July 2016. The dividend will be submitted for formal approval at the Annual General Meeting to be held on 15 November 2016.

These financial statements do not reflect this dividend payable, which will be accounted for in shareholders' equity as an appropriation of retained earnings in the year ending 31 July 2017. During the year ended 31 July 2016, a final dividend of 28.00p per share (totalling £111m) was paid in respect of the dividends declared for the year ended 31 July 2015.

16 Adoption of FRS 101

Reconciliation of balance sheet at 31 July 2015

	Notes	31 July 2015 (as previously reported) £m	Reclassifying software £m	Applying IAS 19 £m	31 July 2015 (restated) £m
Fixed assets					
Intangible assets	2				
Tangible assets	3				
Investments and advances	4	3,486			3,486
Available for sale financial assets	5	147			147
		3,633			3,633
Current assets					
Debtors					
– amounts falling due within one year	6	60			60
Cash at bank and on deposit		330			330
Financial derivatives					
– amounts falling due within one year	9	12			12
– amounts falling due after more than one year	9	4			4
		406			406
Creditors: amounts falling due within one year	7	(236)			(236)
Net current assets/(liabilities)		170			170
Total assets less current liabilities		3,803			3,803
Creditors: amounts falling due after more than one year	8	(1,148)			(1,148)
Provisions for liabilities and charges	10	(2)			(2)
Financial derivatives		(6)			(6)
Net assets excluding pension liabilities		2,647			2,647
Retirement benefit assets	11			169	169
Retirement benefit liabilities	11	(89)		(1)	(90)
Net assets including pension liabilities		2,558		168	2,726
Capital and reserves					
Called up share capital	12	148			148
Share premium account		349			349
Capital redemption reserve		6			6
Other reserves		181			181
Profit and loss account		1,874		168	2,042
Shareholders' equity		2,558		168	2,726

Reconciliation of total equity

	31 July 2015 £m	31 July 2014 £m
As previously reported	2,558	2,448
Recognition of surplus on additional pension schemes	168	119
In accordance with FRS 101	2,726	2,567

Impact of reclassifying software

Fully amortised software has been reclassified from tangible to intangible assets, with no net impact on the balance sheet.

Impact of applying the recognition and measurement requirements of IAS 19 (revised)

Applying IAS 19 has increased pension assets by £1,710m and liabilities by £1,542m at 31 July 2015, as the Company recognises schemes previously treated as multi-employer schemes. There is a £49m credit to comprehensive income for 2015 comprising:

- a net £21m charge to interest, with the £(26)m reduction in interest income due to using the discount rate and £63m additional interest income and £(58)m additional interest charges for the recognition of additional pension schemes;
- added scheme administration costs of £2m previously included in actuarial gains and losses and £2m for new schemes;
- reduced operating charges for multi-employer schemes accounted for as defined contribution schemes by £17m; and
- increased actuarial gains by £57m, due to recognising additional UK schemes and the change in the treatment of finance income and scheme administration costs.

Smiths Group plc subsidiaries

Subsidiary	Country	Security	Direct (%)	Total (%)
Air Log Limited	United Kingdom	ORD 1p		100
Antares Advanced Test Technologies (Suzhou) Co. Ltd	China	Ord $1		100
Antares China Holdings, Inc	United States	Common shares		100
Ashfield Medical Systems Limited	United Kingdom	Ord £1		100
CDI Oilfield Services Srl	Romania	Ord RON 10		100
Changshu Flex-Tek Thermal Fluid Systems Manufacturer Co. Ltd	China	US$520,800 (reg capital)		100
Compania EMC Tecnologia S.A.	Costa Rica	Ord $1		100
CVE Trustee Limited	United Kingdom	Ord £1	100	100
EIS Group Plc	United Kingdom	ORD 25p	100	100
Flagtown Limited	United Kingdom	Ord £1	100	100
Flexible Ducting Malaysia Sdn Bhd	Malaysia	Ord $1		100
Flexible Ducting, Limited	United Kingdom	Ord £1		100
Flexible Technologies (Canada) Ltd	Canada	Ordinary shares $1		100
Flexible Technologies, Inc	United States	Ordinary shares $0.01		100
Flexibox (Northern Ireland) Limited	United Kingdom	Ord £1		100
Flexibox (Pty) Limited	South Africa	Ord		100
Flexibox International Limited	United Kingdom	Ord £1		100
Flexibox Japan KK	Japan	Ord JPY 1000		100
Flexibox Limited	United Kingdom	Ord £1		100
Flexibox Pty Limited	Australia	Ord AUS$ each		100
Flexschlauch Producktions GmbH	Germany	Ord		100
Flightspares Limited	United Kingdom	Ord £1; Ord 10p	100	100
Francis Shaw And Company (Manchester) Limited	United Kingdom	Ord £1		100
Francis Shaw P L C	United Kingdom	37% 2nd Pref Ord 10p; 5.25% Cum Pref £1; Def 20p; Ord 10p		100
George Maclellan Holdings Limited	United Kingdom	Def Ord 25p; Ord 5p	100	100
Global TI Limited	United Kingdom	Ord £1		100
Graseby Limited	United Kingdom	ORD 25p	100	100
Graseby Medical Ireland Limited	Ireland	Ord €1.269738 each		100
Graseby Medical Limited	United Kingdom	Ord £1		100
Hypertac GmbH	Germany	Ord €1		100
Hypertac Limited	United Kingdom	Ord £1		100
Hypertac S.A.	France	Ord €76		100
Hypertac SpA	Italy	Ord €5		100
Hypertronics Corporation	United States	Common stock		100
Indufil BV	Netherlands	Ord		100
Industrias John Crane Mexico S.A. de C.V.	Mexico	Series A MXN 1; Series B MXN 1		100
Interconnect Devices, Inc.	United States	Common stock		100
John Crane (Angola) Prestacao De Services Ltd	Angola	Ord AOA 1		100
John Crane (Ireland) Limited	Ireland	ORD US$1		100
John Crane (Switzerland) AG	Switzerland	Ord 1 CHF		100
John Crane (Thailand) Limited	Thailand	Ord THB1, Preferred shares		100
John Crane Argentina SA	Argentina	Common $1 ARS		100
John Crane Australia Pty Limited	Australia	Ord AUS$1		100
John Crane Baku LLC	Azerbaijan	Ord US 10		100
John Crane Bearing Technology GmbH	Germany	Ord		100
John Crane Belgium NV	Belgium	No par value		100
John Crane Canada Inc	Canada	Common $1		100
John Crane Caribe Ltd	Puerto Rico	Common shares		100
John Crane Chile SA	Chile	Ord		100
John Crane China Co. Limited	China	ORD CNY1		100
John Crane Colombia SA	Colombia	Ord COP$1		100
John Crane Dominicana SA	Dominican Republic	Ord DP$1		100
John Crane Egypt LLC	Egypt	Ord EGP 1		100
John Crane Egypt Sealing Systems LLC	Egypt	Ord EGP 1		100
John Crane Endustriyel Sizdirmazlik Sistemleri Ltd	Turkey	Ord TRY 25		100
John Crane Flexibox India Private Limited	India	Ord INR 10		100
John Crane France SAS	France	Ord €286		100
John Crane GmbH	Germany	Ord €1		100
John Crane Group Corporation	United States	Ord		100
John Crane Group Limited	United Kingdom	Ord £1		100
John Crane Hellas - Engineered Sealing Systems Monoprosopi EPE	Greece	Ord €1		100
John Crane Holland BV	Netherlands	Ord €1		100
John Crane Hungary Kft	Hungary	Ord €1		100
John Crane Iberica SA	Spain	Ord €6.010121		100
John Crane Inc	United States	Common $0.01; preferred $0.10		100
John Crane International Inc.	United States	Common shares		100
John Crane International Limited	United Kingdom	Ord £1		100
John Crane Investments Limited	United Kingdom	Ord £1		100
John Crane Italia SpA	Italy	Ord €5.16		100
John Crane Japan Inc	Japan	Ord JPY1,000		70

Subsidiary	Country	Security	Direct (%)	Total (%)
John Crane Kazakhstan	Kazakhstan	Ordinary equity		100
John Crane Korea Co Ltd	Korea, Republic of	Ord KWON5,000		100
John Crane Malaysia Sdn. Bhd.	Malaysia	Ord MYR $1		100
John Crane Middle East FZE	United Arab Emirates	Ord AED 1		100
John Crane Peru SAC	Peru	Common shares		100
John Crane Poland Sp Z O.O.	Poland	Ord 50 PLN		100
John Crane Production Solutions Inc	United States	Ord $0.01		100
John Crane Pty Ltd	South Africa	Ord ZAR 1		100
John Crane Safematic Oy	Finland	Ord		100
John Crane Saudi Arabia Ltd	Saudi Arabia	Ord ZAR 1		100
John Crane Sealing Systems India Private Limited	India	Ord INR10		100
John Crane Sigma AS	Czech Republic	Ord CZK 1m		100
John Crane Singapore Pte Limited	Singapore	Ord S$1		100
John Crane Slovakia sro	Slovakia	Ord €1		100
John Crane Sociedad De Responsibilidad Limitada De Capital Variable	Mexico	Ord MXN $1		100
John Crane Sverige AB	Sweden	Ord		100
John Crane Taiwan Co Ltd.	Taiwan Province of China	Ord T$1		100
John Crane Technology (Tianjin) Co Limited	China	Ord US$1		100
John Crane UK Limited	United Kingdom	Ord £1		100
John Crane Venezuela CA	Venezuela	CLASS "A" VEF1; CLASS "B" VEF1; COMMON VEF1		100
Kaelus Communications Equipment (Shanghai) Co. Ltd	China	Ord $1		100
Kaelus Interconnect (Shanghai) Co. Ltd.	China	Ord $1		100
Kaelus Pty Ltd	Australia	E shares AUS $1; ord AUS $1		100
Kaelus, Inc.	United States	Class A common stock $0.01; Class B common stock $0.01		100
Kiinteisto Oy Ainolantie 21	Finland	Ord		100
Kontak Manufacturing Company Limited	United Kingdom	Ord £1		100
Lighthome Limited (in liquidation)	United Kingdom	Ord £1	100	100
LLC John Crane Rus	Russian Federation	Ord RUB 1 each		100
Medex Cardio-Pulmonary, Inc	United States	Common Stock of $0.01		100
Medex Medical Limited	United Kingdom	Ord £1		100
Millitech, Inc.	United States	Common stock		100
OIE Services Limited	United Kingdom	Ord £1		100
Oil Plus Limited	United Kingdom	Ord £1		100
Orion Corporation	United States	Ord 1 cent		100
Plenty India Limited	India	Ord		100
Pneupac Limited	United Kingdom	Ord £0.50		100
Power Distribution, Inc.	United States	Common		100
Powercam-Houdaille, Inc.	United States	Common shares		100
Project Sugar Limited	United Kingdom	Ord £1		100
Pt John Crane Indonesia	Indonesia	Ord IDR1,000		99
Pyzotec Limited	United Kingdom	Ord £1	75	75
Radio Waves, Inc.	United States	Common stock		100
Roof Units (Group) Limited	United Kingdom	ORD 10p	100	100
S.I. Pension Trustees Limited	United Kingdom	Ord £1	100	100
Sabritec	United States	Ordinary shares		100
Sedding (No.3) Limited	United Kingdom	Ord £1		100
Shenzhen Dowin Lightning Protection Engineering Co. Ltd	China	Ord 1RMB		100
Shenzhen Dowin Lightning Technologies Co. Ltd.	China	Ord 1RMB		100
SI Overseas Holdings Limited	United Kingdom	Ord £1		100
SI Properties Limited	United Kingdom	Ord 25p	100	100
SITI 1 Limited	United Kingdom	US$1 shares		100
Smiths Aerospace Components Tyseley Limited	United Kingdom	Ord £1	100	100
Smiths Aerospace Components-Burnley Limited	United Kingdom	Ord £1		100
Smiths Aerospace Gloucester Limited	United Kingdom	Ord 25p; Ord A 25p		100
Smiths Brasil LTDA	Brazil	Ord R$1		100
Smiths Business Information Services Limited	United Kingdom	Ord £10		100
Smiths Business Information Services, Inc.	United States	Ord $0.01		100
Smiths Connectors Asia Pte. Ltd.	Singapore	Ord SGD$1		100
Smiths Connectors Tunisia Sarl	Tunisia	Ord 1 DT		100
Smiths Detection – Toronto Ltd.	Canada	Common shares; Preference shares		100
Smiths Detection (Asia Pacific) Pte. Ltd	Singapore	Ord S$1		100
Smiths Detection (Australia) Pty Ltd	Australia	Ord AUD 1		100
Smiths Detection (Thailand) Limited	Thailand	Ord THB100; Pre THB100		100
Smiths Detection Brasil Comerico De Equipamentos LTDA	Brazil	Common		100
Smiths Detection GmbH	Germany	1 share of € 25,000; 1 share of €183,100; 1 shares of € 791,900		100
Smiths Detection Group Limited	United Kingdom	Ord £1		100
Smiths Detection Inc	United States	Common stock of $0.0001		100
Smiths Detection Investments Limited	United Kingdom	Ord £1		100

Subsidiary	Country	Security	Direct (%)	Total (%)
Smiths Detection Ireland Limited	Ireland	Ord €1.25; Ord B of €1.269738; Ord D €1.25; Series C shares €1.25		100
Smiths Detection Italia Srl	Italy	Quota value of shares		100
Smiths Detection Limited	United Kingdom	Ord £1	100	100
Smiths Detection Malaysia Sdn Bhd	Malaysia	Share of 1 MYR		100
Smiths Detection Middle East FZE	United Arab Emirates	Share of AED 1,000,000		100
Smiths Detection Montreal Inc.	Canada	Class A shares; Class B shares		100
Smiths Detection New Zealand Limited	New Zealand	Ord NZ$1		100
Smiths Detection Saudi Arabia Co. Ltd	Saudi Arabia	Share of 1000 Saudi Riyals		100
Smiths Detection US, LLC	United States	Ord $1		100
Smiths Detection US Holdings LLC	United States	Units of limited liability company interest		100
Smiths Detection Security Systems LLC	Abu Dhabi	AED 1,500		49
Smiths Detection Veecon Systems Private Limited	India	Class A equity shares INR 10; Class B equity shares INR 10		100
Smiths Detection-Watford Limited	United Kingdom	Ord £1		100
Smiths Finance Limited	United Kingdom	Ord £1; Redeemable US$1		100
Smiths Finance Luxembourg Sarl	Luxembourg	Ord US$0.01		100
Smiths Group (Gibraltar) Limited	Gibraltar	Ord US$ 1.56		100
Smiths Group Deutschland GmbH	Germany	1 share of €1,491,400; 1 share of €3,478,400; 1 share of €995,500		100
Smiths Group Holdings Netherlands BV	Netherlands	Ord		100
Smiths Group Insurance Limited	Guernsey	Ord £1		100
Smiths Group International Holdings Limited	United Kingdom	Ord £1	100	100
Smiths Group Italia Srl	Italy	Ord €1		100
Smiths Group Luxembourg Sarl	Luxembourg	Ord US$1.00		100
Smiths Group Services Corp.	United States	Common stock $0.01		100
Smiths Healthcare Limited	United Kingdom	ORD 1p	100	100
Smiths Healthcare Manufacturing, S.A. de C.V.	Mexico	Series B 10 pesos; series B-1 pesos 10		100
Smiths Heimann Del Ecuador SA (in liquidation)	Ecuador	Ordinary shares of $1.00 each		100
Smiths Heimann GmbH	Germany	Ord		100
Smiths Heimann Limited	United Kingdom	Ord £1	100	100
Smiths Heimann Rus LLC	Russian Federation	Ord		100
Smiths Heimann S.A.S.	France	Shares of €1 each		100
Smiths Industries GmbH	Germany	Ordinary	100	100
Smiths Industries Industrial Group Limited	United Kingdom	Ord £1		100
Smiths Industries Limited	United Kingdom	7% non cum pref; Ord £1	100	100
Smiths Interconnect Australia Pty Ltd	Australia	Ord $1 AUS		100
Smiths Interconnect Connectors UK	United Kingdom	Ordinary		100
Smiths Interconnect Connectors, Inc.	United States	Common		100
Smiths Interconnect Group Limited	United Kingdom	Ord £1		100
Smiths Interconnect Microwave Components, Inc.	United States	Common stock		100
Smiths Interconnect Power Management, Inc.	United States	Common stock $0.01		100
Smiths Interconnect Power Management UK	United Kingdom	Ordinary		100
Smiths Interconnect, Inc.	United States	Common stock		100
Smiths Medical (Beijing) Co. Ltd	China	Ordinary shares $1		100
Smiths Medical (Hong Kong) Limited	Hong Kong	Ord HK$1		100
Smiths Medical (Portugal), Unipessoal Lda	Portugal	1 Share of €505,000		100
Smiths Medical (South Africa) (Pty) Ltd	South Africa	Shares of R1 each		100
Smiths Medical ASD Inc.	United States	Common stock of $1		100
Smiths Medical Australasia Pty Ltd	Australia	Ord		100
Smiths Medical Belgium NV	Belgium	Registered shares		100
Smiths Medical Canada Ltd	Canada	Common shares		100
Smiths Medical Czech Republic A.S	Czech Republic	Ordinary		100
Smiths Medical Danmark ApS	Denmark	Shares of DKK100 each		100
Smiths Medical Deutschland GmbH	Germany	1 share of €1,000; 1 share of €27,000; 1 share of €5,000		100
Smiths Medical Distribution Limited	United Kingdom	Ord £1	100	100
Smiths Medical Do Brasil Produtos Hospitalares LTDA	Brazil	Ord R$1		100
Smiths Medical Espana S.L.	Spain	Shares €1		100
Smiths Medical France SAS	France	Shares of €7.7 each		100
Smiths Medical Group Limited	United Kingdom	Ord A £1; Ord B £1; Ord C £1		100
Smiths Medical India Private Limited	India	Ord 1 INR		100
Smiths Medical Instrument (Zhejiang) Co. Ltd	China	Ordinary shares of RMB		100
Smiths Medical International Limited	United Kingdom	Ord £1; Pref €2		100
Smiths Medical Italia Srl	Italy	Ord €1		100
Smiths Medical Japan Ltd	Japan	Common stock		100
Smiths Medical Limited	United Kingdom	Ord £1		100
Smiths Medical Nederland B.V.	Netherlands	Shares NLG100		100
Smiths Medical Osterreich GmbH	Austria	Ord €1		100
Smiths Medical Schweiz AG	Switzerland	Shares of CHF 10.00 each		100
Smiths Medical Singapore Pte. Limited	Singapore	Ordinary shares		100
Smiths Medical Sverige AB	Sweden	Shares of SEK100 each		100

Subsidiary	Country	Security	Direct (%)	Total (%)
Smiths Medical UK	United Kingdom	Ord US$1		100
Smiths Medical US, Inc	United States	Common stock of $0.01		100
Smiths Nominees Limited	United Kingdom	Ord £1	100	100
Smiths Pensions Limited	United Kingdom	Ord £1	100	100
Smiths Power UK Limited	United Kingdom	Ord GBP1		100
Smiths Tubular Systems-Laconia, Inc	United States	Ordinary shares $1		100
Smiths Wolverhampton Limited	United Kingdom	Ord 25p		100
STS Titeflex India Pvt Ltd	India	Ordinary shares INR 100		100
Subvenmar Limited	United Kingdom	Ord £1		100
TECOM Industries, Incorporated	United States	Common stock $1		100
TI Group Automotive Systems (Argentina) SA	Argentina	Ord $1 ARS		100
TI Group Limited	United Kingdom	Ord 25p	100	100
TI Guarantee Company Limited	United Kingdom	Limited by guarantee		100
TI Interest Limited	United Kingdom	Ord A £1, Ord B £1, Floating Rate Cum Red Pref C £1	100	100
TI SA (France)	France	Ord		100
TIGrup No. 14 Limited	United Kingdom	Ord 20p		100
TIGrup No.7 Limited	United Kingdom	Ord £1	100	100
Titeflex Commercial, Inc.	United States	Ord $0.01		100
Titeflex Corporation	United States	Ordinary shares $1		100
Titeflex Europe SAS	France	Ord $1		100
TRAK Microwave Corporation	United States	Common stock		100
TRAK Microwave Limited	United Kingdom	Ordinary shares		100
Transtector Systems, Inc.	United States	Common stock		100
TriasX (Hong Kong) Limited	Hong Kong	Ord HKD $1		100
TriasX (Suzhou) Telecommunications Co. Ltd.	China	Ord $1		100
Turbo Components & Engineering Inc	United States	Common shares		100
Tutco De Mexico S de RL de CV	Mexico	Ordinary shares $1.00		100
Tutco, Inc	United States	Ordinary shares $1		100
Venmar Limited	United Kingdom	A Ord 10p, B Ord 10p., C Ord £1, Pref 10p		100
XD Communications Limited	United Kingdom	Ord £1		100
XDG Limited	United Kingdom	Ord 50p	100	100
XPD8 Solutions Limited	United Kingdom	Ord £1		100
Zamor KG	Germany	Ordinary shares €1		49

Associates	Country	Security	Direct (%)	Total (%)
LLC John Crane Iskra	Russian Federation	Ord 1 RUB		50
STI Security Training International GMBH	Germany	Ordinary shares €1		34

A new company, Gastite Systems Limited, was incorporated in the United Kingdom on 1 August 2016. Smiths Group plc indirectly owns the entire issued share capital and the new company will be consolidated as a subsidiary from the date of incorporation.

Financial calendar

	2016
Announcement of results for 2015/16	28 September
Ordinary shares final dividend ex-dividend date	20 October
Ordinary shares final dividend record date	21 October
Annual General Meeting	15 November
Ordinary shares final dividend payment date	18 November

	2017
2016/17 interim results announced	22 March (provisional)
Ordinary shares interim dividend ex-dividend date	30 March (provisional)
Ordinary shares interim dividend record date	31 March (provisional)
Ordinary shares interim dividend payment date	28 April (provisional)
Smiths Group financial year end	31 July
Announcement of results for 2016/17	20 September (provisional)
Ordinary shares final dividend ex-dividend date	19 October (provisional)
Ordinary shares final dividend record date	20 October (provisional)
Annual General Meeting	14 November (provisional)
Ordinary shares final dividend payment date	17 November (provisional)

The market value of an ordinary share of the Company on 31 March 1982 for the purposes of capital gains tax was 136.875p (taking into account the sub-division of 50p shares into 25p shares on 14 January 1985 and the subdivision and consolidation of 25p shares into 37.5p shares on 18 June 2007).

The 2016 Annual General Meeting will be held at the Northcliffe House Auditorium of the law firm, Freshfields Bruckhaus Deringer, 26-28 Tudor Street, London EC4Y 0BQ on Tuesday 15 November 2016 at 11:00am.

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Glossary of terms

AGM	Annual General Meeting
BIS	Business Information Services
EHS	Environment, Health & Safety
EMEA	Europe, Middle East, Africa
GHG	Greenhouse Gas
HVAC	Heating, Ventilation and Air Conditioning
R&D	Research and Development
STEM	Science, Technology, Engineering and Mathematics

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