HALMA

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HALMA plc

RESULTS FOR THE 52 WEEKS TO 1 APRIL 2017

Fourteenth year of record revenue and profit

Halma, the leading safety, health and environmental technology group, today announces its full year results for the 52 weeks to 1 April 2017 (2016: 53 weeks to 2 April 2016).

Highlights

Continuing Operations	2017	2016	Change
Revenue	£961.7m	£807.8m	+19%
Adjusted Profit before Taxation[1]	£194.0m	£166.0m	+17%
Adjusted Earnings per Share[2]	40.21p	34.26p	+17%
Statutory Profit before Taxation	£157.7m	£136.3m	+16%
Statutory Earnings per Share	34.25p	28.76p	+19%
Total Dividend per Share[3]	13.71p	12.81p	+7%
Return on Sales[4]	20.2%	20.6%	
Return on Total Invested Capital[5]	15.3%	15.6%	
Net Debt	£196.4m	£246.7m	

- Revenue up 19% with Adjusted[1] pre-tax profit up 17%. Revenue and profit growth of 4% on an organic constant currency[5] basis.
- Revenue and profit growth in all four sectors. Organic constant currency[5] growth in Infrastructure Safety, Medical and Environmental & Analysis; improved performance in Process Safety.
- Revenue growth in all major regions. Strong growth in the USA, Mainland Europe and Asia Pacific, with solid progress in the UK.
- High returns maintained with Return on Sales[4] of 20.2% and ROTIC[5] of 15.3%.
- Sustained strategic investment, supported by good cash generation and a strong balance sheet; R&D spend increased to 5.3% of revenue.
- Acquisition pipeline benefiting from greater depth and breadth in M&A resources across all four sectors.
- Final dividend up 7%. 38th consecutive year of dividend per share increases of 5% or more.

Andrew Williams, Chief Executive of Halma, commented:

“Halma performed strongly over the past year, achieving its fourteenth consecutive year of record revenue and profit. We have a clear growth strategy, simple financial model and a unique organisational structure, which is customer-focused and enables us to adapt quickly to market changes. We have exciting opportunities for growth in a diverse range of markets. Since the period end, order intake has continued to be ahead of revenue and order intake last year. We expect to make further progress in the year ahead in line with our expectations.”

Notes:

1 Adjusted to remove the amortisation and impairment of acquired intangible assets, acquisition items, restructuring costs and profit or loss on disposal of operations, totalling £36.3m (2016: £29.7m). See note 2 to the Results.

2 Adjusted to remove the amortisation and impairment of acquired intangible assets, acquisition items, restructuring costs, profit or loss on disposal of operations and the associated taxation thereon. See note 6 to the Results.

3 Total dividend paid and proposed per share.

4 Return on Sales is defined as adjusted[1] profit before taxation from continuing operations expressed as a percentage of revenue from continuing operations.

5 Organic growth rates and Return on Total Invested Capital (ROTIC) are non-GAAP performance measures used by management. See note 11 to the Results.

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A copy of this announcement, together with other information about Halma, may be viewed on its website: www.halma.com.

NOTE TO EDITORS

1. Halma develops and markets products used worldwide to protect life and improve the quality of life. The Group comprises four business sectors:

   - Process Safety — Products which protect people and assets at work.
   - Infrastructure Safety — Products and services that improve the safety and mobility of people and protect commercially and publicly owned infrastructure.
   - Medical — Products which enhance the quality of life for patients and improve the quality of care delivered by providers.
   - Environmental & Analysis — Products and technologies for analysis in environmental safety and life sciences markets.

   The key characteristics of Halma's businesses are specialist technology and application knowledge for markets offering strong long term growth potential. Many Group businesses are market leaders in their specialist field.

2. High resolution photos of Halma senior management, including Chief Executive Andrew Williams, and images illustrating Halma business activities can be downloaded from its website: www.halma.com. Click on the 'News & Media' link, then 'Media Gallery'.

3. You can view or download copies of this announcement and the latest Half Year and Annual Reports from the website at www.halma.com or request free printed copies by contacting halma@halma.com.

4. A copy of the Annual Report and Accounts will be made available to shareholders on 21 June 2017 either by post or online at www.halma.com and will be available to the general public online or on written request to the Company's registered office at Misbourne Court, Rectory Way, Amersham, Bucks HP7 0DE, UK.

5. This announcement contains certain forward-looking statements which have been made by the Directors in good faith using information available up until the date they approved the announcement. Forward-looking statements should be regarded with caution as by their nature such statements involve risk and uncertainties relating to events and circumstances that may occur in the future. Actual results may differ from those expressed in such statements, depending on the outcome of these uncertain future events.

Strategic Review

Halma makes a positive difference to people's lives worldwide

Halma's purpose is to protect life and improve the quality of life through innovative safety, health and environmental solutions. This provides us with exciting opportunities for growth in a diverse range of markets and with a strong motivation to make a positive difference to people's lives worldwide.

We have a clear growth strategy, a simple financial model and a unique organisational structure, which is customer-focused and enables us to adapt quickly to market changes.

Halma has had a well-established financial target that aims to double our earnings every five years, without becoming highly geared or seeking further equity, provided there are similar rates of organic, acquisitive and dividend growth. This aspiration pushes our businesses to deliver sustainable revenue growth by increasing investment in innovation, talent and international expansion rather than limiting their focus only on operational efficiency and short-term profitability.

Over the past five years, we have achieved compound annual growth rates of 10% for revenue and 11% for profit with a good balance between organic, acquisition and dividend growth. This strong performance reflects not only our sound growth strategy but also the exceptional commitment, abilities and dedication of talented individuals in every part of Halma. I thank all of them for their contribution to this financial success and, in the process, realising our shared purpose and making a positive difference to people's lives worldwide.

Record revenue and profit

Halma performed strongly over the past year, achieving its fourteenth consecutive year of record revenue and profit.

Revenue increased by 19% to £962m (2016: £808m) including 4% organic constant currency growth and 10% favourable currency impact. Adjusted[1] profit increased by 17% to £194m (2016: £166m), also including 4% organic constant currency growth and 10% favourable currency impact. There were 52 weeks trading in this year compared with 53 weeks trading last year.

Returns were maintained at a high level with Return on Sales of 20.2% (2016: 20.6%) well within our targeted range of 18% to 22%. Return on Capital Employed for our operating companies remained high at 72% (2016: 72%). The Group's Return on Total Invested Capital was 15.3% (2016: 15.6%).

Cash generation and balance sheet supports future growth

Cash generation was good and we ended the year with net debt of £196m (2016: £247m) after spending £10m on current year acquisitions (2016: £193m), £24m on capital expenditure (2016: £24m), £50m on dividends to shareholders (2016: £47m), and paying £33m of tax (2016: £27m).

With gearing at the year-end (net debt to EBITDA) of 0.86 times (2016: 1.27 times), we have a strong balance sheet which can support further strategic investment. In November 2016, we increased and extended our revolving credit facilities from £360m until 2018 to £550m until 2021.

Final dividend to increase by 7%

The Board is recommending a final dividend increase of 7%, giving a final dividend of 8.38p (2016: 7.83p) and a total dividend for the year of 13.71p (2016: 12.81p). The final dividend per share is subject to approval by shareholders at the AGM on 20 July 2017 and will be paid on 16 August 2017 to shareholders on the register on 14 July 2017.

Growth in all major regions

A major benefit for businesses within Halma is the support they receive to build their business in key export markets. This year, once again, this was reflected in the widespread revenue growth achieved in both developing and developed regions.

There was impressive growth in Asia Pacific where revenue increased 21% to £152m (2016: £125m), including 9% organic constant currency growth. Revenue from China was up by 25% to £68m (2016: £54m), with 11% organic constant currency growth. Revenue from Other regions grew by 16% to £99m (2016: £86m) with good growth in Canada.

Revenue from Mainland Europe grew by 17% to £210m (2016: £179m) including 6% organic constant currency growth while UK revenue was up by 7% to £155m (2016: £145m) with 5% organic constant currency growth. The USA remained our largest regional market with revenue increasing by 27% to £345m (2016: £273m) and 1% organic constant currency growth.

Growth in all four sectors

There was revenue and profit growth in all four sectors. All sectors achieved record revenue and all, except Process Safety, also generated record profit.

The **Medical** sector became our largest profit sector for the first time, with profit[2] up by 29% to £66.7m (2016: £51.7) including 6% organic constant currency growth. Revenue grew by 31% to £261m (2016: £199m) with organic constant currency growth of 4%. Return on Sales remained strong at 25.6% (2016: 26.0%).

Regionally, the highest rate of organic constant currency revenue growth was in Asia Pacific and there was good progress in China. There were lower rates of organic growth in the UK and the USA, which is the largest region representing 52% of the sector. There was a small organic constant currency decline in Mainland Europe. Visiometrics and CenTrak, acquired in December 2015 and February 2016 respectively, delivered improved performances as the year progressed.

Infrastructure Safety profit[2] grew by an impressive 17% to £65.1m (2016: £55.6m) and revenue rose by 19% to £315m (2016: £265m). Both included organic constant currency growth of 7%. Return on Sales was 20.7% (2016: 21.2%).

There was strong organic constant currency revenue growth in Asia Pacific, the UK and Mainland Europe (the largest region at 30% of the sector) supported by excellent progress from our Fire and Door Safety businesses. There was organic constant currency revenue decline in the USA, partly due to a weaker performance from our Fire businesses, including Firetrace which we acquired in October 2015. We have continued to strengthen Firetrace's management team from within Halma and we expect its performance to improve as we move through 2017. We remain confident in its longer-term growth potential, especially in international markets.

The **Environmental & Analysis** sector increased profit[2] substantially by 21% to £41.7m (2016: £34.5m), which continued the excellent progress made last year and included 6% organic constant currency growth. Revenue grew by 16% to £219m (2016: £189m) with organic constant currency growth of 4%. Return on Sales improved from 18.3% to 19.0%.

The highest rates of organic constant currency revenue growth were achieved in Asia Pacific, with China achieving double-digit growth and now contributing 12% of sector revenue. There was good growth in the USA and solid progress in the UK. Mainland Europe saw organic revenue decline after weaker demand from certain OEM customers headquartered in the region.

During the year we completed the restructuring of our photonics coatings business, Pixelteq. The exceptional costs associated with this project were reported in our first half results. The profitability benefits started to emerge in the final quarter of 2016/17 and are expected to make a positive contribution to profit growth in the 2017/18 financial year, despite the small revenue reduction arising from this consolidation.

The **Process Safety** sector's performance improved as the year progressed, benefiting from sustained increased investment in market diversification and improving demand from the US onshore energy market in the second half of the year. Revenue increased by 7% to a record £167m (2016: £155m) with a relatively encouraging 1% organic constant currency growth. Profit[2] rose by 2% to £40.2m (2016: £39.6m). Although there was a 4% organic constant currency decline for the full year, there was organic constant currency profit growth of 4% in the second half of the year. Return on Sales for the year remained strong at 24.1% (2016: 25.7%).

There was impressive organic constant currency growth in the Near and Middle East and modest improvements in the USA and Mainland Europe. There was a small organic revenue decline in the UK and reduced demand in our pipeline management sub-sector contributed to organic revenue decline in Asia Pacific.

In overall terms this was an encouraging year and Process Safety is now much better placed to sustain growth, with less reliance on energy and resources markets, than a year ago.

One acquisition completed; M&A resource strengthened

Our core acquisition strategy is to find privately-owned businesses operating in niches within safety, health or environmental markets. Our search efforts are typically focused on our core, or closely adjacent, market niches although each Halma sector has the freedom to find new niches which possess the right product, market and financial characteristics. In almost all cases we acquire 100% of an entity but we will consider a minority investment to gain access to potentially valuable intellectual property, if an outright purchase is not appropriate or possible.

Our sector-focused organisation model gives us the scalability to continue acquiring small-to-medium sized businesses to achieve our strategic growth objectives. We are also able to sell and merge businesses relatively easily should specific market dynamics change. This active portfolio management has meant the number of companies within Halma has been relatively stable, reducing the potential for concerns over management's increasing span-of-control as we grow. In 2007, Halma had revenue of £355m from 39 operating companies while today, we have revenue of £962m and 42 operating companies.

During the year, we added further M&A resource to our four sector boards and the benefits of this are becoming apparent in the improved balance of our acquisition pipeline across sectors and in the increasing number of visits made to targeted businesses. The M&A market continues to be competitive with high multiples being paid for businesses in many of our attractive market niches. This highlights the need for us to build strong relationships with business owners, sometimes over a number of years, so that they already see Halma as a great home for their business when they eventually decide to sell.

Every transaction is approved by the Group Chief Executive and Group Finance Director, with all deals £10m or over requiring Halma plc Board approval.

In January 2017, we acquired FluxData, a New York based manufacturer of advanced multi-spectral and digital imaging systems for multiple market segments including industrial and medical applications. FluxData builds on multi-spectral imaging capabilities that already exist in our Environmental & Analysis sector. Joining Halma offers FluxData the opportunity to access new niches and regions for safety, health and environmental markets. The consideration paid was US$12m (£9.9m) with further contingent consideration of up to US$15.5m (£12.8m) based on its performance to 31 March 2019.

Increasing strategic investment for growth and the 4th Industrial Revolution

We have a clear understanding of how we want our businesses to benefit from being part of Halma. We demonstrate this by making targeted central investments and building a strong collaborative culture. Over the past decade, our primary focus has been on Talent Development, Innovation and International Expansion. These central investments have led to individual sector initiatives targeted at opportunities and challenges which are particularly relevant to that sector.

Increasingly, we are seeing the opportunities and challenges of the '4th Industrial Revolution' and we are gaining a better appreciation of the influential role that we can play in the development of our safety, health and environmental markets. Many of our businesses have been using or experimenting with technologies such as robotics and 3D printing for some time. Increasingly our products are sensing, analysing and communicating data either as part of a larger connected system or as stand-alone solutions. In order to be successful in this changing world the ability to combine technologies is increasingly important and we are relentlessly improving our collaborative capabilities.

We have completed the search for the new role of Chief Innovation and Digital Officer for the Halma Executive Board and are pleased to announce that Inken Braunschmidt will be joining the Group in early July 2017. Inken joins us from innogy

SE, a renewables energy company based in Essen, Germany and spun out of RWE in 2016. In recent years, Inken led the innovation and digital transformation at RWE with a customer and people-centred approach. Prior to that, Inken was MD of RWE's Strategy and Management Consultancy practice. Her role at Halma will similarly be critical in both accelerating the development of innovative digital strategies and in building a stronger collaborative community both inside the Group and with external partners.

In April 2017, we held our biennial innovation, collaboration and experimentation event, HITEx in San Diego, USA. Board members from all Halma companies attended a three-day event which included sessions focused on harnessing new technologies, developing more ambitious growth strategies and understanding the value of strategic partnerships. As always, the event highlighted the impressive capabilities and growth potential of our businesses but also reminded us of the need to constantly improve and change in order to be successful in the future.

R&D spend increased to 5.3% of revenue
New product innovation is a vital component of creating organic growth and enables each Halma company to increase its revenue and profitability through market share gain and market expansion.

Our investment in new product development increased substantially, with a record R&D spend up by 23% to £50.6m (2016: £41.2m). This was a 13% increase at constant currency and represented 5.3% of Group revenue (2016: 5.1%), also a new record.

The decentralised nature of Halma means that each Halma company determines its own R&D spend according to its market opportunity. All four sectors increased R&D spend with the relative investment levels ranging from 3.6% of revenue for Process Safety up to 6.9% for Environmental & Analysis.

We track the effectiveness of this investment in a variety of ways including the proportion of revenue generated from new products launched in the past three years. Over the past four years, the average contribution to Group revenue from products launched in the past three years has been around 22% although the individual company metrics range from single digit to over 50%.

Since 2004, the best examples of innovation in Halma have been celebrated and recognised each year through the Halma Annual Innovation Awards. All employees are able to enter, offering them a first prize of £20,000. This year the winner of the New Product award was BEA's Flatscan laser sensor, which has transformed safety in swinging doors as well as promising further growth opportunities in other markets. First prize in the Process award was Fortress Interlocks' online interactive tool which helps customers easily configure and order customised products from a standard product platform. The Collaboration category was won by Ocean Optics and Fiberguide who co-developed a product to test the authenticity of bank notes in China.

Corporate responsibility and sustainability is at Halma's core
Halma's core strategy is to protect life and improve quality of life for people worldwide. Our primary market growth drivers mean that Halma companies operate in markets in which their products contribute positively to the wider community. These market characteristics and our commitment to health and safety, the environment and people development are reflected in the values held by our employees and our operating culture.

A detailed report on our approach to Corporate Responsibility (including our CO_2 emissions reduction performance) is set out in the Annual Report and Accounts 2017.

Outlook
Halma operates in a diverse range of market niches where demand is supported by resilient long-term growth drivers. We are able to grow faster than our markets through sustainable and increasing investment in innovation, international expansion and strategy-led talent management. Our growth mindset extends to our M&A activity where we buy businesses to increase investment for growth rather than reduce costs.

Since the period end, order intake has continued to be ahead of revenue and order intake last year. We expect to make further progress in the year ahead in line with our expectations.

Andrew Williams, Chief Executive

[1] See Highlights.

[2] See note 2 to the Results.

Financial Review

Continued investment delivering growth
Our objective is to achieve long-term sustainable growth. We continue to invest in our businesses to deliver organic growth and we target value-adding acquisitions.

Record results
Halma achieved record revenue and profit for the fourteenth consecutive year. Revenue increased by 19.0% to £961.7m (2016: £807.8m) and adjusted[1] profit was up by 16.9% to £194.0m (2016: £166.0m). Our balance sheet remains strong with increased financial capacity to invest in growth and to acquire. The Board is proposing a dividend increase of 7%, the 38th consecutive year of 5% or more dividend growth.

The 19.0% (£153.9m) increase in revenue included 4.3% organic constant currency revenue growth. Acquisitions contributed 4.9% to growth. There was a significant 9.8% positive currency translation impact.

The adjusted[1] profit increase of 16.9% (£28.0m) included 3.6% organic constant currency profit growth. Acquisitions contributed 2.8% to growth. There was a 10.5% positive currency translation impact.

Revenue and profit growth from organic operations at constant currency plus contribution from acquisitions was 9.2% and 6.4% respectively.

Statutory profit before taxation increased by 15.7% to £157.7m (2016: £136.3m). Statutory profit is calculated after charging the amortisation and impairment of acquired intangible assets of £43.9m (2016: £23.1m) and after crediting acquisition related items, including revisions to provision for acquisition contingent consideration and related foreign exchange movements, of £9.5m (2016: £7.2m charge) arising from current and prior year acquisitions. The reduction in forecast acquisition contingent consideration, and the related impairment of acquired intangible assets are primarily attributable to Visiometrics and are discussed in the Acquisition section below. There was a gain on disposal of £0.6m in the prior year. Statutory profit is also after charging £1.9m for the restructuring of Pixelteq, within the Environmental & Analysis sector, in the first half of 2016/17. The amount is less than the figure of £2.1m included in the Half Year report.

There were 52 weeks in 2016/17 compared with 53 weeks in the prior year. The extra week fell in the first half of the prior year. We are revising the accounting calendar so that future accounting periods will run from 1 April to 31 March.

Revenue grew by 16.5% in the first half increasing to 21.3% in the second half. There was a significant positive contribution from currency translation in both halves, but this was greater in the second half. Organic revenue growth at constant currency was 2.1% in the first half increasing to 6.2% in the second half with particularly good growth in the two safety sectors.

Adjusted[1] profit growth was also higher in the second half at 20.8% compared to 12.0% in the first half. The contribution to profit from currency translation was greater in the second half. Organic profit growth at constant currency was 2.0% in the first half increasing to 5.0% in the second half. The first half/second half split of adjusted[1] profit was 43%/57% slightly more weighted to the second half than our more typical 45%/55% pattern.

All four sectors delivered revenue and profit growth. Process Safety grew strongly in the second half as expected, to deliver revenue and profit growth following a decline in the first half. The highest rates of revenue and profit growth were in the Medical sector boosted by the contribution from acquisitions and currency. Infrastructure Safety grew by less in the second half than in the first half although delivered a strong result for the year. Environmental & Analysis built on the strong performance in the prior year, with high profit growth in the second half.

At organic constant currency all sectors achieved revenue growth. All except Process Safety delivered profit growth for the year, although it did deliver profit growth in the second half.

Central administration costs were £10.5m (2016: £8.3m). As expected there was an increase in investment in talent development, international expansion and improvements in cyber security. In the prior year there was a profit on sale of a Group freehold property. We expect a further increase in the underlying costs in 2017/18 as we continue to invest in the growth of the Group.

Revenue and profit growth

				Percentage growth		
	2017 £m	2016 £m	**Increase £m**	**Total**	**Organic growth[2]**	**Organic growth[2] at constant currency**
Revenue	**961.7**	807.8	**153.9**	**19.0%**	**14.1%**	**4.3%**
Adjusted[1] profit	**194.0**	166.0	**28.0**	**16.9%**	**14.1%**	**3.6%**

Widespread growth
There was strong revenue growth in all regions. Widespread organic growth was boosted by positive currency impacts and the benefit of acquisitions.

The USA continues to be our largest revenue destination increasing by 27% to contribute 36% (2016: 34%) of Group revenue. All sectors grew in the USA with the largest increase in the Medical sector. In Mainland Europe revenue increased by 17% and all sectors grew, with a particularly strong performance by Infrastructure Safety. Asia Pacific was up 21%, with all except Process Safety growing strongly. Asia Pacific revenue is now only 2% lower than revenue in the UK, where revenue rose by 7%. Africa, Near and Middle East grew by 9% and Other countries increased by 29% with good growth in Canada and some recovery in South and Central America.

Revenue from territories outside UK/Mainland Europe/USA grew by 19%, ahead of our 10% growth target. This was in line with growth in revenue in UK/Mainland Europe/USA.

Due to the significant currency and acquisition impacts the underlying performance is better understood when measured at organic constant currency. The USA grew in the year by 1% at organic constant currency with Infrastructure Safety showing a decline. Some larger contracts towards the end of the second half of the prior year did not repeat contributing to a flat second half performance in the USA in 2016/17 for the Group. Mainland Europe grew by 6% in the year, well ahead of the 2% growth in the first half with Infrastructure Safety delivering very strong second half growth. The UK grew by 5% in the year following 1% first half growth again with Infrastructure Safety performing well in the second half together with a good performance in Environmental & Analysis.

Asia Pacific grew by 9% at organic constant currency ahead of the 7% first half growth, with strong growth in Medical and good growth in Environmental & Analysis and Infrastructure Safety. China grew by 11% with growth in all sectors. Africa, Near and Middle East performance was mixed with Process Safety up and Environmental & Analysis down. There was organic constant currency growth in all four sectors in Other countries.

Geographic revenue growth

	2017		2016				
	£m	**% of total**	£m	% of total	**Change £m**	**% growth**	**% organic growth at constant currency**
United States of America	**345.3**	**36%**	272.9	34%	**72.4**	**27%**	**1%**
Mainland Europe	**210.4**	**22%**	179.3	22%	**31.1**	**17%**	**6%**
United Kingdom	**154.9**	**16%**	144.8	18%	**10.1**	**7%**	**5%**
Asia Pacific	**151.6**	**16%**	125.0	15%	**26.6**	**21%**	**9%**
Africa, Near and Middle East	**60.8**	**6%**	55.7	7%	**5.1**	**9%**	**(1%)**
Other countries	**38.7**	**4%**	30.1	4%	**8.6**	**29%**	**10%**
	961.7	**100%**	807.8	100%	**153.9**	**19%**	**4%**

Continued high returns

Halma's Return on Sales[2] has exceeded 16% for 32 consecutive years. We aim to deliver Return on Sales in the range of 18-22%. This year Return on Sales was 20.2% (2016: 20.6%). Return on Sales for Process Safety reduced this year but strengthened in the second half and remains at the high rate of 24%. Medical and Infrastructure Safety sectors remained broadly in line with last year. Environmental & Analysis improved profitability, building on the increase in the prior year and achieved 19% Return on Sales. Higher financing costs and lower Return on Sales from recent acquisitions contributed to the slightly reduced Return on Sales for the Group.

Adjusted[1] gross margin (revenue less direct material and direct labour costs) remained steady at 64.5% (2016: 64.2%) continuing a long trend of stability and reflecting strong management of pricing and input costs.

Return on Total Invested Capital[2] (ROTIC), the post-tax return on the Group's total assets including all historic goodwill, remained at the high level of 15.3% (2016: 15.6%).

ROTIC is a relentless metric. Every year the addition of prior year retained earnings to Total Invested Capital mean that high rates of organic constant currency profit and acquisition growth are needed just to maintain ROTIC. Currency movements also have an impact on ROTIC. Total Invested Capital, which includes significant US Dollar and Euro assets, has typically been affected by currency movements more than the post-tax return.

Our objective is to continue to invest in our businesses to deliver growth whilst maintaining a high level of ROTIC. At 15.3% ROTIC was once again ahead of our target of 12% and well in excess of Halma's Weighted Average Cost of Capital (WACC), estimated to be 7.1% (2016: 8.1%).

Significant currency impacts

Halma reports its results in Sterling. Our other key trading currencies are the US Dollar, Euro and to a lesser extent the Swiss Franc. Over 45% of Group revenue is denominated in US Dollars and approximately 15% in Euros.

The Group has both translational and transactional currency exposure. Translational exposures arise on the consolidation of overseas company results into Sterling. Translational exposures are not hedged.

Transactional exposures arise where the currency of sale or purchase transactions differs from the functional currency in which each company prepares its local accounts. After matching currency of revenue with currency costs wherever practical, forward exchange contracts are used to hedge a proportion (up to 75%) of the remaining forecast net transaction flows where there is a reasonable certainty of an exposure.

We hedge up to 12 months and, in certain specific circumstances, up to 24 months forward. At 1 April 2017 over 50% of our next 12 months' currency trading transactions were hedged. There is a good degree of natural hedging within the Group in US Dollars but we typically spend less in Euros than we sell and so have a net exposure of approximately €40m at any time.

We saw continued volatility in currencies throughout the year and this had a significant impact on the results. Average exchange rates are used to translate results in the Income Statement. Sterling weakened in the first half of the year, in particular following the result of the EU referendum in the UK, by an average 11% relative to the US Dollar and 12% against the Euro. For the year as a whole Sterling was on average 13% weaker against both the US Dollar and the Euro. Currency translation therefore had a positive impact of 9.8% on revenue and 10.5% on adjusted[1] profit for 2016/17.

		Weighted average rates used in the Income Statement		Exchange rates used to translate the Balance Sheet	
		2017	2016	**2017**	2016
	First half	**Full year**	Full year	**Year end**	Year end
US$	**1.36**	**1.31**	1.51	**1.25**	1.42
Euro	**1.21**	**1.19**	1.37	**1.17**	1.25

Based on the current mix of currency denominated revenue and profit, a 1% movement in the US Dollar relative to Sterling changes revenue by £4.4m and profit by £0.8m. Similarly, a 1% movement in the Euro changes revenue by £1.2m and profit by £0.3m.

We expect currency rates to continue to be volatile. If currency rates through the 2017/18 year were as follows: US Dollar 1.30/Euro 1.15 relative to Sterling, and assuming a constant mix of currency results, we would expect approximately 1% positive currency translation impact on revenue and profit in 2017/18 compared with 2016/17. On this basis there would be a positive impact in the first half of the year, mostly reversing in the second half of the year.

Increased financing cost
The net financing cost in the Income Statement of £9.3m was higher than the prior year (2016: £7.1m). The average cost of financing was higher due to the increased interest rate on long-term borrowing following the US Private Placement completed in January 2016. Average debt for the year was also higher, following acquisition expenditure made in the second half of the prior year (see the ‘Average debt and interest rates’ table below for more information).

Interest cover (EBITDA as a multiple of net interest expense as defined by our revolving credit facility) was 30 times (2016: 46 times) which was well in excess of the four times minimum required in our banking covenants.

The net pension financing charge under IAS 19 is included within the net financing cost. This year it decreased to £1.6m (2016: £2.0m) due to a combination of a lower net pension deficit at the start of the year and lower discount rate than the prior year.

Steady group tax rate
The Group’s approach to tax is to ensure compliance with the tax regulations in all of the countries in which it operates. The key features of this are: (1) Tax compliance – Halma is committed to maintaining good relationships with tax authorities based on cooperation, transparency and paying in full the tax due in each jurisdiction; (2) Tax strategy – our tax arrangements have an underlying business purpose and, where possible, we consider mitigating tax in compliance with local legislation; and (3) Tax policy – the Board of Directors is regularly updated, either directly or through the Audit Committee, on the Group’s Tax policy and management of tax risks.

The Group has major operating subsidiaries in 10 countries so the Group’s effective tax rate is a blend of these national tax rates applied to locally generated profits. A significant proportion (approximately one quarter) of Group profit is generated and taxed in the UK. The Group’s effective tax rate on adjusted profit was just below the prior year at 21.5% (2016: 21.9%).

We benefit from widely claimed R&D related tax incentives, exemptions and reliefs (for example under the UK ‘Patent Box’ rules).

There remains significant uncertainty over potential tax legislation changes in the USA, our largest region. Such changes are not expected to be imminent. We would benefit from a reduction in the rate of corporation tax but the overall impact on Halma would depend on the package of changes. We continue to monitor the position closely.

Strong cash generation
Cash generation is an important component of the Halma model underpinning further investment in our businesses, supporting value enhancing acquisitions and funding an increasing dividend. Our cash conversion in 2016/17 was strong. Adjusted operating cash flow was £175.5m (2016: £148.3m) and represented 86% (2016: 86%) of adjusted operating profit, ahead of our cash conversion KPI target of 85%.

Operating cash flow summary

	2017 £m	2016 £m
Operating profit	**167.1**	142.9
Net acquisition costs and contingent consideration fair value adjustments	**(9.5)**	7.2
Amortisation and impairment of acquisition-related acquired intangible assets	**43.9**	23.1
Loss on restructuring of operations	**1.9**	–
Adjusted operating profit	**203.4**	173.2
Depreciation and other amortisation	**26.3**	21.8
Working capital movements	**(13.9)**	(5.8)
Capital expenditure net of disposal proceeds	**(23.1)**	(22.1)
Additional payments to pension plans	**(10.2)**	(7.7)
Other adjustments	**(7.0)**	(11.1)
Adjusted operating cash flow	**175.5**	148.3
Cash conversion %	**86%**	86%

Non-operating cash flow and reconciliation to net debt

	2017 £m	2016 £m
Adjusted operating cash flow	**175.5**	148.3
Tax paid	**(33.2)**	(27.2)
Acquisition of businesses including cash/debt acquired	**(10.2)**	(202.6)
Net movement in loan notes	**0.2**	0.1
Net finance costs and arrangement fees	**(9.5)**	(4.7)
Dividends paid	**(49.8)**	(46.5)
Own shares purchased/issue of shares	**(2.4)**	(3.0)
Adjustment for cash outflow on share awards not settled by own shares	**(3.3)**	(2.5)
Disposal of operations	**–**	0.9
Effects of foreign exchange	**(17.0)**	(8.6)
Movement in net debt	**50.3**	(145.8)
Opening net debt	**(246.7)**	(100.9)
Closing net debt	**(196.4)**	(246.7)

Net debt to EBITDA

	2017 £m	2016 £m
Adjusted operating profit	**203.4**	173.2
Depreciation and amortisation (excluding acquired intangible assets)	**26.3**	21.8
EBITDA	**229.7**	195.0
Net debt to EBITDA	**0.86**	1.27

A summary of the year's cash flow is shown in the table above. The largest outflows in the year were in relation to dividends and taxation paid. Working capital outflow, comprising changes in inventory, receivables and creditors, totalled £13.9m (2016: £5.8m). This outflow was higher than typical following strong revenue growth in the final quarter leading to increased year end debtor balances. Debtor days remain in line with the prior year and outstanding debtor balances are actively reviewed as part of our year end process.

Dividends totalling £49.8m (2016: £46.5m) were paid to shareholders in the year. Taxation paid was £33.2m (2016: £27.2m).

Capital allocation and funding
Halma aims to deliver high returns, measured by Return on Total Invested Capital (ROTIC), well in excess of our cost of capital. Future earnings growth and strong cash returns underpin ROTIC and our capital allocation as follows:

Investment for organic growth

Organic growth is our priority and is driven by investment in our businesses, in particular through capital expenditure, innovation of new products, international expansion and the development of our people.

Regular and increasing returns to shareholders

We have maintained a long-term progressive dividend policy as our preferred route for delivering cash returns to shareholders.

Value enhancing acquisitions

We supplement organic growth with acquisitions in related markets. This brings new technology and Intellectual Property into the Group and can expand our market reach.

Investment for organic growth
All sectors continue to innovate and invest in new products with R&D spend determined by each individual Halma company. This year R&D expenditure grew by 23% with increased investment through the year, in particular in the Infrastructure Safety sector. Excluding currency impacts, R&D expenditure increased by 13%. R&D expenditure as a percentage of revenue increased to 5.3% (2016: 5.1%). In the medium term we expect R&D expenditure to increase broadly in line with revenue.

Under IFRS accounting rules we are required to capitalise certain development projects and amortise the cost over an appropriate period, which we determine as three years. In 2016/17 we capitalised £10.7m (2016: £8.6m), and amortised £6.8m (2016: £5.0m). This results in an asset carried on the Consolidated Balance Sheet, after £1.4m of foreign exchange gain, of £28.8m (2016: £23.5m). All R&D projects and particularly those requiring capitalisation, are subject to rigorous review and approval processes.

Capital expenditure on property, plant and computer software this year was £24.4m (2016: £24.1m). The prior year included additional investment of £4m in Group properties. The underlying increase in fixed assets was spread across the four sectors supporting our operating capability, capacity and growth. We anticipate increased capital expenditure in the coming year.

Regular and increasing returns for shareholders
Adjusted[1] earnings per share increased by 17% to 40.21p (2016: 34.26p). Statutory earnings per share increased by 19% to 34.25p (2016: 28.76p). We deliver shareholder value via consistent growth in earnings per share and this is reflected in our senior management share-based incentives.

The Board is recommending a 7.0% increase in the final dividend to 8.38p per share (2016: 7.83p per share), which together with the 5.33p per share interim dividend gives a total dividend of 13.71p (2016: 12.81p), up 7.0%. This year dividend cover (the ratio of adjusted profit after tax to dividends paid and proposed) is 2.93 times (2016: 2.67 times).

The final dividend for 2016/17 is subject to approval by shareholders at the AGM on 20 July 2017 and will be paid on 16 August 2017 to shareholders on the register at 14 July 2017.

We continue with a long-term progressive dividend policy, maintaining a prudent level of dividend cover. The aim is to deliver consistent, sustainable and affordable dividend growth. Dividend growth has been an important contributor to our Total Shareholder Return over many years.

The Board's determination of recommended annual dividend increases takes into account the medium-term rate of organic constant currency growth, organic investment needs and acquisition opportunities, while maintaining moderate debt levels.

One acquisition in the year
Acquisitions and disposals are an important part of our growth strategy. We buy businesses already successful in, or adjacent to, the niches in which we operate. Sector acquisition resources to support this strategy have been further increased in the year.

In January 2017 we acquired FluxData, based in New York State, which joins our Environmental & Analysis sector. The initial consideration was US$12m (£9m). Deferred contingent consideration of up to US$15.5m (£12m) is payable for growth to March 2019. Our current estimate is that US$11m (£9m) will be paid in deferred contingent consideration and this has been provided for in the accounts.

There were three acquisitions completed in the second half of 2015/16. In the first half of 2016/17 in aggregate these contributed less to revenue and profit than their run rates at acquisition. As expected their contribution increased in the second half of this year with contracts in place at acquisition progressing to plan. An increased contribution is anticipated in the coming year and we expect a good performance from these acquisitions over the long term.

The acquisition of Visiometrics S.L. in the prior year was structured with a high element of deferred contingent consideration to reduce the financial risk to the Group if the vendor's growth forecast targets were not met. Deferred contingent consideration previously provided for of £10m has been released in 2016/17 relating to a specific customer where sales targets will not be achieved. Offsetting this is the £12m impairment of the customer related intangible asset attributable to the same customer. Both of these items are included in the adjustments to profit detailed in Note 2 to the Results. Our current estimate is that £12.0m remains to be paid in deferred contingent consideration on this acquisition and this amount is provided for in the accounts.

Funding capacity increased
Halma operations are inherently cash generative and the Group has access to competitively priced debt finance providing good liquidity for the Group. Group treasury policy is conservative and no speculative transactions are undertaken. We continue to fund organic and acquisition growth through our strong cash flow and use of debt facilities.

In November 2016 we increased our Revolving Credit Facility from £360m to £550m for five years to 2021 on favourable terms. This supplements the US$250m US Private Placement drawn down in January 2016 which provided diversification of Group funding.

At the year end net debt was £196.4m (2016: £246.7m), a combination of £265.2m of debt and £68.8m of cash held around the world to finance local operations. The gearing ratio at year end (net debt to EBITDA) reduced to 0.86 times (2016: 1.27 times) following cash inflows this year. We are comfortable operating at this level of gearing and would increase to 2 times gearing if the timing of acquisitions required it. Net debt represents 5% (2016: 7%) of the Group's year end market capitalisation. The Group continues to operate well within its banking covenants with significant headroom under each financial ratio.

These sources of funding provide Halma with the financial resources to operate within its existing business model for the medium term, continuing investment in our business and with substantial capacity for further acquisitions.

Average debt and interest rates

	2017	2016
Average gross debt (£m)	**300.5**	208.1
Weighted average interest rate on gross debt	**2.00%**	1.54%
Average cash balances (£m)	**67.3**	57.7
Weighted average interest rate on cash	**0.32%**	0.38%
Average net debt (£m)	**233.3**	150.4
Weighted average interest rate on net debt	**2.49%**	1.99%

Pensions update
We closed the two UK defined benefit (DB) plans to new members in 2002. In December 2014 we ceased future accrual within these plans with future pension benefits earned within the Group's Defined Contribution (DC) pension arrangements. These changes have reduced Group risk.

The Group accounts for post-retirement benefits in accordance with IAS 19 Employee Benefits. The Consolidated Balance Sheet reflects the net deficit on our pension plans at 1 April 2017 based on the market value of assets at that date and the valuation of liabilities using year end AA corporate bond yields.

On an IAS 19 basis the deficit on the Group's DB plans at the 2016/17 year end has increased to £74.9m (2016: £52.3m) before the related deferred tax asset. The value of plan assets increased to £265.0m (2016: £221.9m). In total, about 50% of plan assets are invested in return seeking assets providing a higher expected level of return over the longer term. Plan liabilities increased to £339.9m (2016: £274.2m) primarily due to the reduction in the discount rate from 3.4% to 2.5%.

The plan's actuarial valuation reviews, rather than the accounting basis, determine any cash deficit payments by Halma. Following the most recent triennial actuarial valuation of the two UK pension plans, cash contributions aimed at eliminating the deficit were agreed with the trustees. In 2016/17 these contributions amounted to £10.2m (2016: £7.7m) with agreed modest future increases. The next triennial valuations are due in late 2017 and early 2018 and following these appropriate revised contribution rates will be set as necessary.

Risk management

Halma has a well-established business and financial model which has delivered success consistently over the long term. The model is based on considerable autonomy and accountability at operating company and sector level, within a robust strategic framework supported by strong policies and clear procedures. In the year we have continued to develop risk and control capability within each sector and we recruited a Director of Risk and Internal Audit at Group level to help support growth of our businesses and our proactive approach to risk management.

Risk is managed closely and is spread across well-resourced companies, each of which manages risk to its individual level of materiality. There are extensive review processes in place including peer financial review and risk-based internal audit. The principal Group risks have been referenced below and in the Chief Executive's Strategic Review and Sector Reviews. In addition principal risks are highlighted in the Audit Committee Report and Auditor's Report in the Annual Report and Accounts 2017.

The UK Corporate Governance Code issued by the Financial Reporting Council (FRC) requires regular monitoring of risk by the Board. As noted above, for many years we have had comprehensive and regular review of risk taking place at many levels throughout the organisation and this is discussed more fully in the Strategic Report and Governance sections within the Annual Report.

The UK referendum decision in June 2016 to leave the European Union has added a new dimension to the uncertainties surrounding global economic growth. In 2016/17, approximately 10% of Group revenue came from direct sales between the UK and Mainland Europe. Our decentralised model with businesses in diverse markets and locations enables each Halma company to adapt quickly to changing trading conditions, such as weaker Sterling, offering competitive pricing opportunities for exports from the UK.

Halma has formed an executive working group that is tasked with assessing and monitoring the impacts on our business and to communicate updates and guidance as the Brexit process evolves. To date, the following risks have been identified as having an actual and/or potential impact on our business:

- Economic conditions - increased overall uncertainty including the specific impacts on growth, inflation, interest and currency rates
- Defined benefit pension liability - movements in bond yields affecting discount rates which may increase the liability
- Laws and regulations - potential changes to UK and EU based law and regulation including product approvals, patents and import/export tariffs

Cyber security represents an ongoing risk to our businesses. This year, in addition to continuing our online employee awareness programme, we have further strengthened the proactive monitoring of threats and our system resilience. We continue to extend our international team and also continue to design cyber security into our products.

The Board considers all of the above factors in its review of 'Going Concern' as described below. In addition the Viability Statement is presented in an abridged form below, and in full in the Annual Report and Accounts 2017, extending the Board's review over a three year period. Both reviews have been concluded satisfactorily.

The Annual Report and Accounts is prepared in line with the latest requirements for integrated reporting and the Board has taken care to ensure that it is 'fair, balanced and understandable'. The Audit Committee took a key role in assessing compliance with reporting requirements supported by robust management processes.

Kevin Thompson, **Finance Director**

[1] In addition to those figures reported under IFRS Halma uses adjusted figures as key performance indicators as management believe these measures enable them to better assess the underlying trading performance of the business. Adjusted profit excludes the amortisation and impairment of acquired intangible assets; acquisition items, restructuring cost and profit or loss on disposal of operations. All of these are included in the statutory figures. Note 11 to the Results gives further details with the calculation and reconciliation of adjusted figures.

[2] See Highlights.

Process Safety Sector Review

Products which protect people and assets at work. Specialised interlocks that control critical processes safely. Instruments that detect flammable and hazardous gases. Explosion protection and pressure relief systems, and corrosion monitoring products.

Philippe Felten, Sector Chief Executive, Process Safety

Sector progress summary
The sector has delivered both revenue and profit growth in difficult market conditions.

In the first half of the year our major market, energy, was still impacted by low oil prices. The second half saw improvements with a combination of stabilised oil prices and positive progress in our diversification strategy.

These factors and investment made during the year have positioned the sector to continue to grow in 2017/18.

Market trends and growth drivers
Population growth and economic development drive demand for life-critical resources. The industrial processes supporting this development are at risk from accidents caused by explosions, radiation, fire, corrosion and other hazards. Workers and assets are exposed to these dangers.

Every year, industrial accidents have significant human, environmental and economic consequences. These accidents have many causes, including component failure, human error or procedure deviations. The consequences vary in severity from minor (such as loss of production) to major (serious injury, death, closure of business).

The companies in Halma's Process Safety sector have a deep understanding of our customers' safety challenges. We offer innovative and reliable products and technology that reduce accidents and enhance the efficiency of industrial processes by isolating, detecting or removing hazards.

Our end markets are diverse and our products can be found in energy (mainly oil and gas), chemical, pharmaceutical, food and beverage, automotive, transport and logistics installations across the globe.

The underlying long term drivers in our Process Safety markets remain relatively unchanged, despite some sectors, such as oil and gas, having faced economic challenges over the last 18 months.

Our main drivers are:

- increasing health, safety and environmental regulations
- industrialisation and population growth, stimulating rising energy demand
- increasing development, complexity and geographic spread of energy resources and their safety requirements
- automation and digitalisation, requiring connected safety controls systems

Governments continue to support increased health and safety regulations to protect people and the environment. This drives the demand for our products at rates that are higher than general economic growth. In a challenging oil and gas environment, the Process Safety sector delivered performance in 2016/17 that demonstrated the robustness of our growth drivers.

Oil prices fell from a high in 2014 due to oversupply and reduced demand as economic growth slowed. The reduction in capital expenditure by the oil majors was significant in the upstream segment, and to a lesser extent in the midstream segment. The sector started to see the impact of this in mid-2015. Chemicals and petrochemicals processing benefited from the low oil price and, in those markets, we saw more resilient demand.

In the first half of 2016/17, market conditions did not change significantly. Oil price stability offered some comfort, but overall, capital expenditure in upstream and midstream markets remained subdued.

In the second half of 2016/17 the oil and gas market was more active, with oil price stability, cost-efficiency efforts, and non-conventional oil extraction in the US creating a slightly more positive environment for our businesses. Although upstream capital expenditure remained tightly controlled, the need to upgrade and maintain safety products led to higher activity levels. These improvements were, however, modest relative to levels seen a couple of years earlier.

In these challenging and complex market conditions, we adapted our strategy by diversifying into non-oil and gas end markets. This demonstrated our flexibility and deep understanding of the applications in which our products can be used. This ability to use our technologies for new applications and new end markets has been a key factor in our improved performance.

Geographic trends
Revenue increased in most major regions. The US revenue grew by 12% helped by the gradual increase in non-conventional oil extraction in the second half of the year.

Europe revenue rose as we diversified our explosion protection business into chemical and pharmaceutical applications, while our safety interlocks businesses saw good momentum in the automotive, food, beverage and transport/logistics markets. UK market activities were flat compared to last year, with continuing low activity in the North Sea.

In China, our business grew by 18% with good progress in the gas detection and machine automation/sequential safety sub sectors. Stricter safety regulations continue to be enforced, creating growing demand for our products in China.

Sales in the Middle East grew strongly by 37% as oil and gas production has been maintained at reasonable levels.

In South America, economic conditions were still depressed. Supported by our Brazil sector hub, we were able to achieve some growth, mainly in the explosion protection market.

We saw good growth in India particularly in our pipeline management sub-sector.

Strategy

Our strategy of investing in new products in order to diversify our end markets and meet specific local requirements has delivered improving results. We reduced costs in some of our oil and gas-exposed businesses and were able to focus our activities on new application niches in non-oil and gas markets.

At the start of the year we combined some of our businesses in order to raise operating efficiency and support diversification. This strategy has led to faster product innovation, increased geographic market reach and improved customer service. Combining these businesses also allowed us to offer customers an extended product portfolio.

Investment in innovation and application engineering capabilities was increased, providing local markets with quick product adaptation for specific requirements.

Our companies embrace globalisation, diversification and the need to develop connected technology. We are upgrading and developing talent across our businesses.

Greater emphasis has been placed on strategic marketing, with our companies researching new market opportunities.

Our acquisition strategy is to focus on businesses that will reinforce our diversification, accelerate our digital transformation, and contribute to our geographic expansion.

Performance

Sector revenues grew by 7% to £167m (2016: £155m) and profit[1] grew by 2% to £40m (2016: £40m). At constant currency, organic revenue was up by 1% and profit down 4%. Return on Sales was 24.1%.

The first half of the year was challenging while the second half saw some positive signs in the non-conventional oil market. This welcome increase in activity, combined with our restructuring efforts aimed at increasing diversification, delivered revenue and profit growth through the second half of the year.

Our machine automation, sequential safety and gas safety companies enjoyed good levels of demand for existing safety products, while offering innovative solutions in new, specific niche applications.

The newly combined sequential safety businesses delivered excellent performance thanks to strong regional activity and centrally-located innovation. Our machine automation business continues to perform well, with good progress in North America and China. The gas detection business also made good progress in China.

Our pressure management companies performed better in the second half due to efforts in chemical and pharmaceutical markets and a slight recovery in the US oil industry.

Our pipeline management businesses had mixed results. The corrosion monitoring business delivered flat profit while our valve interlock businesses faced difficult market conditions, as their products come late in the cycle when capital expenditures are released. Efforts to grasp new opportunities with valve drive units and valve monitoring solutions have started to improve results.

New products (not older than three years) accounted for 29% of sector revenues. R&D spend has remained at good levels, providing new products and innovations to support our growth ambitions.

Outlook

Overall industrial production is expected to increase on the three major continents, with China and the US leading this growth. In parallel, the food and beverage, automotive, and transport and logistics industries will continue to be attractive markets for the sector.

Non-conventional US oil extraction is set to rebound in 2017 and we will benefit from this increased activity. The chemical market will continue to develop further mainly in the USA.

The evolution of smart factories using the internet of things and cloud computing will continue to drive the demand for safety products. We see the possibility to offer extended capabilities as we move to digitalise our products.

We will continue to push on our diversification strategy, constantly looking at specific niche applications.

The combination of market diversification, our newly-combined businesses, and a slow economic improvement in the oil and gas industry will enable us to make further progress in the coming year.

[1] See note 2 to the Results.

Infrastructure Safety Sector Review

Products and services that improve the safety and mobility of people and protect commercially and publicly owned infrastructure. Fire detection systems, smoke detectors, specialist fire suppression systems, people and vehicle flow solutions, security systems and elevator safety products.

Paul Simmons, Sector Chief Executive, Infrastructure Safety

Sector progress summary
The Infrastructure Safety sector delivered strong organic revenue and profit growth with revenue growth across all geographic regions and most sub-sectors. Record results in the Fire detection and People and vehicle flow sub-sectors more than compensated for a more challenging year for the Fire suppression sub-sector.

Return on Sales and Return on Capital Employed remained comfortably above the Group's targets with good cash generation. Investment in R&D in absolute terms and as a percentage of sales continued to increase. New sensing technologies, increased product functionality and inter-connectivity were the predominant themes in building the sector's new product pipeline.

Market trends and growth drivers
The long-term growth drivers of global population growth, urbanisation and increasing health and safety regulation worldwide remain central to our strategy. We are also increasingly focusing on two additional drivers:

- the need for increased efficiency in buildings and people movement
- the need for protection from increasing threats to security

These growth drivers provide the potential for each of our sub-sectors to grow at a faster rate than their wider markets.

Technology trends across all sector businesses include the increasing inter-connectivity of devices and systems, wireless technology and an increase in the use of cloud based applications to share data and facilitate data analysis.

The combined effect of the market growth drivers and technology trends are reflected in each sub-sector's market growth rates:

- the global elevator market is expected to grow at around 6% per year. The elevator refurbishment market is forecast to grow above that due to an ever-increasing installed base. Due to the high cost of fixed telephone lines, mobile telecommunications technology is increasingly being utilised to connect elevator cars to call centres for emergency communications and to facilitate data transmission for applications such as predictive maintenance
- the fire detection market is forecast to grow at over 5% annually with premium products such as multi-function sensors, wireless detectors and networked panels expected to grow beyond the general market growth rate. Increased regulation continues to be important in the fire market. For example, China's fire regulator (CCCF) will introduce more stringent standards in the next few years. A change to Underwriter Laboratories' (UL) fire regulation requirements to deal with new types of fire and to eliminate nuisance alarms will increase detector specifications in 40% of the global market by 2020. The global fire suppression market is expected to grow at 5% per year
- the core of our People and vehicle flow sub-sector is pedestrian sensing. Our strategy of diversification into other applications such as vehicle sensing and people counting is reducing our dependence on the 4% growth global door market and providing higher growth opportunities
- increasingly home owners are looking to integrate their home security systems with the automation of other functions of property management, all controlled and monitored from smart phones. These connected systems are poised to deliver annual growth of 9% as part of the total security market growth of 5% annually

Geographic trends
While all sub-sectors enjoy positive market growth worldwide, there are regional variations. These are driven by specific local opportunities (for example vehicle inspection in China), local changes in regulations (for example fire regulations changes) or regional economic growth rates. For example, the fire detection market is due to grow 12% per year in India, 7% in China and below 5% in the USA and Europe.

The sector's regional companies can see changes within a geographic market. For example, the Chinese elevator OEM supply market is very large but highly competitive. The elevator service and refurbishment market in China is much less mature and offers both higher margin and higher growth opportunities. Another example is the opportunity created for people flow technologies created by China's significant investment in its high-speed rail network.

Strategy
The Infrastructure Safety sector is focused on improving the safety and mobility of people and protecting commercially and publicly owned infrastructure worldwide. We target high return, niche markets that have low cyclicality and have high barriers to entry. We build our business globally by developing products and services within our sector companies or by acquiring companies that are already leaders in targeted, adjacent markets.

The trend towards the interconnectivity of devices to form more intelligent systems is playing an increasingly important part in the sector's strategic actions, with the opportunity to offer customers broader solutions than simply detecting hazards.

Many sector companies are well placed to generate data and data analysis through their sensor technologies. This trend is driving increased collaboration between our companies as they co-operate on joint development programmes.

Geographic expansion remains a priority. We continue to strengthen our teams and our product offerings in China, India and South East Asia. These geographies are particularly attractive due to their higher growth rates and the support that the Halma hub infrastructure can provide.

Our key strategic objectives to drive growth include:

- acquiring companies to strengthen our core technologies
- acquiring companies in adjacent niche markets
- launching new products to create additional value in existing and new applications
- developing new products to expand our offerings along the digital value chain
- establishing R&D capabilities close to our customers
- developing top talent and hiring a capable and diverse team to meet the changing challenges in our markets
- operational excellence and the sharing of best practice to sustain growth in existing product areas and market segments

Performance

Revenue grew by 19% to £315m (2016: £265m) and profit[1] by 17% to £65m (2016: £56m). Organic constant currency revenue and organic constant currency profit growth were both 7%.

All geographic regions contributed strongly to revenue growth. Mainland Europe grew by 29%, the US grew by 16% and the UK increased by 11%. Growth outside these established markets was particularly encouraging at 20%.

The Fire detection and People and vehicle flow sub-sectors performed very well. The Security and Elevator sub-sectors delivered a solid performance, while the Fire suppression sub-sector declined.

New products played an important role in driving revenue growth. A new generation laser product achieved rapid success in the People and vehicle flow sub-sector and a new fire detection platform, consisting of multiple products complete with a new operating protocol, was launched.

Our recent acquisitions made a significant impact on the sector's results. Advanced Electronics (Fire detection), acquired in 2014, performed above expectations. In 2015 we acquired Firetrace, our specialist Fire suppression company. The company's performance was below expectations and we made senior management changes to position the business for growth.

Return on Capital Employed remained high and well ahead of the Halma minimum target of 45%. There was significant investment in capitalised R&D programmes and substantial spend on targeted automation of our manufacturing processes. The benefits of the investment in automation contributed immediately in increased capacity and increased labour efficiency.

Gross margins were maintained and Return on Sales was 20.7%, after increased investment in R&D. Cash generation was strong.

Outlook

The strategic growth drivers of population growth, urbanisation and increasing regulation remain key to the sector. Our new product pipeline is strong, with significant products due to be launched across multiple sub-sectors in the next year.
As devices are becoming increasingly interconnected, new opportunities are being created which we are positioned to exploit. Consequently, in the medium-term we expect all sub-sectors to grow at, or better than, market rates through the increased penetration of core markets and geographic expansion.

The level of acquisition activity has increased. We expect acquisitions to both enhance our technology offering in our core markets and accelerate our regional growth in core sub-sectors. Acquisitions also provide an opportunity to build platforms in adjacent sub-sectors. The sector is positioned to make further progress in the year ahead.

[1] See note 2 to the Results.

Medical Sector Review

Products which enhance the quality of life for patients and improve the quality of care delivered by providers. Devices that assess eye health, assist with eye surgery and primary care applications. Critical fluidic components used by medical diagnostic OEMs and laboratories. Sensor technologies used in hospitals to track assets and support patient and staff safety.

Adam Meyers, Sector Chief Executive, Medical

Sector progress summary
The Medical sector delivered record revenue and profit on both an as reported and organic constant currency basis. Revenue grew in all our major geographies.

Including recent acquisitions and currency movement, the sector achieved 31% revenue growth and 29% profit growth. Medical has averaged greater than 15% growth in both revenue and profit since it began reporting as a sector in 2013.

On an organic constant currency basis, revenue grew 4% and profit was ahead 6%.

R&D spending increased again by more than £2m, with continued investment in our core businesses and investment in recent acquisitions adding new capabilities to our research teams.

We continued to focus on talent development, investing in our key people both at the sector level and throughout our subsidiaries.

Return on Sales remained flat at 26% and Return on Capital Employed and cash production continue to be strong.

The performance of our recent acquisitions improved in the second half and we continued to focus on acquiring new businesses.

Market trends and growth drivers
The Medical sector growth driver of increasing demand for healthcare is underpinned by:

- worldwide population ageing and increasing life expectancy
- increasing prevalence of diabetes, obesity and hypertension
- increasing healthcare access in developing economies
- new medical diagnostic technologies
- new or improved surgical and pharmaceutical therapies

Global healthcare spending is forecast to rise over 4% per year through to 2020 with higher rates in Asia Pacific.

The world population is expected to increase by 1 billion by 2025 with 300 million of that increase predicted to come from people over 65. Because eyesight problems and high blood pressure are both age-related, population ageing is a key driver for our businesses, especially in ophthalmology and hypertension management.

With the continued growth of the middle class in developing economies, it is forecast that 65% of the global population will be middle class by 2025. Coupled with increased urbanisation, rising affluence is likely to lead to more sedentary lifestyles which increases obesity and hypertension-related illness and diabetes-related eye disorders.

Currently, one in every three US adults has high blood pressure and only half of these individuals have their condition under control. A further one third have prehypertension which means they should continue to have their blood pressure monitored by the type of products made by our patient assessment companies.

Cataract surgery is one of the most frequent surgical operations carried out worldwide at more than 25 million annually. Continued growth in the number of cataract surgeries and an ongoing shift towards disposable instrumentation will drive global spending on ophthalmic surgical instrumentation over 5% per year through to 2022.

In addition to the prevalence of eye disease with ageing, demand is increasing for improved visual outcomes and premium procedures due to people's lifestyles. By 2020, premium cataract procedures are expected to account for 34% of total cataract surgery revenue as wealthier and younger patients are demanding perfect vision at every stage in life. This market for high-revenue, personal payment premium procedures is of increasing importance to our ophthalmic companies which focus on improved patient outcomes.

Hospitals remain under pressure to improve patient outcomes, reduce costs, improve throughput and ensure safety of staff and patients. The global market for the real time location systems that we recently added to our portfolio, is forecast to grow at 24% per year between 2016 and 2022.

The increasing prevalence of lifestyle-connected and chronic disease, along with a growing acceptance of molecular diagnostics in personalised medicine, is driving growth in the in vitro diagnostics and laboratory markets served by our diagnostic companies. This market is projected to grow at 5.5% through to 2021.

We are starting to see other macro trends around healthcare delivery impacting our markets and offering growth opportunities. Telemedicine is growing at almost 19% annually as it offers dramatically different ways to deliver healthcare by sharing information and data across a wide range of service providers. One of our ophthalmology companies is using remote diagnosis via telecoms to help prevent blindness in diabetic patients.

Trends like increasing global healthcare costs are putting pressure on product pricing and government expenditure, increasing market volatility in some geographies.

Globally regulated markets continue to shift as increased medical product and procedure approvals delay product launches, especially in geographies such as China and Brazil, and more recently Europe. Recent changes suggest India is introducing tighter regulation too. Overall, our strong channels and regulatory experience position us well to navigate this environment and provide barriers to entry for new entrants.

Geographic trends

There continues to be considerable geographic variation in the global medical device market due to local economic conditions, government spending programmes and currency fluctuations. Our growth strategies will continue to vary by region.

The global medical device market is expected to continue to grow 5% through to 2021. North America will remain the largest market for medical device technologies, growing at 4%. In the Asia Pacific market growth is forecast to continue above 7%, with Europe recovering at 5% through to 2021.

US healthcare expenditure continues to have the highest spending per capita, but we may see significant change under the new political administration. Hospitals are seeing relief from covering the uninsured as more Americans benefit from health insurance through the Affordable Care Act, allowing them to invest in new technologies, although, this may change. We expect continued growth for our single-use surgical devices in the USA and growing demand in Europe.

The Chinese ophthalmology market could double by 2021 and we continue to expand our engineering, sales and marketing staff to drive the development and commercialisation of local products. Changing government restrictions from pricing controls to regulatory tightening continue to make this a dynamic market.

The Latin American market continues to experience volatility although should continue to grow on average across the region. The in vitro diagnostic business, a focus of our diagnostic companies in the region, is forecast to grow 7% annually to 2020.

Strategy

The Medical sector is focused on enhancing the quality of life for patients and improving the quality of care delivered by providers.

We serve niche applications in global markets. By investing in our current portfolio, and acquiring additional companies, we aim to continue to deliver growth rates at, or above, Group targets.

We organise our medical businesses into two segments: Patient care and Provider solutions. Patient care includes businesses that develop and market devices to monitor and improve the health of patients. Current focus areas include ophthalmology and patient assessment.

Provider solutions features products sold to diagnostic equipment manufacturers, laboratories and hospitals. Current focus areas include critical fluidic components for instruments such as blood analysers, finished devices for laboratories, and sensor technologies that track assets in healthcare facilities and support patient and staff safety.

Key sector strategic initiatives to increase growth organically and via acquisition include:

- improving talent and increasing diversity
- increasing collaboration to drive geographic expansion and product development
- increasing R&D investment to adapt to quickly changing market needs and respond to consumerisation of healthcare globally
- empowering regional leaders to expand geographic penetration and increase local manufacturing and R&D
- acquisitions in both core and adjacent market niches

We continue to seek and develop higher calibre talent. We have increased our gender and international diversity to drive innovation, collaboration and better meet market needs.

Collaboration between our Medical sector businesses continues to increase with shared R&D projects reaching commercialisation and sales and marketing projects like shared service technicians in Brazil.

R&D spending increased by £2.4m to 4.3% of revenue, which is above Group target.

This is a 27% increase over last year and 68% higher than two years ago. The increase has come throughout our core businesses as well as new acquisitions.

Our R&D focuses on components and instruments that will be readily accepted by our existing customer base as well as technologies that will advance patient care, reduce cost and improve outcomes. Efforts continue in emerging markets to better satisfy local customer needs including expanding local resources and increasing local R&D and manufacturing capability.

During 2017 we will expand our collaborative efforts in China, jointly marketing a wider range of ophthalmic and diagnostic products.

Performance

The Medical sector grew revenue by 31% to £261m (2016: £199m) and profit[1] by 29% to £67m (2016: £52m). This includes a favourable currency impact of 14%. Organic constant currency revenue growth and organic constant currency profit growth were 4% (2016: 10%) and 6% (2016: 9%) respectively.

We delivered revenue growth in all major regions with the USA ahead 43%, Europe up 13%, the UK 13% higher and Asia Pacific ahead 36%.

Growth outside the UK, USA and Europe was 29%, contributing 25% of sector revenue.

The sector continues to deliver high returns. Return on Sales remained high at 25.6% (2016: 26.0%). Return on Capital Employed and cash generation remained strong.

We did not complete any acquisitions in 2016/17, but continued the integration of the three businesses acquired in the prior year. These businesses delivered strong second half performances and will continue to contribute to sector growth in the year ahead.

Outlook

In the medium term, we expect our Patient care and Provider solutions segments to outperform the market with rising revenue driven by export growth, new products, increased penetration in existing markets and acquisitions.

We will continue to build our acquisition targets pipeline within existing and adjacent niches, and expect continued growth from the businesses acquired in 2015/16.

[1] See note 2 to the Results.

Environmental & Analysis Sector Review

Products and technologies for analysis in environmental safety and life sciences markets. Market-leading opto-electronic technology and sensors. Flow measurement instruments and gas conditioning products. Products for environmental data recording, water quality testing and water distribution network monitoring, and UV water treatment.

Chuck Dubois, Sector Chief Executive, Environmental & Analysis

Sector progress summary
The Environmental & Analysis sector achieved record results with good organic revenue and profit growth, continuing the progress made last year.

Global emphasis on climate change and pollution monitoring continues to strengthen the position of our environmental applications. We grew significantly in emerging markets, particularly in the Asia Pacific region, led by environmental monitoring applications. Our water businesses had a successful year with a strong performance in North America. Our photonics businesses continued to find new applications in a variety of diversified markets and industries.

The acquisition of FluxData strengthened our technological capabilities, greatly increasing the number of opportunities for the sector in spectral imaging and sensing.

We completed the restructuring of our photonics coating business, Pixelteq, by transferring key technologies and assets into Ocean Optics, while Ocean Optics Asia was folded back into the Ocean group under a strong leadership team and coordinated strategy. We expect to see the benefits of this restructuring in the coming financial year.

Market trends and growth drivers
The Environmental & Analysis sector's long-term growth is sustained by three key drivers:

- rising demand for life-critical resources such as energy, water and food
- increasing environmental monitoring and regulations
- worldwide population growth, urbanisation and rising standards of living

Globally, water demand is predicted to increase significantly over the coming decades in all sectors from agriculture and industry to energy production. Accelerated urbanisation and the expansion of municipal water supply and sanitation systems, particularly in developing regions, also contribute to the rising demand. At the same time, limited water resources are increasingly stressed by over abstraction, pollution and climate change.

Two thirds of the world's population currently live in areas that experience water scarcity for at least one month a year. About 500 million people live in areas where water consumption exceeds the locally renewable water resources by a factor of two. Our products monitor surface, municipal and waste water conditions, helping improve water conservation both in developing and developed countries.

Water quality testing applications use our products to assess the presence of faecal coliforms, which originate from human and animal excreta, and are used as an indicator of the presence of all potential pathogens in surface waters. This is especially important in developing countries and rural areas. It is estimated that severe pathogen pollution affects around one third of all river stretches in Africa, Asia and Latin America, putting the health of millions of people at risk.

Population growth has outpaced gains in sanitation and drinking water coverage, especially in urban areas. Only 26% of urban sanitation and wastewater services effectively prevent human contact with contaminants along the entire sanitation chain. Our water testing systems help identify the contaminants in these water networks, while our UV systems disinfect drinking and waste water in major cities around the world as well as being the primary method of disinfection for many bottled water plants.

Outdoor air pollution is a major environmental health risk affecting everyone in developing and developed countries alike. In 2014, 92% of the world population lived in places where the World Health Organization air quality guidelines levels were not met, and ambient air quality (outdoor air pollution) in both cities and rural areas was estimated to cause three million premature deaths worldwide. For example, in China only 25 of 190 cities studied could meet the country's National Ambient Air Quality Standards.

We provide systems that assist in the precise detection of contaminants as well as other products that aid in the calibration of pollution monitoring equipment. Further, our gas conditioning equipment is ideally suited for stack emission monitoring of gases such as SO_2 and NO_x as well as for measuring the fine particles ($PM_{2.5}$) which are believed to be the greatest risk to health. These applications are also beginning to find success in India, which overtook China in air pollution levels in cities in 2015.

Our recent acquisition of FluxData has strengthened our position in spectroscopy and spectral specific imaging. By looking at specific spectral bands, they provide much more information in far less time than traditional methods, thus allowing for higher efficiency and decreased waste.

Applications include inspection during industrial processes including the production of food and beverages, pharmaceuticals and agriculture. The non-invasive nature of the technology is also best suited for security applications such as detection of explosive or hazardous chemicals, non-invasive medical diagnostics, and environmental and remote sensing applications. Process spectroscopy is forecasted to grow at 6% annually until 2020, but some of the newer technologies that we employ such as Raman spectroscopy and spectral imaging are forecast to grow at even faster rates.

Geographic trends

We sell into a wide variety of diverse market niches. These niches exhibit different characteristics that vary according to each specific country's requirements, their economy and their regulatory environment.

The China National 13th Five-Year Plan is having a profound impact on the environmental landscape of China. Stricter compliance measures for urban air quality, standardisation of the regulations around industrial pollutant emissions and ultra-low emissions of coal-fired power plants are all aimed at improving the quality of air, especially in urban areas. Similarly, other control plans are being enacted for water and soil pollution. For example, there is continued emphasis on improving rural access to clean water and improving the water distribution network and wastewater treatment.

In India, emissions monitoring and concerns over air pollution are increasing and we have designed products that specifically address the needs of this market. We expect that stronger water monitoring protocols are next. We are ready to supply products suited to their needs, benefiting from our experience in China.

We continue to grow well in the developed countries. While growth in pollution monitoring in some regions might not be as significant as in the emerging markets, there are other niches that we continue to serve through a variety of technologies. Performance in the USA was particularly strong this year, as our life science and research products continued to grow sales, as did some of our water monitoring businesses. Designing products in, and for, emerging markets is important to our growth, although we continue to develop products for our core markets too.

Strategy

Our products improve the quality of air, water and food for everyone on the planet. They enable the development and manufacture of products that improve our health and well-being. Our growth strategy centres on market-led new product development, geographic expansion and collaboration between the companies in the sector. Through this we will enhance our ability to help solve the problems our world faces.

We continue to seek, foster and invest for growth in emerging markets. Revenue from countries outside the UK, the USA and Europe has grown 55% in the past five years, as we have captured larger opportunities thanks to more stringent regulations driven by a demand for environmental protection, safer food and water, and better health and sanitation.

Most of our companies provide sensors that are a data collection point. Data availability has dramatically changed in the last few years, and our companies are increasing their efforts in exploring new ways to capture, manage, manipulate and utilise data.

Talent management and development has been a major contributor to the continued success of the sector. The introduction of a Sector Talent Director has supported our sector-level initiative to achieve stronger and more diverse company boards across the sector.

We are targeting acquisitions in segments that tie to our existing technologies and/or market knowledge, have good long-term growth drivers and defensible positions through regulations or intellectual property. For example, our most recent acquisition, FluxData, extends our spectroscopic capability into spectral imaging to provide more valuable information to our customers.

Performance

The sector grew revenue by 16% to £219m (2016: £189m) and profit[1] by 21% to £42m (2016: £34m). At constant currency, organic revenue growth was 4% and organic profit growth was 6%. Return on Sales improved to 19.0% (2016: 18.3%) and was within the Group target range.

This year, and following the geographic consolidation of our photonics coatings business (Pixelteq) in 2014/15, we transferred its core technology and assets to Ocean Optics. This restructuring benefited the sector's full year adjusted profit by £0.5m in 2016/17 and will also add £1.5m in 2017/18, while simultaneously improving key returns metrics. This restructuring resulted in exceptional costs amounting to £1.9m, which are included within the adjustments to the Income Statement.

The acquisition of FluxData during the year opens up many new growth opportunities. Prior to joining Halma, FluxData worked with two of our existing businesses and we expect that number to rise as they become fully integrated.

Outlook

Global population growth, population ageing and increasing standards of living will continue to drive demand for basic energy resources, cleaner air, safer water and food, and improved health. Our products and companies are well-positioned to continue to take advantage of these long-term growth drivers both in developing and developed countries.

We will continue to improve collaboration between our sector companies in terms of technology, processes, and sales and marketing, to improve efficiency, innovation and performance.

Our acquisition pipeline is growing and we expect to add complementary businesses in the coming years.

[1] See note 2 to the Results.

Principal Risks and Uncertainties

Halma's principal risks and uncertainties are detailed below and are supported by the robust risk management and internal control systems and procedures noted in the Annual Report and Accounts 2017.

Risk description	Potential impact	Mitigation
Globalisation The global interconnectedness of operations poses wide-ranging challenges across the Group especially where businesses manage operational matters via remote locations; the increasing global spread of our businesses, particularly in China, requires additional vigilance over communication, culture, training and export controls/sanctions in order to anticipate and contain any vulnerabilities.	- Weakening of financial, tax, audit and legal control and divergence from overall Group strategy in remote operations, leading to businesses taking on more risks than intended or unexpected financial outcomes. - Failure to comply with local laws and regulations in unfamiliar territories, leading to reputational issues and legal or regulatory disputes. - Continued international growth increases risk. - Missed opportunities due to failure to mobilise resources efficiently.	- Control is exercised locally in accordance with the Group's policy of autonomous management. We seek to employ local high-quality experts. - The increasing geographic diversity of operating personnel emphasises the importance the Group places on local knowledge and experience. - The Group's acquisition model supports retention of management and staff in acquired businesses, meaning that local expertise is retained. - Sector Chief Executives ensure that overall Group strategy is fulfilled through ongoing review of the businesses. The right balance between autonomy and adherence to the overall objectives of the Group is a key function of the Sector Chief Executives, Sector Vice Presidents and Senior Finance Executives. - Regular visits to remote operations and maintenance of key adviser relationships by senior management, finance staff and Internal Audit support local control. - The Group's geographic and product diversity reduces risk.
Competition The Group faces competition in the form of pricing, service, reliability and substitution.	- Loss of market share due to price pressure and changing markets. - Reduced financial performance arising from competitive threats both from third parties and customers bringing production in-house.	- By empowering and resourcing innovation in local operations to respond to changing market needs, the potential adverse impact of downward price pressure and competition can be mitigated and growth maintained. - We recognise the competitive threat coming from emerging economies and by operating within these economies, typically using local staff, we are better placed to make fast progress ourselves. - The Group operates in specialised global niche markets offering high barriers to entry.
Economic conditions In times of uncertain economic conditions, businesses face additional or elevated levels of risk. These include market and customer risk, customer default, fraud, supply chain risk and liquidity risk. The decision made in the UK to leave the EU (Brexit) creates additional uncertainty.	- Reduced financial performance. - Loss of market share. - Unforeseen liabilities. - Disruption of service to customers. - Breaches of legal or regulatory requirements resulting in fines/ penalties impacting the Group financially and reputationally. - Potential impairment of goodwill.	- Risks are primarily managed at the operating company level where local knowledge is situated. The financial strength and availability of pooled finances within the Group mitigates local risks faced by operating companies as does the robust credit management processes in place across the Group. - The Halma Executive Board identifies any wider trends which require action. - A Brexit Committee has been created to assess, monitor and publish guidance on potential impacts due to Brexit. The agility of Group operations is expected to help mitigate any adverse impacts of Brexit. - The Group's geographic diversity limits its exposure to economic risk arising in any one territory. The Group does not have significant operations, cash deposits or sources of funding in economically uncertain regions.
Financial *Funding* A key risk is that the Group may run out of cash or not have access to adequate funding. In addition, cash deposits are required to be held in a secure form and location.	- Constraints on trading and/or acquiring new companies limiting the Group's growth aspirations. - Availability of additional funding in traditional debt markets. - Permanent loss of shareholders' funds and/or restrictions on dividend payments.	- The strong cash flow generated by the Group provides financial flexibility. Cash needs are monitored regularly. Gearing has reduced during the year. - The Group increased its funding capacity in January 2016 via a US$250m US Private Placement. In addition to short-term overdraft facilities, the Group renewed and increased to £550m its five-year revolving credit facility in November 2016 providing security of funding and sufficient headroom for its current needs. - Cash deposits are monitored centrally and spread amongst a number of high credit-rated banks.

Treasury Breaches of banking/US Private Placement covenants and foreign currency risk are the most significant treasury-related risks for the Group. In times of increased volatility this can have a significant impact on performance. The Group is exposed to a lesser extent to other treasury risks such as interest rate risk and liquidity risk.	- Volatile financial performance arising from translation of earnings from the Group's increasing proportion of overseas operations or poorly-managed foreign exchange exposures. - Deviation from core strategy through the use of speculative or overly complex financial instruments. - Financial penalties, reputational damage and withdrawal of facilities arising from breach of banking/ US Private Placement covenants. - Increased interest rate risk on higher borrowings. - Currency markets continue to be volatile causing uncertainty.	- The risk has increased because more of the Group's profits are derived from non-Sterling currencies. Currency profits are not hedged. Currency hedging must fit with the commercial needs of the business and we have in place a hedging strategy to manage Group exposures. This requires the hedging of a substantial proportion of expected future transactions up to 12 months (and in exceptional cases 24 months) ahead. Longer-term currency trends can only be covered through a wide geographic spread of operations. - The Group does not use overly complex derivative financial instruments and no speculative treasury transactions are undertaken. - We closely monitor performance against the financial covenants on our revolving credit facility and US Private Placement and operate well within these covenants.
Pension deficit To meet our pension obligations, we must adequately fund our closed UK defined benefit pension plans.	- Excessive consumption of cash, limiting investment in operations. - Unexpected variability in the Company's financial results.	- There is regular dialogue with pension fund trustees and pension strategy is a regular Halma Board agenda item. The Group's strong cash flows and access to adequate borrowing facilities mean that the pensions risk can be adequately managed. - The Group has maintained additional pension contributions with the overall objective of paying off the deficit in line with the Actuary's recommendations over an appropriate period. Alternative means of reducing pension risk is evaluated in light of the best long-term interest of shareholders.
Cyber security/Information Technology/Business interruption/Natural disasters Group and operational management depend on timely and reliable information from our IT systems to run their businesses. We seek to ensure continuous availability, security and operation of those information systems. Cyber threats continue to show an increasing trend. We also aim to have wider business continuity plans in place should one or more of our premises suddenly became unavailable.	- Delay or impact on decision making through lack of availability of sound data or disruption in/denial of service. - Reduced service to customers due to poor information handling or interruption of business. - Loss of commercially sensitive and/or personal information. - Intended and unintended actions of employees cause disruption, including fraud.	- There is substantial redundancy and back-up built into Group-wide systems and the spread of business offers good protection from individual events. - A small central resource, Halma IT Services, assists Group companies with strategic IT needs and ensures adequate IT security policies are used across the Group. - An IT security committee exists, comprising central and subsidiary IT personnel. - Halma IT is ISO 27001 certified for its information security management systems. - Regular IT health checks of all companies are conducted by the Group IT team. Comprehensive IT systems monitoring is in place. - Cyber risk and security is a regular Board agenda item addressing the landscape as it evolves. - External penetration testing is utilised and a centralised IT disaster recovery solution is in place to supplement local processes. - Business continuity plans exist for each business unit with ongoing testing. - Education/awareness of cyber threats continues to ensure Group employees protect themselves and Group assets.
Acquisitions The identification and purchase of suitable businesses which are an important part of our strategy for developing the Group, as is ensuring the new businesses are rapidly integrated into the Group.	- Failure to attract sufficient numbers of high-quality businesses to meet our strategic growth target. - Failure to deliver expected results resulting from poor acquisition selection. - Failure to identify new markets in which to expand.	- The sector management teams provide resource to focus on M&A activities, including a dedicated M&A Director for each sector. Such resources remain under constant review. - We acquire businesses whose technology and markets we know well or who operate in adjacent markets. - Sector Chief Executives are responsible for finding and completing acquisitions in their business sectors, subject to Board approval, supported by sector and central resources, as necessary. We employ detailed post-acquisition integration plans.

	- Reduced financial performance arising from failure to integrate acquisitions into the Group. - Unforeseen liabilities arising from a failure to understand acquisition targets fully.	- Thorough due diligence is performed by a combination of in-house and external experts to ensure that a comprehensive appraisal of the commercial, legal and financial position of every target is obtained. - Incentives are aligned to encourage acquisitions which are value-enhancing from day one.
Laws and regulations Group operations are subject to wide-ranging laws and regulations including business conduct, employment, export controls/sanctions, environmental and health and safety legislation. There is also exposure to product litigation and contractual risk. The laws and regulations we are exposed to as our businesses expand around the world increase each year.	- Unfavourable changes in laws and regulations that restrict the export of our products. - Reputational damage and/or loss arising from non-compliance. - Diversion of management resources resulting in lost opportunities. - Penalties arising from breach of laws and regulations. - Loss of revenue and profit associated with contractual disputes.	- The Group's emphasis on excellent internal controls, high ethical standards, the deployment of high-quality management resources and the strong focus on quality control over products and processes in each operating business help to protect us from product failure, litigation, fraudulent activities and contractual issues. - Each operating company has a health and safety manager responsible for compliance and our performance in this area is good. Health and Safety policies, guidance and monthly reporting requirements are updated to reflect changing reporting and governance requirements and to enhance compliance. Our well-established policies on bribery and corruption have been maintained during the year to ensure continued compliance with best practice internally, via the Group Code of Conduct and externally, via appropriate clauses included in third-party agreements. - Comprehensive insurance covers all standard categories of insurable risk. Contract review and approval processes mitigate exposure to contractual liability. - The Group's whistleblowing policy and externally facilitated hotline assist the timely identification of potential problem areas. - Continued investment in international markets may introduce additional risk while we develop the appropriate commercial infrastructure necessary to build a direct presence.
Talent and diversity Group performance is dependent on having high-quality talent and diversity at all levels of the organisation allowing us to continue to grow through acquisition as well as driving organic growth.	- Failure to recruit and to retain key staff leading to reduced innovation and progress in the business. - Acquisition growth limited due to our organisation's and leaders' inability to effectively manage acquisition integration. - International growth increasing the need for high-quality local talent.	- Group development programmes are under continuous review to ensure they deliver enhanced skills for executives and middle managers as needed in their current and future roles. - Comprehensive recruitment and ongoing evaluation processes assist high-quality hiring and development. - The Group regularly surveys staff to assess the alignment of individuals with Group values. - The Group Talent Director assists the identification and development of Group executives. - Ongoing focus on increasing the diversity of our employees worldwide to better meet our markets' needs and provide sufficient opportunities for advancement as well as clear succession planning. - Considerable time spent assessing senior management talent and establishing better processes to improve the talent pipeline has advanced our succession planning and talent quality.
Research & Development and Intellectual Property strategy New, high-quality products are critical to our organic growth and underpin our ability to earn high margins and high returns over the long term.	- Loss of market share resulting from product obsolescence and failure to innovate to meet customer needs. - Loss of market share resulting from a failure to protect key intellectual property. - Diversion of resources to address related matters.	- Devolving control of product development to the autonomous operating businesses spreads risk and ensures that the people best placed to service the customers' needs are driving innovation. - New product development 'best practice' is shared between Group companies and return on investment of past and future innovation projects is tracked monthly. This ensures that the collective experience and expertise of the Group can be utilised to maximum effect. - Large R&D projects, especially those which are capitalised, require Head Office approval, ensuring that the Group's significant projects are aligned to overall strategy. - Workforce quality and retention is a central objective. This focus ensures that intangible resources stay and grow within the business. - Operating businesses are actively encouraged to develop and protect know-how in local jurisdictions. - Innovation is encouraged and fostered throughout the Group and recognised at Halma's Annual Innovation Awards.

Product quality The quality and reliability of our products is vital to meet the needs of our customers and ensure compliance with regulations.	- Loss of market share resulting from product quality issues including the necessity to recall/replace product. - Reputational damage and financial loss due to unexpected liability for injuries, fatalities and/or damage to property.	- Strict product development and testing procedures in place to ensure quality of products and compliance with appropriate regulations. - Rigorous testing of products during development and also during the manufacturing process. - Terms and conditions of sale limit liability as much as practically possible. Insurance is in place.

Going Concern Statement

The Group's business activities, together with the main trends and factors likely to affect its future development, performance and position, and the financial position of the Group, its cash flows, liquidity position and borrowing facilities, are set out herein.

The Group has considerable financial resources (including a £550m five-year revolving credit facility, of which £469m was undrawn at 1 April 2017) together with contracts with a diverse range of customers and suppliers across different geographic areas and industries. No one customer accounts for more than 2% of Group turnover. As a consequence, the Directors believe that the Group is well placed to manage its business risks successfully.

After conducting a formal review of the Group's financial resources, the Directors have a reasonable expectation that the Company and the Group have adequate resources to continue in operational existence for the foreseeable future. For this reason, they continue to adopt the going concern basis in preparing the Annual Report and Accounts.

Longer-term Viability

During the year, the Board carried out a robust assessment of the principal risks affecting the Company, including those that would threaten its business model, future performance, solvency or liquidity. The Board has assessed the viability of the Company over a three-year period, taking into account the Group's current position and the potential impact of the principal risks and uncertainties. Whilst the Board has no reason to believe that the Group will not be viable over a longer period, it has determined that three years is an appropriate period, as it is aligned with the Group's strategic planning process and therefore provides greater certainty over forecasting and, therefore, increases reliability in the modelling and stress testing of the Company's viability.

In making their assessment, the Board carried out a comprehensive exercise of financial modelling and stress-tested the model with various scenarios based on the principal risks identified in the Group's annual risk assessment process. In each scenario, the effect on the Group's KPIs and borrowing covenants was considered, along with any mitigating factors.

Based on this assessment, the Board confirms that they have a reasonable expectation that the Company will be able to continue in operation and meet its liabilities as they fall due over the three-year period to 31 March 2020. The full Viability Statement is set out in the Annual Report and Accounts 2017.

Responsibility Statement of the Directors on the Annual Report and Accounts

The responsibility statement below has been prepared in connection with the Company's full Annual Report and Accounts for the 52 weeks to 1 April 2017. Certain parts thereof are not included within these Results.

We confirm that to the best of our knowledge:

- the financial statements, prepared in accordance with International Financial Reporting Standards as adopted by the EU, give a true and fair view of the assets, liabilities, financial position and profit or loss of the Company and the undertakings included in the consolidation taken as a whole;
- the Strategic Report includes a fair review of the development and performance of the business and the position of the Company and the undertakings included in the consolidation taken as a whole, together with a description of the principal risks and uncertainties that they face; and
- the Annual Report and financial statements, taken as a whole, are fair, balanced and understandable and provide the information necessary for shareholders to assess the Company's position, performance, business model and strategy.

This responsibility statement was approved by the Board of Directors on 13 June 2017 and is signed on its behalf by:

A J Williams
Chief Executive

K J Thompson
Finance Director

Results for the 52 weeks to 1 April 2017

Consolidated Income Statement

		52 weeks to 1 April 2017			53 weeks to 2 April 2016		
	Notes	**Before adjustments* £000**	**Adjustments* (note 2) £000**	**Total £000**	Before adjustments* £000	Adjustments* (note 2) £000	Total £000
Continuing operations							
Revenue	2	**961,662**	**–**	**961,662**	807,805	–	807,805
Operating profit		**203,371**	**(36,301)**	**167,070**	173,225	(30,282)	142,943
Share of results of associate		**(81)**	**–**	**(81)**	(159)	–	(159)
Profit on disposal of operations	9	**–**	**–**	**–**	–	556	556
Finance income	3	**494**	**–**	**494**	217	–	217
Finance expense	4	**(9,780)**	**–**	**(9,780)**	(7,269)	–	(7,269)
Profit before taxation		**194,004**	**(36,301)**	**157,703**	166,014	(29,726)	136,288
Taxation	5	**(41,734)**	**13,720**	**(28,014)**	(36,373)	8,926	(27,447)
Profit for the year attributable to equity shareholders	2	**152,270**	**(22,581)**	**129,689**	129,641	(20,800)	108,841
Earnings per share	6						
From continuing operations							
Basic and diluted		**40.21p**		**34.25p**	34.26p		28.76p
Dividends in respect of the year	7						
Paid and proposed (£000)				**51,916**			48,449
Paid and proposed per share				**13.71p**			12.81p

* Adjustments include the amortisation and impairment of acquired intangible assets; acquisition items; restructuring costs; profit or loss on disposal of operations; and the associated taxation thereon.

Consolidated Statement of Comprehensive Income and Expenditure

	52 weeks to 1 April 2017 £000	53 weeks to 2 April 2016 £000
Profit for the year	**129,689**	108,841
Items that will not be reclassified subsequently to the Consolidated Income Statement:		
Actuarial (losses)/gains on defined benefit pension plans	**(31,059)**	8,841
Tax relating to components of other comprehensive income that will not be reclassified	**6,082**	(2,304)
Items that may be reclassified subsequently to the Consolidated Income Statement:		
Effective portion of changes in fair value of cash flow hedges	**1,197**	(990)
Exchange gains on translation of foreign operations and net investment hedge	**74,810**	30,036
Exchange losses transferred to Income Statement on disposal of operation	**–**	22
Tax relating to components of other comprehensive income that may be reclassified	**(233)**	209
Other comprehensive income for the year	**50,797**	35,814
Total comprehensive income for the year attributable to equity shareholders	**180,486**	144,655

The exchange gain of £74,810,000 (2016: gain of £30,036,000) includes gains of £21,305,000 (2016: gains of £9,336,000) which relate to net investment hedges as described in the Annual Report and Accounts 2017.

Consolidated Balance Sheet

	1 April 2017 £000	(Restated)* 2 April 2016 £000
Non-current assets		
Goodwill	**603,553**	542,097
Other intangible assets	**234,430**	235,654
Property, plant and equipment	**106,016**	96,562
Interest in associate	**3,553**	3,722
Deferred tax asset	**56,866**	44,424
	1,004,418	922,459
Current assets		
Inventories	**118,780**	105,283
Trade and other receivables	**212,236**	184,126
Tax receivable	**124**	190
Cash and bank balances	**66,827**	53,938
Derivative financial instruments	**598**	1,131
	398,565	344,668
Total assets	**1,402,983**	1,267,127
Current liabilities		
Trade and other payables	**134,816**	122,791
Borrowings	**1,351**	4,748
Provisions	**6,776**	4,789
Tax liabilities	**16,055**	15,158
Derivative financial instruments	**315**	2,196
	159,313	149,682
Net current assets	**239,252**	194,986
Non-current liabilities		
Borrowings	**261,918**	295,908
Retirement benefit obligations	**74,856**	52,323
Trade and other payables	**11,221**	10,153
Provisions	**16,917**	19,355
Deferred tax liabilities	**100,121**	93,366
	465,033	471,105
Total liabilities	**624,346**	620,787
Net assets	**778,637**	646,340
Equity		
Share capital	**37,965**	37,965
Share premium account	**23,608**	23,608
Own shares	**(7,263)**	(8,219)
Capital redemption reserve	**185**	185
Hedging reserve	**354**	(610)
Translation reserve	**150,197**	75,387
Other reserves	**(6,323)**	(5,831)
Retained earnings	**579,914**	523,855
Shareholders' funds	**778,637**	646,340

* Comparatives have been restated, as required by IFRS 3 (revised) Business Combinations, for material changes arising on the provisional accounting for prior period acquisitions. See note 8.

Consolidated Statement of Changes in Equity

	Share capital £000	Share premium account £000	Own shares £000	Capital redemption reserve £000	Hedging reserve £000	Translation reserve £000	Other reserves £000	Retained earnings £000	Total £000
At 2 April 2016	**37,965**	**23,608**	**(8,219)**	**185**	**(610)**	**75,387**	**(5,831)**	**523,855**	**646,340**
Profit for the year	–	–	–	–	–	–	–	129,689	129,689
Other comprehensive income and expense:									
Exchange differences on translation of foreign operations	–	–	–	–	–	74,810	–	–	74,810
Actuarial losses on defined benefit pension plans	–	–	–	–	–	–	–	(31,059)	(31,059)
Effective portion of changes in fair value of cash flow hedges	–	–	–	–	1,197	–	–	–	1,197
Tax relating to components of other comprehensive income	–	–	–	–	(233)	–	–	6,082	5,849
Total other comprehensive income and expense	–	–	–	–	964	74,810	–	(24,977)	50,797
Dividends paid	–	–	–	–	–	–	–	(49,788)	(49,788)
Share-based payment charge	–	–	–	–	–	–	6,076	–	6,076
Deferred tax on share-based payment transactions	–	–	–	–	–	–	65	–	65
Excess tax deductions related to share-based payments on exercised awards	–	–	–	–	–	–	–	1,135	1,135
Purchase of Own shares	–	–	(2,368)	–	–	–	–	–	(2,368)
Performance share plan awards vested	–	–	3,324	–	–	–	(6,633)	–	(3,309)
At 1 April 2017	**37,965**	**23,608**	**(7,263)**	**185**	**354**	**150,197**	**(6,323)**	**579,914**	**778,637**

Own shares are ordinary shares in Halma plc purchased by the Company and held to fulfil the Company's obligations under the Group's share plans. At 1 April 2017 the number of treasury shares held was 462,188 (2016: 940,421) and the number of shares held by the Employee Benefit Trust was 512,417 (2016: 311,444). The market value of Own shares was £9,980,000 (2016: £11,417,000).

The Translation reserve is used to record the difference arising from the retranslation of the financial statements of foreign operations. The Hedging reserve is used to record the portion of the cumulative net change in fair value of cash flow hedging instruments that are deemed to be an effective hedge.

The Capital redemption reserve was created on repurchase and cancellation of the Company's own shares. The Other reserves represent the provision for the value of the Group's equity-settled share plans.

	Share capital £000	Share premium account £000	Own shares £000	Capital redemption reserve £000	Hedging reserve £000	Translation reserve £000	Other reserves £000	Retained earnings £000	Total £000
At 28 March 2015	37,965	23,608	(8,450)	185	171	45,329	(4,073)	454,213	548,948
Profit for the year	–	–	–	–	–	–	–	108,841	108,841
Other comprehensive income and expense:									
Exchange differences on translation of foreign operations	–	–	–	–	–	30,036	–	–	30,036
Exchange losses transferred to Income Statement on disposal of operations	–	–	–	–	–	22	–	–	22
Actuarial gains on defined benefit pension plans	–	–	–	–	–	–	–	8,841	8,841
Effective portion of changes in fair value of cash flow hedges	–	–	–	–	(990)	–	–	–	(990)
Tax relating to components of other comprehensive income	–	–	–	–	209	–	–	(2,304)	(2,095)
Total other comprehensive income and expense	–	–	–	–	(781)	30,058	–	6,537	35,814
Dividends paid	–	–	–	–	–	–	–	(46,473)	(46,473)
Share-based payment charge	–	–	–	–	–	–	3,845	–	3,845
Deferred tax on share-based payment transactions	–	–	–	–	–	–	109	–	109
Excess tax deductions related to share-based payments on exercised awards	–	–	–	–	–	–	–	737	737
Purchase of Own shares	–	–	(3,003)	–	–	–	–	–	(3,003)
Performance share plan awards vested	–	–	3,234	–	–	–	(5,712)	–	(2,478)
At 2 April 2016	37,965	23,608	(8,219)	185	(610)	75,387	(5,831)	523,855	646,340

Consolidated Cash Flow Statement

	Notes	**52 weeks to 1 April 2017 £000**	53 weeks to 2 April 2016 £000
Net cash inflow from operating activities	10	**172,493**	149,273
Cash flows from investing activities			
Purchase of property, plant and equipment		**(21,875)**	(22,418)
Purchase of computer software		**(2,479)**	(1,669)
Purchase of other intangibles		**(281)**	(535)
Proceeds from sale of property, plant and equipment		**1,495**	2,364
Proceeds from sale of capitalised development costs		**–**	166
Development costs capitalised		**(10,731)**	(8,579)
Interest received		**211**	217
Acquisition of businesses, net of cash acquired	8	**(9,972)**	(202,575)
Disposal of operations, net of cash disposed	9	**–**	907
Net cash used in investing activities		**(43,632)**	(232,122)
Financing activities			
Dividends paid		**(49,788)**	(46,473)
Purchase of Own shares		**(2,368)**	(3,003)
Interest paid		**(7,023)**	(4,149)
Loan arrangement fee paid		**(2,656)**	(770)
Proceeds from bank borrowings		**–**	74,788
Repayment of bank borrowings	10	**(54,761)**	(97,000)
Proceeds on issue of loan notes		**–**	167,473
Net cash (used in)/generated from financing activities		**(116,596)**	90,866
Increase in cash and cash equivalents	10	**12,265**	8,017
Cash and cash equivalents brought forward		**49,526**	39,525
Exchange adjustments		**3,846**	1,984
Cash and cash equivalents carried forward		**65,637**	49,526

	Notes	**52 weeks to 1 April 2017 £000**	53 weeks to 2 April 2016 £000
Reconciliation of net cash flow to movement in net debt			
Increase in cash and cash equivalents		**12,265**	8,017
Net cash outflow from repayment of bank borrowings	10	**54,761**	22,212
Proceeds from issue of loan notes		**–**	(167,473)
Loan notes issued in respect of acquisitions		**–**	(288)
Loan notes repaid in respect of acquisitions	10	**241**	367
Exchange adjustments		**(16,991)**	(8,659)
		50,276	(145,824)
Net debt brought forward		**(246,718)**	(100,894)
Net debt carried forward		**(196,442)**	(246,718)

Notes to the Results

1 Basis of preparation

General Information

The Results are based on the Company's financial statements which are prepared in accordance with International Financial Reporting Standards (IFRS) adopted for use in the European Union (EU) and therefore comply with Article 4 of the EU IAS legislation and with those parts of the Companies Act 2006 that are applicable to companies reporting under IFRS. The financial statements have also been prepared in accordance with IFRS and International Financial Reporting Interpretations Committee (IFRIC) interpretations issued and effective at the time of preparing these accounts.

With the exception of the new standards adopted in the year, as discussed below, there have been no significant changes in accounting policies from those set out in Halma plc's Annual Report and Accounts 2016. The accounting policies have been applied consistently throughout the years ended 1 April 2017 and 2 April 2016 other than those noted below.

The financial information set out in these Results does not constitute the Group's statutory accounts for the years ended 1 April 2017 and 2 April 2016 but is derived from those accounts. Statutory accounts for 2016 have been delivered to the Registrar of Companies and those for 2017 will be delivered following the Company's Annual General Meeting. The auditor's reports on the 2016 and the 2017 accounts were unqualified, did not draw attention to any matters by way of emphasis without qualifying their report and did not contain a statement under section 498(2) or (3) of the Companies Act 2006.

The following Standards with an effective date of 1 January 2016 have been adopted without any significant impact on the amounts reported in these financial statements:

- IAS 16 and IAS 38 (amended) 'Clarification of Acceptable Methods of Depreciation and Amortisation';
- Annual Improvements 2012-2014 Cycle, specifically amendments to IAS 34 'Interim Financial Reporting';
- Amendments to IAS 1;
- Amendments to IAS 27 'Equity Method in Separate Financial Statements'; and
- Amendments to IFRS 11 'Accounting for Acquisitions of Interests in Joint Operations'.

These Results were approved by the Board of Directors on 13 June 2017.

2 Segmental analysis

Sector analysis

The Group has four reportable segments (Process Safety, Infrastructure Safety, Medical, and Environmental & Analysis), which are defined by markets rather than product type. Each segment includes businesses with similar operating and marketing characteristics. These segments are consistent with the internal reporting as reviewed by the Chief Executive.

Segment revenue and results

	Revenue (all continuing operations)	
	52 weeks to 1 April 2017 £000	53 weeks to 2 April 2016 £000
Process Safety	**167,007**	155,467
Infrastructure Safety	**315,219**	264,843
Medical	**260,576**	198,715
Environmental & Analysis	**219,118**	188,928
Inter-segmental sales	**(258)**	(148)
Revenue for the year	**961,662**	807,805

Inter-segmental sales are charged at prevailing market prices and have not been disclosed separately by segment as they are not considered material. Revenue derived from the rendering of services was £39,011,000 (2016: £25,134,000). All revenue was otherwise derived from the sale of products.

	Profit (all continuing operations)	
	52 weeks to 1 April 2017 £000	53 weeks to 2 April 2016 £000
Segment profit before allocation of adjustments*		
Process Safety	**40,243**	39,557
Infrastructure Safety	**65,129**	55,579
Medical	**66,704**	51,695
Environmental & Analysis	**41,698**	34,527
	213,774	181,358
Segment profit after allocation of adjustments*		
Process Safety	**36,243**	36,095
Infrastructure Safety	**60,342**	50,376
Medical	**45,804**	34,747
Environmental & Analysis	**35,084**	30,413
Segment profit	**177,473**	151,631
Central administration costs	**(10,484)**	(8,291)
Net finance expense	**(9,286)**	(7,052)
Group profit before taxation	**157,703**	136,288
Taxation	**(28,014)**	(27,447)
Profit for the year	**129,689**	108,841

* Adjustments include the amortisation and impairment of acquired intangible assets; acquisition items; restructuring costs; and profit or loss on disposal of operations.

The accounting policies of the reportable segments are the same as the Group's accounting policies. Acquisition transaction costs, adjustments to contingent consideration and release of fair value adjustments to inventory (collectively 'acquisition items') are recognised in the Consolidated Income Statement. Segment profit, before these acquisition items and the other adjustments, is disclosed separately above as this is the measure reported to the Chief Executive for the purpose of allocation of resources and assessment of segment performance. These adjustments are analysed as follows:

							52 weeks to 1 April 2017
		Acquisition items					
	Amortisation and impairment of acquired intangible assets £000	**Transaction costs £000**	**Adjustments to contingent consideration £000**	**Release of fair value adjustments to inventory £000**	**Total amortisation charge and acquisition items £000**	**Disposal of operations and restructuring (note 9) £000**	**Total £000**
Process Safety	(4,000)	–	–	–	(4,000)	–	(4,000)
Infrastructure Safety	(4,784)	(3)	–	–	(4,787)	–	(4,787)
Medical	(30,702)	(95)	10,687	(790)	(20,900)	–	(20,900)
Environmental & Analysis	(4,412)	(265)	14	(41)	(4,704)	(1,910)	(6,614)
Total Segment & Group	(43,898)	(363)	10,701	(831)	(34,391)	(1,910)	(36,301)

Included within amortisation and impairment of acquired intangible assets in the Medical sector is £12,429,000 impairment to a customer relationship asset of Visiometrics S.L. (Visiometrics), acquired in the prior year. Related to this impairment, included within the Medical sector, there is a credit arising from a revision to the estimate of the associated deferred contingent consideration payable for Visiometrics of £10,087,000 (€12,002,000). The majority of this revision relates to deferred contingent consideration payable on sales to the related customer.

The transaction costs arose mainly on the acquisition of FluxData, Inc. (FluxData) on 6 January 2017.

The £10,701,000 credit to contingent consideration comprises mainly the revision to estimate of the payable for Visiometrics discussed above. The remaining credit relates to the change in estimate to the payable for Value Added Solutions LLC (VAS) by £356,000 from £704,000 (US$1,000,000) to £427,000 (US$535,000), and for ASL Holdings Limited (ASL) by £14,000 on final settlement of the payable, and a credit of £244,000 arising from exchange differences on the Visiometrics payable which is denominated in Euros.

The £831,000 charge relates to the release of the fair value adjustment on revaluing the inventories of CenTrak Inc. (CenTrak) (£790,000) and FluxData (£41,000) on acquisition. All amounts have now been released in relation to CenTrak.

The £1,910,000 charge relates to inventory and fixed asset write downs and severance costs arising on the restructuring of non-core operations in one of the Group's subsidiaries, Pixelteq, Inc. (Pixelteq).

							53 weeks to 2 April 2016
		Acquisition items					
	Amortisation of acquired intangible assets £000	Transaction costs £000	Adjustments to contingent consideration £000	Release of fair value adjustments to inventory £000	Total amortisation charge and acquisition items £000	Disposal of operations and restructuring (note 9) £000	Total £000
Process Safety	(3,462)	–	–	–	(3,462)	–	(3,462)
Infrastructure Safety	(2,398)	(1,101)	(827)	(842)	(5,168)	(34)	(5,202)
Medical	(13,018)	(2,926)	(826)	(768)	(17,538)	590	(16,948)
Environmental & Analysis	(4,225)	–	111	–	(4,114)	–	(4,114)
Total Segment & Group	(23,103)	(4,027)	(1,542)	(1,610)	(30,282)	556	(29,726)

The transaction costs arose mainly on the acquisitions of VAS, Firetrace USA, LLC (Firetrace), Visiometrics, and CenTrak.

The £827,000 charge in the Infrastructure Safety sector related to a revision in the estimate of the remaining contingent consideration payable on Advanced Electronics Limited (Advanced). The £826,000 charge in the Medical sector related to exchange differences arising on the revaluation of Visiometric's contingent consideration which is denominated in Euros. The remaining £111,000 credit to contingent consideration related to a revision in the estimate of the remaining payable on a prior year acquisition (ASL) from £197,000 to £86,000.

The release of fair value adjustments to inventory arose from revaluing the inventories of Firetrace and CenTrak at acquisition.

The £590,000 profit on disposal in the Medical sector relates to the disposal of 8.8% of the Group's ownership interest in Optomed Oy (Optomed).

Geographic information

The Group's revenue from external customers (by location of customer) is detailed below:

	Revenue by destination	
	52 weeks to 1 April 2017 £000	53 weeks to 2 April 2016 £000
United States of America	**345,295**	272,933
Mainland Europe	**210,342**	179,290
United Kingdom	**154,920**	144,821
Asia Pacific	**151,626**	124,992
Africa, Near and Middle East	**60,765**	55,712
Other countries	**38,714**	30,057
	961,662	807,805

3 Finance income

	52 weeks to 1 April 2017 £000	53 weeks to 2 April 2016 £000
Interest receivable	**211**	217
Fair value movement on derivative financial instruments	**283**	–
	494	217

4 Finance expense

	52 weeks to 1 April 2017 £000	53 weeks to 2 April 2016 £000
Interest payable on borrowings	**6,977**	4,104
Amortisation of finance costs	**1,040**	561
Net interest charge on pension plan liabilities	**1,553**	2,013
Other interest payable	**126**	45
	9,696	6,723
Fair value movement on derivative financial instruments	**53**	508
Unwinding of discount on provisions	**31**	38
	9,780	7,269

5 Taxation

	52 weeks to 1 April 2017 £000	53 weeks to 2 April 2016 £000
Current tax		
UK corporation tax at 20% (2016: 20%)	**9,282**	9,093
Overseas taxation	**27,525**	25,014
Adjustments in respect of prior years	**(2,041)**	(3,422)
Total current tax charge	**34,766**	30,685
Deferred tax		
Origination and reversal of timing differences	**(7,365)**	(4,833)
Adjustments in respect of prior years	**613**	1,595
Total deferred tax credit	**(6,752)**	(3,238)
Total tax charge recognised in the Consolidated Income Statement	**28,014**	27,447
Reconciliation of the effective tax rate:		
Profit before tax	**157,703**	136,288
Tax at the UK corporation tax rate of 20% (2016: 20%)	**31,541**	27,258
Overseas tax rate differences	**9,230**	9,970
Effect of intra-group financing	**(6,095)**	(3,062)
Tax incentives, exemptions and credits (including patent box, R&D and High-Tech status)	**(3,461)**	(2,902)
Permanent differences	**(1,773)**	(1,990)
Adjustments in respect of prior years	**(1,428)**	(1,827)

	28,014	27,447
Effective tax rate	**17.8%**	20.1%

	52 weeks to 1 April 2017 £000	53 weeks to 2 April 2016 £000
Adjusted* profit before tax	**194,004**	166,014
Total tax charge on adjusted* profit	**41,734**	36,373
Effective tax rate	**21.5%**	21.9%

* Adjustments include the amortisation and impairment of acquired intangible assets; acquisition items; restructuring costs; and profit or loss on disposal of operations.

The Group's future Effective Tax Rate (ETR) will mainly depend on the geographic mix of profits and whether there are any changes to tax legislation in the Group's most significant countries of operations. Phased reductions in the UK corporation tax rate to 19% (from 1 April 2017) and 17% (from 1 April 2020) have been substantively enacted which we would expect to impact the ETR in due course. In the US, proposed tax reform measures include a reduction in the US corporate income tax rate from 35% to as low as 15%. The US rate change is a proposal only at this stage and the Group is actively monitoring developments to evaluate its potential impact. No reliable estimate of the impact of these tax reform proposals can be made at this time. The Group does not expect the future rate to be materially impacted by the changes to the international tax landscape resulting from the package of measures developed under the OECD Base Erosion and Profit Shifting project and the investigations and proposals of the European Commission.

6 Earnings per ordinary share

Basic and diluted earnings per ordinary share are calculated using the weighted average of 378,685,730 shares in issue during the year (net of shares purchased by the Company and held as Own shares) (2016: 378,412,359). There are no dilutive or potentially dilutive ordinary shares.

Adjusted earnings are calculated as earnings from continuing operations excluding the amortisation and impairment of acquired intangible assets; acquisition items; restructuring costs; profit or loss on disposal of operations; and the associated taxation thereon. The Directors consider that adjusted earnings, which constitute a non-GAAP measure, represent a more consistent measure of underlying performance. A reconciliation of earnings and the effect on basic and diluted earnings per share figures is as follows:

			Per ordinary share	
	52 weeks to 1 April 2017 £000	53 weeks to 2 April 2016 £000	**52 weeks to 1 April 2017 pence**	53 weeks to 2 April 2016 pence
Earnings from continuing operations	**129,689**	108,841	**34.25**	28.76
Amortisation of acquired intangible assets (after tax)	**21,452**	16,102	**5.66**	4.26
Impairment of acquired intangible assets (after tax)	**9,322**	–	**2.46**	–
Acquisition transaction costs (after tax)	**240**	2,941	**0.06**	0.78
Release of fair value adjustments to inventory (after tax)	**569**	998	**0.15**	0.26
Adjustments to contingent consideration (after tax)	**(10,650)**	1,315	**(2.81)**	0.35
Disposal of operations and restructuring (after tax)	**1,648**	(556)	**0.44**	(0.15)
Adjusted earnings	**152,270**	129,641	**40.21**	34.26

7 Dividends

	Per ordinary share			
	52 weeks to 1 April 2017 pence	53 weeks to 2 April 2016 pence	**52 weeks to 1 April 2017 £000**	53 weeks to 2 April 2016 £000
Amounts recognised as distributions to shareholders in the year				
Final dividend for the year to 2 April 2016 (28 March 2015)	**7.83**	7.31	**29,605**	27,629
Interim dividend for the year to 1 April 2017 (2 April 2016)	**5.33**	4.98	**20,183**	18,844
	13.16	12.29	**49,788**	46,473
Dividends declared in respect of the year				
Interim dividend for the year to 1 April 2017 (2 April 2016)	**5.33**	4.98	**20,183**	18,844
Proposed final dividend for the year to 1 April 2017 (2 April 2016)	**8.38**	7.83	**31,733**	29,605
	13.71	12.81	**51,916**	48,449

The proposed final dividend is subject to approval by shareholders at the Annual General Meeting on 20 July 2017 and has not been included as a liability in these financial statements.

The Company offers a Dividend Reinvestment Plan ('DRIP') to enable shareholders to elect to have their cash dividends reinvested in Halma shares. Shareholders who wish to elect for the DRIP for the forthcoming final dividend, but have not already done so, should return a DRIP mandate form to the Company's Registrars no later than 26 July 2017.

8 Acquisitions

In accounting for acquisitions, adjustments are made to the book values of the net assets of the companies acquired to reflect their fair values to the Group. Acquired inventories are valued at fair value adopting Group bases and any liabilities for warranties relating to past trading are recognised. Other previously unrecognised assets and liabilities at acquisition are included and accounting policies are aligned with those of the Group where appropriate.

Below are summaries of the assets acquired and liabilities assumed and the purchase consideration of:

a) the total of FluxData Inc. and adjustments to prior year acquisitions;
b) FluxData Inc., on a stand-alone basis;
c) the adjustments to prior year acquisitions, on a stand-alone basis; and
d) the total of FluxData Inc. and adjustments to prior year acquisitions, allocated between restated and not restated.

Due to their contractual dates, the fair value of receivables acquired (shown below) approximate to the gross contractual amounts receivable. The amount of gross contractual receivables not expected to be recovered is immaterial.

There are no material contingent liabilities recognised in accordance with paragraph 23 of IFRS 3 (revised).

The combined fair value adjustments made for the acquisition of FluxData and for prior year acquisitions within the goodwill measurement window under IFRS 3, excluding acquired intangible assets recognised and deferred tax thereon, resulted in net adjustments to goodwill of negative £541,000.

As at the date of approval of the financial statements, the acquisition accounting for all prior year acquisitions is complete. The accounting for FluxData is provisional; relating to finalisation of the valuation of acquired intangibles and the initial consideration, which is subject to agreement of the net tangible asset adjustment.

a) Total of FluxData Inc. and adjustments to prior year acquisitions	**Total £000**
Non-current assets	
Intangible assets	**17,366**
Property, plant and equipment	**217**
Current assets	
Inventories	**340**
Trade and other receivables	**512**
Total assets	**18,435**
Current liabilities	
Trade and other payables	**(464)**
Provisions	**(453)**
Non-current liabilities	
Provisions	**(834)**
Deferred tax	**(1,016)**
Total liabilities	**(2,767)**
Net assets of businesses acquired	**15,668**
Initial cash consideration paid	**9,878**
Initial cash consideration payable*	**77**
Initial consideration adjustment on prior year acquisitions	**(555)**
Contingent purchase consideration estimated to be paid (FluxData)	**9,407**
Total consideration	**18,807**
Goodwill arising on acquisitions (current year & prior year (not restated))	**5,273**
Goodwill arising on prior year acquisitions (restated)	**(2,134)**
Total goodwill	**3,139**

* Estimate in respect of net tangible asset adjustments.

Analysis of cash outflow in the Consolidated Cash Flow Statement	**52 weeks to 1 April 2017 £000**	53 weeks to 2 April 2016 £000
Initial cash consideration paid	**9,878**	187,601
Cash acquired on acquisitions	**–**	(1,830)
Initial cash consideration adjustment on prior year acquisitions	**(496)**	–
Contingent consideration paid in relation to current year acquisitions	**–**	6,558
Contingent consideration paid and loan notes repaid in cash in relation to prior year acquisitions*	**590**	10,246
Net cash outflow relating to acquisitions (per Consolidated Cash Flow Statement)	**9,972**	202,575

* The £590,000 comprises £241,000 loan notes and £349,000 contingent consideration paid in respect of prior period acquisitions all of which had been provided in the prior period's financial statements.

b) FluxData Inc.

	Total £000
Non-current assets	
Intangible assets	**13,515**
Property, plant and equipment	**217**
Current assets	
Inventories	**456**
Trade and other receivables	**711**
Total assets	**14,899**
Current liabilities	
Trade and other payables	**(458)**
Provisions	**(21)**
Total liabilities	**(479)**
Net assets of businesses acquired	**14,420**
Initial cash consideration paid	**9,878**
Additional cash consideration payable*	**77**
Contingent purchase consideration estimated to be paid	**9,407**
Total consideration	**19,362**
Goodwill arising on acquisition	**4,942**

* Estimate in respect of net tangible asset adjustments.

The Group acquired the entire share capital of FluxData Inc. on 6 January 2017 for an initial cash consideration of US$12,000,000 (£9,878,000). The maximum contingent consideration payable is US$15,500,000 (£12,759,000). The current provision of US$11,428,000 (£9,407,000) represents the fair value of the estimated payable based on performance to date and the expectation of future cash flows. The earn out is payable on gross margin in excess of a target threshold for the period ending March 2017 and then annually until March 2019.

FluxData designs and manufactures advanced multispectral and digital imaging systems across multiple sectors including industrial and medical applications. Based in New York State, USA, it has become part of the Environmental & Analysis sector, building on the existing multispectral imaging capabilities within those companies. Existing management will remain in place.

The excess of the fair value of the consideration paid over the fair value of the assets acquired is represented by customer related intangibles of £7,240,000; and technology related intangibles of £6,250,000; with residual goodwill arising of £4,942,000. The goodwill represents:

a) the technical expertise of the acquired workforce;
b) the ability to exploit the Group's existing customer base; and
c) the opportunity to leverage the technical expertise across Halma's businesses and through new products.

The FluxData acquisition contributed £1,017,000 of revenue and £213,000 of profit after tax for the year ended 1 April 2017.

If this acquisition had been held since the start of the financial year, it is estimated that the Group's reported revenue and profit after tax would have been £3,518,000 and £928,000 higher respectively.

£17,798,000 of goodwill arising on the FluxData acquisition is expected to be deductible for tax purposes.

c) Adjustments to prior year acquisitions

	Total £000
Non-current assets	
Intangible assets	3,851
Current assets	
Inventories	(116)
Trade and other receivables	(199)
Total assets	3,536
Current liabilities	
Trade and other payables	(6)
Provisions	(432)
Non-current liabilities	
Provisions	(834)
Deferred tax	(1,016)
Total liabilities	(2,288)
Net assets of businesses acquired	1,248
Initial cash consideration adjustment	(555)
Goodwill arising on acquisition	(1,803)

During the year adjustments were made to the fair values of acquired assets and liabilities included in the provisional accounting for the prior year acquisitions of Firetrace, Visiometrics and CenTrak.

The provisional accounting was updated for the external valuation of the acquired intangibles of CenTrak which was incomplete at the prior year end, for changes to certain provisions and inventory valuations across all three acquisitions, and for adjustments to the related deferred tax balances. The initial consideration for CenTrak was also adjusted following the finalisation of the working capital adjustment payable. The combined adjustments made for each acquisition resulted in a net adjustment to goodwill of £1,803,000.

The net increase of £3,851,000 in intangible assets arising on the acquisition of CenTrak included a decrease in the technology asset by £7,198,000 and an increase in the customer relationship asset and trademark asset by £4,851,000 and £6,198,000 respectively.

All adjustments to the provisional accounting were made within the goodwill measurement period, relevant to each acquisition, as defined by IFRS 3 (revised) Business Combinations. As required by IFRS 3, comparatives have been restated to reflect the changes to the fair values of assets acquired and liabilities assumed for CenTrak which, totalling a net adjustment to goodwill of negative £2,134,000, are considered material, as if they'd occurred at the date of acquisition. The comparatives have not been restated for the non-material changes to Firetrace and Visiometrics, totalling a net adjustment to goodwill of £331,000. The table below sets out the total assets acquired and liabilities assumed arising on current acquisitions and adjustments to prior year acquisitions split between those which have been treated as current year adjustments and those as prior year for which comparatives have been restated.

d) The total of FluxData Inc. and adjustments to prior year acquisitions, allocated between restated and not restated

	Not restated £000	Restated £000	Total £000
Non-current assets			
Intangible assets	**13,515**	**3,851**	**17,366**
Property, plant and equipment	**217**	**–**	**217**
Current assets			
Inventories	**375**	**(35)**	**340**
Trade and other receivables	**554**	**(42)**	**512**
Total assets	**14,661**	**3,774**	**18,435**
Current liabilities			
Trade and other payables	**(464)**	**–**	**(464)**
Provisions	**(105)**	**(348)**	**(453)**
Non-current liabilities			
Provisions	**–**	**(834)**	**(834)**
Deferred Tax	**(15)**	**(1,001)**	**(1,016)**
Total liabilities	**(584)**	**(2,183)**	**(2,767)**
Net assets of businesses acquired	**14,077**	**1,591**	**15,668**
Initial cash consideration paid	**9,878**	**–**	**9,878**
Initial cash consideration payable*	**77**	**–**	**77**
Initial consideration adjustment on prior year acquisitions	**(12)**	**(543)**	**(555)**
Contingent purchase consideration estimated to be paid (FluxData)	**9,407**	**–**	**9,407**
Total consideration	**19,350**	**(543)**	**18,807**
Goodwill arising on acquisition	**5,273**	**(2,134)**	**3,139**

* Estimate in respect of net tangible asset adjustments.

9 Disposal of operations and restructuring

During the year the Group restructured non-core operations in its subsidiary, Pixelteq. The £1,910,000 loss on restructuring included in operating profit comprises fixed asset and inventory write downs and severance costs.

The total profit on disposal of operations shown in the prior year of £556,000 comprises a charge of £34,000 related to the previous disposal of Monitor Elevator Products, Inc arising from a claim under the warranty arrangement, and £590,000 credit for the partial disposal of shares in the Group's associate, Optomed. The Group disposed of 9,176 shares in Optomed, representing 8.8% of its ownership interest in the associate. Consideration received was €1,236,000 (£907,000). Further details are provided on page 158 of the Annual Report and Accounts 2016.

10 Notes to the Consolidated Cash Flow Statement

	52 weeks to 1 April 2017 £000	53 weeks to 2 April 2016 £000
Reconciliation of profit from operations to net cash inflow from operating activities:		
Profit on continuing operations before finance income and expense, share of results of associate and profit on disposal of operations	**167,070**	142,943
Depreciation of property, plant and equipment	**17,798**	15,245
Amortisation of computer software	**1,432**	1,348
Amortisation of capitalised development costs and other intangibles	**6,947**	5,202
Impairment of intangibles	**98**	–
Amortisation of acquired intangible assets	**31,469**	23,103
Impairment of acquired intangible assets	**12,429**	–
Share-based payment expense in excess of amounts paid	**1,880**	1,899
Additional payments to pension plans	**(10,213)**	(7,728)
Loss on restructuring of operations	**1,252**	–
Loss/(profit) on sale of property, plant and equipment and computer software	**138**	(1,345)
Operating cash flows before movement in working capital	**230,300**	180,667
Increase in inventories	**(5,406)**	(4,809)
Increase in receivables	**(14,262)**	(8,786)
Increase in payables and provisions	**5,750**	7,844
Revision to estimate of, and exchange differences arising on, contingent consideration payable	**(10,701)**	1,543
Cash generated from operations	**205,681**	176,459
Taxation paid	**(33,188)**	(27,186)
Net cash inflow from operating activities	**172,493**	149,273

	52 weeks to 1 April 2017 £000	53 weeks to 2 April 2016 £000
Analysis of cash and cash equivalents		
Cash and bank balances	**66,827**	53,938
Overdrafts (included in current borrowings)	**(1,190)**	(4,412)
Cash and cash equivalents	**65,637**	49,526

	At 2 April 2016 £000	**Reclass £000**	**Cash flow £000**	**Loan notes repaid £000**	**Exchange adjustments £000**	**At 1 April 2017 £000**
Analysis of net debt						
Cash and bank balances	53,938	**–**	**9,043**	**–**	**3,846**	**66,827**
Overdrafts	(4,412)	**–**	**3,222**	**–**	**–**	**(1,190)**
Cash and cash equivalents	49,526	**–**	**12,265**	**–**	**3,846**	**65,637**
Loan notes falling due within one year	(336)	**(66)**	**–**	**241**	**–**	**(161)**
Loan notes falling due after more than one year	(172,112)	**66**	**–**	**–**	**(9,111)**	**(181,157)**
Bank loans falling due after more than one year	(123,796)	**–**	**54,761**	**–**	**(11,726)**	**(80,761)**
Total net debt	(246,718)	**–**	**67,026**	**241**	**(16,991)**	**(196,442)**

The net cash outflow from loan notes relates to £241,000 repayment of existing loan notes issued in relation to the previous acquisition of Advanced.

11 Non-GAAP measures

The Board uses certain non-GAAP measures to help it effectively monitor the performance of the Group. These measures include Return on Total Invested Capital, Return on Capital Employed, Organic growth at constant currency, Adjusted operating profit and Adjusted operating cash flow.

Return on Total Invested Capital

	1 April 2017 £000	(Restated)* 2 April 2016 £000
Post-tax profit before adjustments[2]	**152,270**	129,641
Total shareholders' funds	**778,637**	646,340
Add back retirement benefit obligations	**74,856**	52,323
Less associated deferred tax assets	**(13,947)**	(9,619)
Cumulative amortisation of acquired intangible assets	**168,031**	112,478
Historical adjustments to goodwill[3]	**89,549**	89,549
Total Invested Capital	**1,097,126**	891,071
Average Total Invested Capital[1]	**994,099**	833,616
Return on Total Invested Capital (ROTIC)	**15.3%**	15.6%

Return on Capital Employed

	1 April 2017 £000	(Restated)* 2 April 2016 £000
Operating profit before adjustments[2], but after share of results of associate	**203,290**	173,066
Computer software costs within intangible assets	**4,466**	3,215
Capitalised development costs within intangible assets	**28,782**	23,540
Other intangibles within intangible assets	**1,111**	903
Property, plant and equipment	**106,016**	96,562
Inventories	**118,780**	105,283
Trade and other receivables	**212,236**	184,126
Trade and other payables	**(135,257)**	(122,791)
Current provisions	**(6,776)**	(4,789)
Net tax liabilities	**(15,931)**	(14,968)
Non-current trade and other payables	**(10,780)**	(10,153)
Non-current provisions	**(16,917)**	(19,355)
Add back contingent purchase consideration	**16,444**	17,075
Capital Employed	**302,174**	258,648
Average Capital Employed[1]	**280,411**	238,898
Return on Capital Employed (ROCE)	**72.5%**	72.4%

1 The ROTIC and ROCE measures are expressed as a percentage of the average of the current period's and prior year's Total Invested Capital and Capital Employed respectively. Using an average as the denominator is considered to be more representative. The March 2015 Total Invested Capital and Capital Employed balances were £776,160,000 and £219,148,000 respectively.

2 Adjustments include the amortisation and impairment of acquired intangible assets; acquisition items; restructuring costs; and profit or loss on disposal of operations.

3 Includes goodwill amortised prior to 3 April 2004 and goodwill taken to reserves.

* Comparatives have been restated as described in note 8.

Organic growth

Organic growth measures the change in revenue and profit from continuing Group operations. This measure equalises the effect of acquisitions by:

i. removing from the year of acquisition their entire revenue and profit before taxation, and
ii. in the following year, removing the revenue and profit for the number of months equivalent to the pre-acquisition period in the prior year.

The resultant effect is that the acquisitions are removed from organic results for one full year of ownership.

The results of disposals are removed from the prior period reported revenue and profit before taxation. The effects of currency changes are removed through restating the current year revenue and profit before taxation at the prior year exchange rates.

Organic growth at constant currency has been calculated for the Group as follows:

Group

	Revenue			Adjusted profit* before taxation		
	52 weeks to 1 April 2017 £000	53 weeks to 2 April 2016 £000	**% growth**	**52 weeks to 1 April 2017 £000**	53 weeks to 2 April 2016 £000	**% growth**
Continuing operations	**961,662**	807,805		**194,004**	166,014	
Acquired and disposed revenue/profit	**(40,303)**			**(4,544)**		
Organic growth	**921,359**	807,805	**14.1%**	**189,460**	166,014	**14.1%**
Constant currency adjustment	**(78,982)**			**(17,427)**		
Organic growth at constant currency	**842,377**	807,805	**4.3%**	**172,033**	166,014	**3.6%**

Sector Organic growth at constant currency

Organic growth at constant currency is calculated for each segment using the same method as described above.

Process Safety

	Revenue			Adjusted* segment profit		
	52 weeks to 1 April 2017 £000	53 weeks to 2 April 2016 £000	**% growth**	**52 weeks to 1 April 2017 £000**	53 weeks to 2 April 2016 £000	**% growth**
Continuing operations	**167,007**	155,467		**40,243**	39,557	
Acquisition and currency adjustments	**(10,317)**			**(2,406)**		
Organic growth at constant currency	**156,690**	155,467	**0.8%**	**37,837**	39,557	**(4.3%)**

Infrastructure Safety

	Revenue			Adjusted* segment profit		
	52 weeks to 1 April 2017 £000	53 weeks to 2 April 2016 £000	**% growth**	**52 weeks to 1 April 2017 £000**	53 weeks to 2 April 2016 £000	**% growth**
Continuing operations	**315,219**	264,843		**65,129**	55,579	
Acquisition and currency adjustments	**(32,050)**			**(5,549)**		
Organic growth at constant currency	**283,169**	264,843	**6.9%**	**59,580**	55,579	**7.2%**

Medical

	Revenue			Adjusted* segment profit		
	52 weeks to 1 April 2017 £000	53 weeks to 2 April 2016 £000	**% growth**	**52 weeks to 1 April 2017 £000**	53 weeks to 2 April 2016 £000	**% growth**
Continuing operations	**260,576**	198,715		**66,704**	51,695	
Acquisition and currency adjustments	**(53,335)**			**(11,908)**		
Organic growth at constant currency	**207,241**	198,715	**4.3%**	**54,796**	51,695	**6.0%**

Environmental & Analysis

	Revenue			Adjusted* segment profit		
	52 weeks to 1 April 2017 £000	53 weeks to 2 April 2016 £000	**% growth**	**52 weeks to 1 April 2017 £000**	53 weeks to 2 April 2016 £000	**% growth**
Continuing operations	**219,118**	188,928		**41,698**	34,527	
Acquisition and currency adjustments	**(23,583)**			**(5,140)**		
Organic growth at constant currency	**195,535**	188,928	**3.5%**	**36,558**	34,527	**5.9%**

* Adjustments include the amortisation and impairment of acquired intangible assets; acquisition items; restructuring costs; and profit or loss on disposal of operations.

Adjusted operating profit

	52 weeks to 1 April 2017 £000	53 weeks to 2 April 2016 £000
Operating profit	**167,070**	142,943
Add back:		
Acquisition items	**(9,507)**	7,179
Loss on restructuring	**1,910**	–
Amortisation of acquired intangible assets	**31,469**	23,103
Impairment of acquired intangible assets	**12,429**	–
Adjusted operating profit	**203,371**	173,225

Adjusted operating cash flow

	52 weeks to 1 April 2017 £000	53 weeks to 2 April 2016 £000
Net cash from operating activities (note 10)	**172,493**	149,273
Add back:		
Net acquisition costs	**363**	–
Taxes paid	**33,188**	27,186
Proceeds from sale of property, plant and equipment	**1,495**	2,364
Proceeds from sale of capitalised development costs	**–**	166
Share awards vested not settled by own shares*	**3,309**	2,478
Less:		
Purchase of property, plant and equipment	**(21,875)**	(22,418)
Purchase of computer software and other intangibles	**(2,760)**	(2,204)
Development costs capitalised	**(10,731)**	(8,579)
Adjusted operating cash flow	**175,482**	148,266
Cash conversion % (adjusted operating cash flow/adjusted operating profit)	**86%**	86%

* See Consolidated Statement of Changes in Equity

12 Events after the balance sheet date

There were no events after the balance sheet date.

13 Related party transactions

Trading transactions

	1 April 2017 £000	2 April 2016 £000
Associated companies		
Purchases from associated companies	**384**	1,254
Amounts due to associated companies	**51**	153
Amounts due from associated companies	–	–
Other related parties		
Rent charged by other related parties	–	121
Amounts due to other related parties	–	2

Other related parties in the prior year comprised one company with a Halma employee on the board and from which the Halma subsidiary rented property. All the transactions above are on an arm's length basis and on standard business terms.

Remuneration of key management personnel

The remuneration of the Directors and Executive Board members, who are the key management personnel of the Group, is set out below in aggregate for each of the categories specified in IAS 24 'Related Party Disclosures'. Further information about the remuneration of individual Directors is provided in the audited part of the Directors' Remuneration Report in the Annual Report and Accounts 2017.

	52 weeks to 1 April 2017 £000	53 weeks to 2 April 2016 £000
Wages and salaries	**4,886**	5,658
Pension costs	**112**	180
Share-based payment charge	**2,470**	2,341
	7,468	8,179

Cautionary note

These Results contain certain forward-looking statements which have been made by the Directors in good faith using information available up until the date they approved the announcement. Forward-looking statements should be regarded with caution as by their nature such statements involve risk and uncertainties relating to events and circumstances that may occur in the future. Actual results may differ from those expressed in such statements, depending on the outcome of these uncertain future events.