



Our purpose
is to grow a
safer, cleaner,
healthier future
for everyone,
every day.

Halma is a global Group of life-saving technology companies. Our companies provide innovative solutions to many of the key problems facing the world today.

Three examples of our impact

Growing a safer future: enhancing road safety

[Read more on page 18](#)

Growing a cleaner future: reducing marine pollution

[Read more on page 28](#)

Growing a healthier future: improving oxygen treatment

[Read more on page 34](#)

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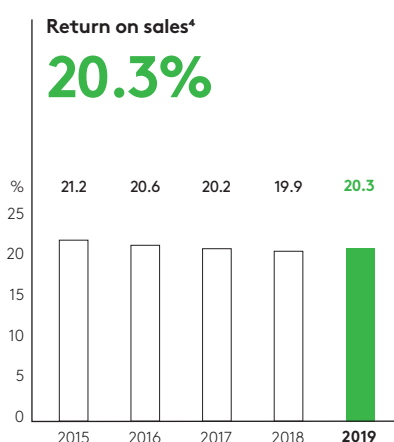
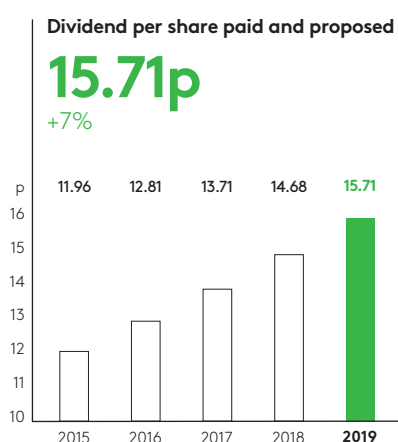
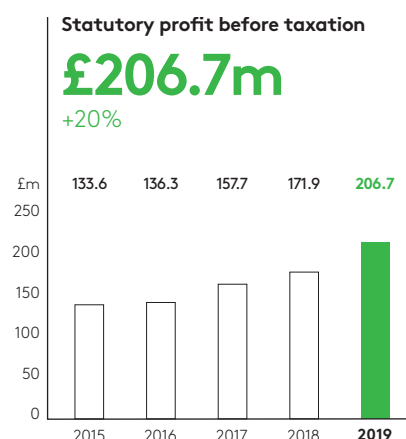
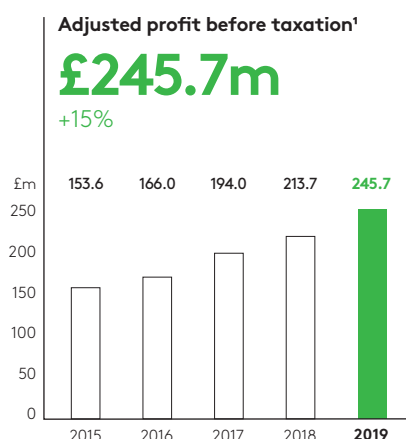
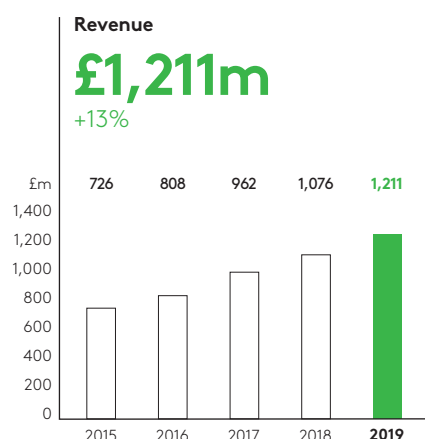
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Record revenue and profit for the 16th consecutive year



Pro-forma information

- Adjusted to remove the amortisation and impairment of acquired intangible assets, acquisition items, restructuring costs, profit or loss on disposal of operations and the effect of equalisation of benefits for men and women in the defined benefit pension plans, totalling £39.0m (2018: £41.7m). See note 1 to the Accounts.
- Adjusted to remove the amortisation of acquired intangible assets, acquisition items, restructuring costs, profit or loss on disposal of operations and the effect of equalisation of benefits for men and women in the defined benefit pension plans, the associated taxation thereon and, in the prior year, the effect of US tax reform measures. See note 2 to the Accounts.
- Total dividend paid and proposed per share.
- Return on Sales is defined as adjusted¹ profit before taxation from continuing operations expressed as a percentage of revenue from continuing operations.
- Return on Total Invested Capital (ROTIC) is defined as post-tax Adjusted¹ Profit as a percentage of average Total Invested Capital.
- Adjusted¹ Profit before Taxation, Adjusted² Earnings per Share, organic growth rates and ROTIC are alternative performance measures used by management. See notes 1, 2 and 3 to the Accounts.
- Adjusted¹ operating profit before central administration costs after share of associate.

Continuing operations

	2019	2018	Change
Revenue	£1,210.9m	£1,076.2m	+13%
Adjusted ¹ Profit before Taxation	£245.7m	£213.7m	+15%
Adjusted ² Earnings per Share	52.74p	45.26p	+17%
Statutory Profit before Taxation	£206.7m	£171.9m	+20%
Statutory Earnings per Share	44.78p	40.69p	+10%
Total Dividend per Share ³	15.71p	14.68p	+7%
Return on Sales ⁴	20.3%	19.9%	
Return on Total Invested Capital ⁵	16.1%	15.2%	
Net Debt	£181.7m	£220.3m	

Our sectors



Process Safety

Process Safety’s technologies protect people and assets at work across a range of critical industrial and logistics operations. Its instruments detect hazardous gases and analyse air quality and its systems manage the movement of people in high risk areas, preventing accidents and ensuring critical processes operate safely. Its explosion protection devices and systems protect pressurised vessels and pipework and its real-time corrosion monitoring and valve interlocking systems safeguard people and processes.

[Read more on page 20](#)

Revenue

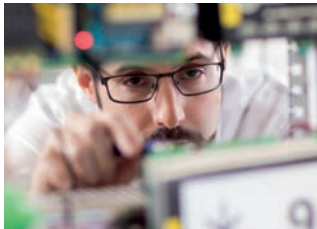
£198m

16% of Group revenue

Adjusted¹ operating profit⁷

£46m

16% of Adjusted¹ operating profit⁷



Infrastructure Safety

Infrastructure Safety’s technologies save lives, protect infrastructure and enable safe movement. It protects people, property and assets with technologies that detect and suppress fire, and ensure the security of commercial, residential and public buildings. It makes elevators smarter, simpler and safer with safety and communications systems and components, its sensors automate doors in public, commercial and industrial buildings, and its advanced radar technology makes highways and airports safer and more efficient.

[Read more on page 24](#)

Revenue

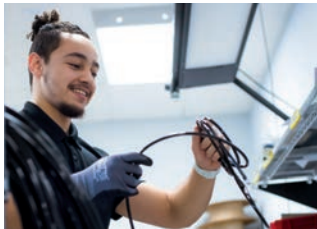
£409m

34% of Group revenue

Adjusted¹ operating profit⁷

£89m

32% of Adjusted¹ operating profit⁷



Environmental & Analysis

Environmental & Analysis provides technologies that monitor and protect the environment and ensure the quality and availability of life-critical resources. Its solutions, including environmental data recording, water quality testing, water network monitoring and ultraviolet treatment, help to monitor and improve the quality of drinking, industrial and recreational water, and to monitor air and water pollution and analyse gases. Its optical, opto-electronic and spectral imaging systems use light to analyse materials across a broad range of applications and industries.

[Read more on page 30](#)

Revenue

£299m

25% of Group revenue

Adjusted¹ operating profit⁷

£66m

24% of Adjusted¹ operating profit⁷



Medical

Medical’s technologies enhance the quality of life for patients and improve the quality of care delivered by healthcare providers. Its devices assess eye health, monitor blood pressure, and assist with eye surgery and in primary care applications. Its fluidic components are used by medical diagnostic OEMs and laboratories in demanding fluidic handling applications, and its sensor technologies are used in hospitals and healthcare facilities to improve care quality, safety and operational efficiency.

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Revenue

£306m

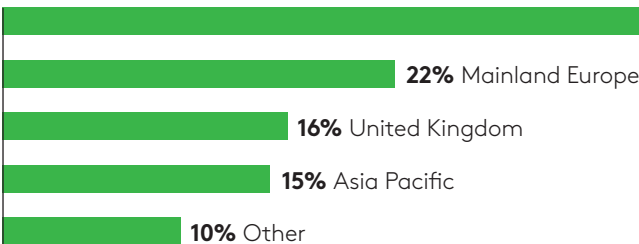
25% of Group revenue

Adjusted¹ operating profit⁷

£77m

28% of Adjusted¹ operating profit⁷

Revenue by destination



37% USA

22% Mainland Europe

16% United Kingdom

15% Asia Pacific

10% Other

20+

Countries with a Halma company presence

5

International hubs in the USA, Brazil, UK, India and China

100+

Countries with customers

Halma's DNA



Our purpose

Halma's DNA runs through our business at all levels. It provides competitive advantage and core stability, and allows us to continuously adapt to new market needs.

Our purpose is to grow a safer, cleaner, healthier future for everyone, every day.

It drives every business decision we make. It ensures everyone who works with us is focused on doing those things that make it happen.

Our companies develop technologies which protect and improve people's lives. We solve some of the world's most pressing issues, from air quality to food security.

Our purpose defines the three broad market areas where we operate:

Safety

Protecting life as populations grow and urbanise, and protecting worker safety.

Environment

Improving food and water quality, and monitoring air pollution.

Health

Meeting rising healthcare demand as growing populations age and lifestyles change.

We believe these issues are global and long term in nature. We expect them to support Halma's success sustainably for the foreseeable future.





Halma Organisational Genes

These are the core elements of our business structure and have proved themselves to be fundamental drivers in delivering consistent, long-term growth. They describe what we will protect while we continuously transform ourselves.

Purpose drives us

Our purpose powers every business decision we make, from choosing our markets to finding the right talent.

Agility is everything

We are built to be responsive.

Decision-making is close to our customers. Individual businesses, as well as the portfolio, can react with speed when market dynamics change.

We bet on talent

We insist on exceptional leaders who are empowered and accountable to set strategy and grow their own businesses. Diverse viewpoints on every team help to ensure we don't miss a thing.

We are global niche specialists

We are disciplined in targeting high-return, well-defended global niches in markets with long-term growth drivers. We innovate with cutting-edge technology in these niches and use our deep application knowledge.

We invest for the future

Our diverse portfolio allows us to take a long-term view and means we can continue to innovate for the future even as short-term market conditions change.

We are structured for growth

Individual businesses within the Group have access to our internal and external networks, enabling us to go faster by learning from the experiences of others. Central expertise and capital are available to accelerate organic growth, which in turn allows us to continue to acquire additional growth and capabilities.



Halma Cultural Genes

These are the unique cultural and behavioural principles that we require, protect and leverage to effectively optimise our organisational genes and deliver our purpose.

Live the purpose

Be passionate about making the world safer, cleaner and healthier. See real problems and create innovative solutions.

Embrace the adventure

Continually grow and change, as individuals and collectively. Challenge assumptions and see opportunities. Seek insight from all directions and leverage diverse points of view.

Be an entrepreneur

Be an owner, risk-taker, visionary. Transform bold ambitions into reality. Be agile and responsive in the face of constant change. Be successful through and with others.

Say yes, and...

Be comfortable with paradox. Choose Yes, and... to seemingly conflicting priorities. Build for tomorrow and deliver today. Have stability and constantly evolve. Enjoy autonomy and eagerly collaborate.

Just be a good person

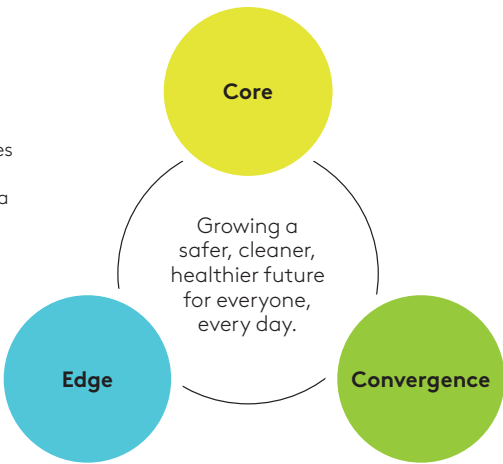
Play to win, but not at the expense of others. Operate with impeccable ethics, transparency and integrity in all that you do.

Our strategy is powered by our purpose. It is focused on acquiring and growing businesses in global niche markets, in our chosen areas of safety, health and the environment.

Our strategy

We divide our growth strategy into three areas. Our Core strategy is to grow our companies both organically and through M&A, and will continue to be our major focus.

Our Convergence and Edge strategies recognise that the increasing rate of technological change, including data and connectivity, is opening up new ways of growing our business and leveraging our collaborative culture.



- Core**
Developing new products and services, and growing organically and by acquisitions in niche markets with global reach which have resilient long-term growth drivers.
- Convergence**
Developing new products, services and business models by combining existing Halma technologies and capabilities in new ways, and potentially by adding capabilities and partnerships.
- Edge**
Developing and investing in digital business models that have the potential to completely disrupt existing models, and which can scale exponentially.



Our markets

We choose our markets because they have resilient, long-term growth drivers. Their growth is driven by demographic changes, as populations grow and age, and as more people move to cities, and by ever increasing regulation, as standards for safety, cleanliness and care become ever higher.

We expect to drive consistently superior growth and returns over the long term from our disciplined focus on acquiring and growing businesses in these niche markets.

We continuously reinvest in our companies to ensure that we maintain strong positions in our chosen markets. This includes investment in developing our people, our products and services, our intellectual property and our knowledge of the markets we serve.

Our companies are small- to medium-sized businesses, which provide technology solutions in the safety, health and environmental markets.

We have a variety of routes to market, from direct sales to third party distribution, and a wide range of customers, from individuals to large OEMs.

Our customers operate in diverse sectors, including commercial and public buildings, utilities, healthcare, science and the environment, process industries, and energy and resources.

We operate in more than 20 countries, with major operations in the UK, Mainland Europe, the USA and Asia.

We believe that the combination of our purpose, strategy, culture and business model differentiates us from our peers, and we expect it to deliver superior and sustainable value for our shareholders. We set ourselves challenging targets, and aspire to double our earnings every five years, while maintaining high returns.

Investment proposition

A clear purpose

Our purpose is to grow a safer, cleaner, healthier future for everyone, every day, and this gives us a strong motivation to make a positive difference to people’s lives worldwide, and provides us with exciting opportunities for growth in a diverse range of markets.

High growth and returns

We deliver high growth and returns. Over the past five years, organic revenue growth has averaged 10% and growth in adjusted earnings per share has averaged 12.9%. Return on Sales has averaged 20.4% and Return on Total Invested Capital has averaged 15.7% over the same time period.

Strong cash generation and modest leverage

Our business is strongly cash generative. Cash generation (adjusted operating cash flow as a percentage of adjusted operating profit) has averaged 86% over the past five years. We maintain modest levels of leverage, to allow us flexibility for organic investment and to make acquisitions, with gearing (net debt to EBITDA) having averaged 0.84 times over the past five years.



Agile portfolio management

We manage the mix of businesses in our Group to ensure we can sustain strong growth and returns over the long term. We acquire businesses to accelerate penetration of more attractive market niches, we merge businesses when market characteristics change, and we exit markets which offer less attractive long-term growth and returns through carefully planned disposals.

A strong and consistent track record

We have a strong track record, having consistently achieved record profits, high returns and strong cash flows, with low levels of balance sheet gearing. We have delivered record levels of revenue and profit for 16 consecutive years, Return on Sales of 16% or more for 34 consecutive years, and have a 40 year track record of growing dividend per share by 5% or more every year.

Our business model is simple. It is driven by our strategy and supported by Halma's DNA. It is focused on sustaining our companies' growth and returns over the longer term, while delivering strong performance in the shorter term.

Our business model

We are structured for growth

Our structure is simple and lean, with only three layers – companies, sectors and support functions – all three of which are focused and rewarded on driving growth. This allows for fast decision-making, and minimises bureaucracy.

We have a sustainable financial model

Our purpose and strategy define the markets we operate in, and our focus on growing and acquiring businesses in global niches in the safety, health and environmental markets.

Our choice of markets results in a highly sustainable financial model: strong organic growth and cash generation allow us to continuously reinvest in future growth and acquisitions.



Our companies

Each company is a separate legal entity with a board of directors. This drives accountability for performance and supports good governance. It also allows companies to drive innovation in their chosen niche markets, and be agile and responsive to changes in their customers' needs to drive sustainable growth.

Our sectors

Our sector teams are the vital connection between our companies and support functions. They promote internal networks and collaboration between companies, enabling companies to capitalise on broader sector trends, and support M&A through small sector teams.

Support functions

Support functions provide expertise in capital management and control frameworks. They support our companies through our Growth Enablers, manage our portfolio of companies and the allocation of capital, set our risk appetite, and ensure compliance and good governance.

Strong organic growth

The foundation of our financial model is strong and consistent organic revenue and profit growth. This is driven by our disciplined focus on markets which have resilient, long-term growth drivers, and market niches that offer consistently superior organic growth and high returns.

High returns and cash generation

We also choose markets that have relatively low capital intensity and high returns on sales. In turn, this drives strong returns on capital and high levels of cash generation.

Continuous reinvestment

We use this cash generation to continuously reinvest in R&D and product innovation to maintain our strong market and product positions, and to drive growth and maintain a high return on sales.

Value-enhancing acquisitions

Strong cash generation also allows us to make value-enhancing acquisitions in core and adjacent markets to expand our growth opportunities and geographical reach.

Flexibility to invest and grow dividends

We maintain modest levels of financial leverage, to allow us flexibility to invest and sustain a progressive dividend policy for our shareholders.





We support our companies through our Growth Enablers

Our Growth Enablers support our companies in delivering our growth strategy. These seven Growth Enablers leverage a unique set of skills and expertise from across the Group, powered and co-ordinated by small central teams.

We measure our achievements and reward performance

We measure our achievements through financial and non-financial key performance indicators (KPIs), and through customer satisfaction and the delivery of shareholder value.



M&A

We acquire and grow businesses which are aligned with our strategy, and sell or merge businesses to ensure we maintain our strategic focus.



International Expansion

We assist our companies in growing their businesses in key export markets, including through our hubs in the USA, Brazil, UK, India and China.



Talent and Culture

We attract and develop ambitious people who want to make a difference, and who prosper from the freedom to make their own decisions.



Finance and Risk

We give our leaders the insight to make good decisions, through accurate, timely, and actionable financial data and risk analysis.



Digital Growth Engines

We provide innovation and accelerator programmes to help our companies discover new opportunities and build digital capabilities.



Innovation Network

We connect our companies with each other and experts from around the world to help them learn from each other and stay current with market trends.



Strategic Communications

We assist our companies in reaching all stakeholders who can help them to build their brand and develop market-leading positions.

Setting challenging targets

We aspire to double our earnings every five years while maintaining high returns, and set targets for our growth, returns, cash generation and investment KPIs. We work hard to ensure that we have the right culture, talent and diversity and set challenging targets for employee engagement, health and safety and training.

Closely monitoring performance

We closely monitor our companies' performance, their strategic plans and forecasts. Each company certifies twice a year its compliance with minimum controls for finance, legal and IT; this is complemented by independent peer reviews of financial performance, and internal and external audits.

We are developing new ways of measuring the delivery of our strategy, for example in the effect of Convergence and Edge strategies, and how we are achieving our purpose, by more effectively measuring our impact on the world.

Rewarding our people

Our people are rewarded on performance. We reward them for delivering superior and sustainable growth and returns and hold them accountable for delivering our strategy and complying with our control frameworks. Short-term incentives based on Economic Value Added (profit growth, adjusted for a charge for the use of any capital) are balanced by longer-term incentives in the form of Halma shares.

Record results and the 40th year of dividend growth of 5% or more

I am pleased to report that Halma had a successful year, delivering record results and executing well against our growth strategy. We remain positioned to deliver continued strong growth and returns into the future.

Revenue and profit increased for the 16th consecutive year, with strong organic growth, and increased returns. We have a robust financial position, with strong cash generation and modest financial leverage, allowing us to continue to invest in our businesses and in acquisitions to drive future growth. We are proposing a 7% increase in our final dividend which, if approved at our Annual General Meeting, will result in our dividend per share growing by 5% or more for the 40th consecutive year.

Ensuring sustained success

I believe Halma's continued success is driven by two key elements: focus and discipline in our choice of markets, and our careful selection and development of talented people.

In terms of our choice of markets, our purpose ensures that we remain focused on delivering solutions for our customers that improve safety, support a cleaner environment and deliver better health outcomes. This means that our companies are helping to solve some of the biggest issues facing the world today, and this is likely to support their growth over the long-term.

Our clear and consistent strategy means that we are disciplined in only investing in global niche markets which are aligned with our purpose and where growth is driven by long-term trends such as global population growth, the increasing proportion of people living in cities, and ever higher regulatory standards. We create value by growing and acquiring strong companies in these markets, and supporting them in creating new technologies, products and solutions to make the world safer, cleaner and healthier.

The digital revolution is presenting exciting opportunities for our businesses, and we are already seeing a step-change in the mindset of our business leaders and their drive to 'think digital'. Supported by our Innovation & Digital team, they are developing their thinking around products, services and markets in order to develop innovative propositions for their customers.



"Our clear and consistent strategy means that we are disciplined in only investing in global niche markets which are aligned with our purpose."

Paul Walker
Chairman

Talent, culture and diversity

The support we give to our businesses in selecting and developing their people is a further crucial element of our success. We want exceptional people, who are motivated by our purpose and by the opportunity to grow their companies, and who want to be held accountable for the delivery of that growth over the long-term.

We are thoughtful in our approach to ensure that we recruit and retain the best people and have robust succession plans. A good example of this is the successful handover this year from Kevin Thompson to Marc Ronchetti as Chief Financial Officer. I was pleased to welcome Marc to the Board in July 2018.

Our culture is fundamental to our success, and one measure of its health is the engagement of our employees. I am pleased that our independent survey of employee engagement saw both a very high response rate and continued strong engagement at all levels.

I believe that diversity in all its forms brings great benefits to Halma, and we seek to provide opportunities for all, regardless of background, age, gender or race. While we are moving in the right direction, with good representation at Group, Sector and Board levels, we do recognise that we still need to do more to improve diversity across the Group and particularly in senior management within companies.

I would like to thank all of my colleagues across our companies for their hard work and support for Halma, in delivering such a strong performance.

Communicating and supporting our purpose

During the year, we developed new ways of communicating our purpose to all our stakeholders. This includes a new brand design, which we are launching with this report, a redesigned website at www.halma.com, and the development of Halma's DNA, which articulates the key elements of our culture and approach. All of the elements of Halma's DNA are fundamental to our success, and unite our diverse Group of companies.

We also supported our purpose through the launch of our first group-wide charitable campaign, Gift of Sight. Over 1,800 employees around the world have received eye screenings throughout the campaign, raising over US\$100,000 for the Himalayan Cataract Project.

The UK Corporate Governance Code

The Board has already taken steps to consider and strengthen our governance to align with the new UK Corporate Governance Code 2018 – particularly around stakeholder and workforce engagement. I am pleased to report that we have complied with the 2016 Code in full and further details of our approach to the 2018 Code are set out in the Governance Report.

A new approach to sustainability

During the year, we reviewed our approach to sustainability. Halma has always minimised its environmental impact by operating close to its end markets, and our technologies have a positive impact on the world by protecting people and improving their quality of life. However, we recognise that being a good corporate citizen extends beyond these positive effects and that we need to demonstrate more fully how we manage our businesses in a sustainable and ethical way.

We undertook an exercise to understand which areas of corporate social responsibility matter most to our stakeholders and how we are performing against our peers. Our initiatives in these areas, further described in the Sustainability review on pages 48 to 53, will be led by Marc Ronchetti, who has been appointed as the Board member responsible for Sustainability and Health & Safety.

Looking to the future

In summary, Halma has delivered another great set of results and I am proud of what everyone across the Group has achieved. I hope that you will find this Annual Report helpful in understanding our business and strategy, our performance over the past year and our approach to governance. As Chairman, I look to the future with confidence, knowing that we have a strong sense of purpose, a clear and focused strategy and great talent to continue to deliver strong growth and returns.

Paul Walker
Chairman



In February, we held a Capital Markets Day for analysts and investors focused on the Medical sector, and the life-saving technology developed by Halma companies. Materials from the event, including a video summary, are available on our website www.halma.com

Another record year

Revenue

£1.2bn

Adjusted¹ profit

£246m

≥5% dividend growth for

40yrs

Final dividend to increase by

7%



Record revenue and profit for 16th consecutive year

Process Safety revenue

£198m

+7%

Infrastructure Safety revenue

£409m

+17%

Environmental & Analysis revenue

£299m

+15%

Medical revenue

£306m

+8%

“We have a clear and focused growth strategy of growing and acquiring businesses in niche markets with global reach in our chosen market areas of safety, health and the environment.”

We have achieved record revenue and profit for the 16th consecutive year, and double-digit organic constant currency revenue growth for the second year running. Our strategic investment is wide-ranging, including creating innovative new technology, products and services, extending our international reach, strengthening our talent base, and acquiring strong businesses in, or adjacent to, our existing markets.

Halma’s purpose is to grow a safer, cleaner, healthier future for everyone, every day. Consequently, we address some of the world’s most fundamental needs and challenges: safety at work and in public spaces; a cleaner, more sustainable environment; and improved medical care. These needs are both global and long-term in nature, and they will continue to gain importance as populations increase, urbanise and age, and as regulation continues to tighten. We expect these factors to drive demand for our solutions far into the future.

We have a clear and focused growth strategy of growing and acquiring businesses in niche markets with global reach in our chosen market areas of safety, health and the environment. We also have a simple financial model, with strong organic growth, high returns and cash generation allowing us to continuously increase investment to drive future organic and acquired growth, while providing progressive dividends for shareholders. We set ourselves challenging targets, aspiring to double our earnings every five years, while maintaining modest levels of financial gearing without being reliant on seeking further equity.

Halma’s definitive organisational model and culture have provided a stable foundation for over 40 years. They are becoming increasingly important as Halma continues to grow and expand internationally, and as our businesses constantly evolve and adapt to address changing market needs. I believe it is crucial that we are clear on how our purpose, strategy, organisation and culture interact, and how they continue to be the foundation of our success. This is described earlier in this Annual Report (pages 4 to 9) and on our new website, so that all our stakeholders can understand how our organisation and culture are at the heart of ensuring that we align our purpose with continued strong performance.

Record revenue and profit with higher returns

Revenue increased by 13% to £1,211m (2018: £1,076m), including 10% organic constant currency revenue growth for the second consecutive year. Adjusted¹ profit rose by 15% to £245.7m (2018: £213.7m) including 11% organic constant currency growth. Acquisitions contributed 3% to revenue growth (2% net of disposals) and 3% to adjusted profit growth (4% net of disposals). There was a small benefit to revenue and profit from currency in the full year, with a negative impact in the first half more than offset by a positive effect in the second half. Statutory profit before taxation increased by 20.2% to £206.7m (2018: £171.9m).

Returns remained at a high level. Return on Sales¹ increased to 20.3% (2018: 19.9%), within our target range of 18% – 22%. The post-tax Return on Invested Capital improved to 16.1% (2018: 15.2%), well above our estimated Weighted Average Cost of Capital of 7.9%, with the increase primarily reflecting the strong earnings growth achieved.

Group Chief Executive's review

Continued

Strong cash generation and balance sheet to support future investment

Cash generation was excellent and resulted in net debt reducing to £182m (2018: £220m) after spending £68m on acquisitions and £31m on capital expenditure, as well as paying dividends of £57m to shareholders and £41m of tax.

Gearing (net debt to EBITDA) reduced to 0.63 times from 0.87 times. This is lower than our targeted range of 1-2 times, and therefore our balance sheet has significant capacity to support investment in both organic and acquisitive growth, in line with our strategic objectives.

Final dividend to increase by 7%

The Board is recommending a 7% increase in the final dividend to 9.60p per share (2018: 8.97p per share). The final dividend for 2019 is subject to approval by shareholders at the AGM on 25 July 2019 and is expected to be paid on 14 August 2019 to shareholders on the register at 12 July 2019.

Together with the 6.11p per share interim dividend, this would result in a total dividend for the year of 15.71p (2018: 14.68p), also up 7%, making this the 40th consecutive year of dividend per share growth of 5% or more.

Revenue growth in all major regions

We delivered revenue growth in all major regions, reflecting the sustainable and global growth opportunities offered by safety, environmental and health markets. Our companies are increasingly leveraging our regional hubs and collaborating with other companies to develop new products and services and to expand internationally.

The USA, Mainland Europe and the UK performed strongly. Our largest region, the USA, achieved the strongest revenue growth of 18%, both on a reported and on an organic constant currency basis. Mainland Europe and the UK grew revenue by 12% and 16% respectively (6% and 11% on an organic constant currency basis).

Asia Pacific growth was slower, at 5%, against a strong performance last year which benefited from some large contracts. In our major markets in the region, China grew 8% following 20% growth last year, and Australasia improved by 16%. We continue to see good growth potential in Asia Pacific, by leveraging our growth hubs in the region, and we continue to strengthen our local management teams.

In the Rest of the World, performance was mixed. Revenue was broadly flat overall, with a challenging second half following good first half growth. In the larger markets, Africa and Brazil delivered good growth, while Near and Middle East and Canada were broadly flat.

Revenue and profit growth in all sectors

Revenue and profit increased in all sectors, with three out of four sectors reporting double-digit organic revenue and profit growth.

Process Safety delivered good growth, although reorganisations in our Industrial Access Control and Safe Storage and Transfer businesses, to improve their competitive position and performance, softened profit growth.

Revenue increased 7% to £198m (2018: £185m), while profit grew 5% to £45.5m (2018: £43.3m). Organic constant currency growth for revenue and profit was also 7% and 5% respectively, given a minimal currency effect and no acquisitions in the year. Revenue growth was slower in the second half, primarily due to less favourable conditions in the US energy sector. Return on Sales remained strong at 23.0% (2018: 23.5%), with the decline in the year reflecting the reorganisation costs. R&D spend increased by 10% to £7.0m (2018: £6.3m). The Gas Detection and Industrial Access Control businesses performed strongly, while the performance of Pressure Management was challenged by adverse end market conditions and profit mix, but nonetheless delivered flat revenue. Our Safe Storage and Transfer businesses reported a single-digit decline in revenue during their period of restructuring which included strengthening their leadership and consolidating manufacturing operations.

There was strong organic constant currency growth in the USA, supported by a major logistics contract for our Industrial Access Control subsector, despite less favourable energy market conditions. The UK also performed well, with good progress in Gas Detection and Industrial Access Control. There was solid progress in Asia Pacific and Mainland Europe, while other regions declined, including in energy related markets in the Middle East.

Revenue

+13%

Adjusted¹ profit
before tax

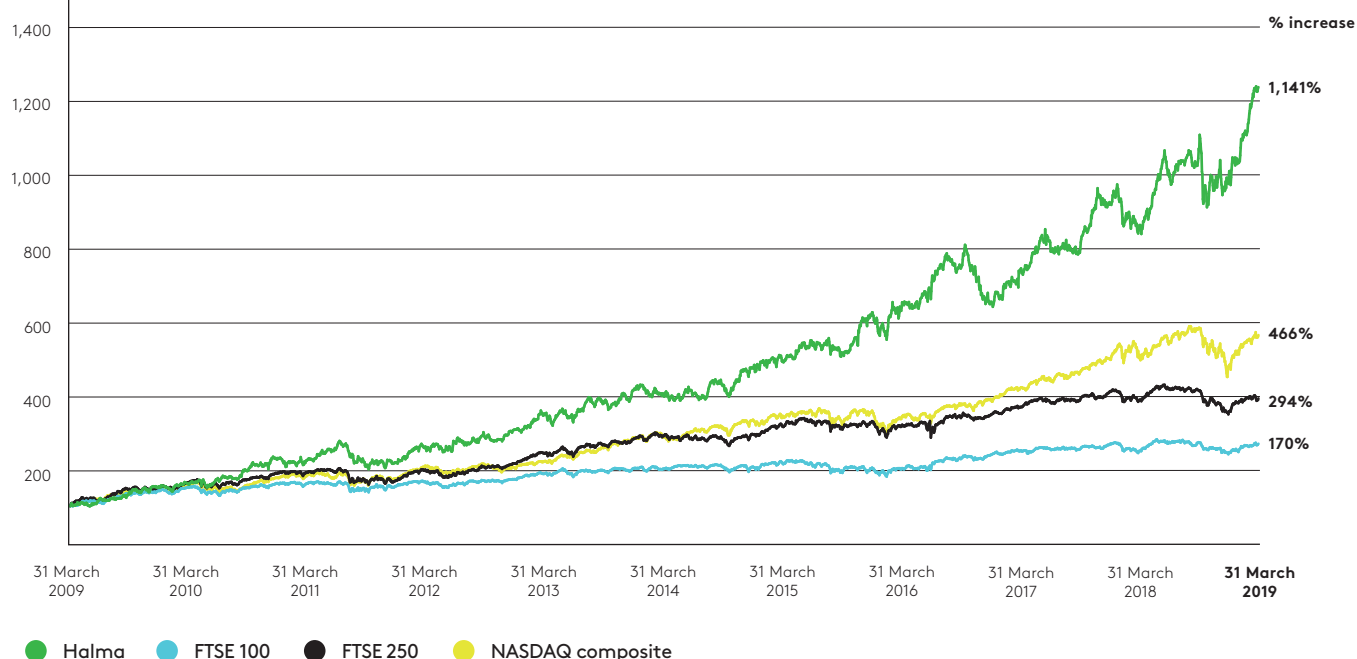
+15%

Statutory profit
before tax

+20%

Total Shareholder Return (ten years)

Graph as rebased to 100



Process Safety will continue to invest in broadening its markets and improving its product innovation and leadership. We expect this to make it less sensitive to changes in its largest market, oil and gas, and deliver more consistent growth in the future.

Infrastructure Safety had a very impressive year, with strong organic growth and a significant contribution from acquisitions.

Revenue increased by 17% to £409m (2018: £349m), including 11% organic constant currency growth and a 6% contribution from acquisitions. Profit grew by 21% to £88.9m (2018: £73.3m), which included 16% organic constant currency growth and a 5% contribution from acquisitions. Return on Sales increased to 21.8% (2018: 21.0%). R&D spend increased by 22% to £24.9m (2018: £20.4m). The sector's strong performance was broadly-based, with all five subsectors performing well.

There was exceptionally strong growth in the USA, partly reflecting a recovery from last year's weaker performance. The sector's Fire businesses were key contributors to this improvement. The Africa, Near and Middle East region also performed strongly, and there were good rates of growth in the UK and Mainland Europe. Growth in Asia Pacific was slower.

The Other regions, which accounts for around 3% of sector revenue, saw a decline as larger contracts, which contributed to last year's strong performance, came to an end.

Given the widespread growth, and a full year contribution from this year's acquisitions, Infrastructure Safety is expected to make good progress in the coming year.

The **Environmental & Analysis** sector achieved strong organic growth, and also benefited from the acquisition of Mini-Cam in 2018.

Revenue grew by 15% to £299m (2018: £259m), which included organic constant currency growth of 11% and a 3% contribution from acquisitions. Profit increased by 21% to £66.4m (2018: £55.0m) including organic constant currency growth of 13% and a 7% contribution from acquisitions. There was a benefit from currency to both revenue and profit of just under 1%. Return on Sales improved to 22.2% (2018: 21.2%). R&D spend increased by 8% to £19.2m (2018: £17.8m). All three subsectors delivered good revenue and profit growth, with a particularly strong contribution from the Environmental Monitoring subsector, which benefited from double-digit organic growth and the acquisition of Mini-Cam.

There was impressive revenue growth in the UK and also in the USA, the sector's largest market, which benefited from large Spectroscopy and Photonics projects. Mainland Europe grew well, while Asia Pacific saw more modest growth. Other regions, which account for only 4% of sector revenue, reported a decline.

With continued investment to drive collaboration, technology and the extension of its digital and data management capabilities, the Environmental & Analysis sector is expected to make further progress in the year ahead.

The **Medical** sector achieved a good performance, with revenue growing in all subsectors and all major geographic regions.

Revenue increased by 8% to £306m (2018: £284m), including 10% organic constant currency growth. Profit grew by 15% to £76.9m (2018: £67.1m), including 13% organic constant currency growth. There was a small benefit to revenue and profit from acquisitions. The disposal of Accudynamics in the year had an adverse effect on revenue but benefited profit. Return on Sales increased to 25.1% (2018: 23.6%). R&D spend declined by 3% to £11.5m (2018: £11.8m) but grew by 2% excluding the effect of the disposal of Accudynamics during the year.

Group Chief Executive's review

Continued

The Diagnostics subsector performed very well, after adjusting for the Accudynamics disposal. The Ophthalmology and Sensor Technology subsectors delivered strong growth, the former through continued international expansion, and the latter from further penetration into their core market of location services in acute care facilities in the USA.

There was a strong revenue performance in the USA, the sector's largest region, with Mainland Europe and Asia Pacific also delivering good growth. There was solid growth in the UK, with Other regions showing a small decline following a strong increase last year.

The Medical sector is expected to make continued progress in the coming year, through increased penetration into developing markets, further product and service development and continued investment in talent.

Four acquisitions and one disposal completed

Halma's sector-focused organisational 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 enables us to continue to grow rapidly without becoming significantly more complex. For example, in 2009 Halma had revenue of £502m from 38 operating companies, while today we have revenue of over £1.2bn from 42 operating companies.

Our core acquisition strategy is to find privately owned businesses operating in niches which are aligned with our purpose of "Growing a safer, cleaner, healthier future for everyone, every day". We focus the majority of our search efforts on our core, or closely adjacent, market niches although each sector board has the freedom to find new niches which might have the right product, market and financial characteristics. In most cases we acquire 100% of an entity but we also consider minority investments to gain access to potentially valuable intellectual property if an outright purchase is not appropriate or possible. Every transaction is approved by the Group Chief Executive and Chief Financial Officer, with all deals £10m or over requiring Halma plc Board approval.

We entered the year with a healthy acquisition pipeline and this translated into four acquisitions being completed in the Infrastructure Safety sector, as well as two small asset purchases in the Medical sector, for a total initial cash consideration of £66.1m. We made one small disposal in the year, of Accudynamics, as it no longer had the future growth and returns characteristics we require. These acquisitions contributed in line with expectations during the year and we expect good performances from them in the future. Full details are given in the Financial Review and in the notes to the Financial Statements.

I am pleased with the number of acquisitions made during the year and with the high levels of prospecting activity in our sector M&A teams. Although we did not meet our KPI of acquiring profit growth of 5% or more, delivering 3.2% (excluding the effect of the Accudynamics disposal), this was more than compensated for by strong organic growth. However, increasing the contribution from acquisitions will be a focus for improvement. Consequently, we have increased our capability, with new talent at the Divisional Chief Executive and Managing Director levels and the addition of further resources to our sector M&A teams. We have also added expertise to support minority investments that can bring new capabilities to Halma without taking 100% ownership. We continue to build long-term relationships with business owners so that they see Halma as the right home for their business when they decide to sell, or as a strong investment partner to help them grow their businesses, and have a good pipeline for the year ahead.

Further investment in our Growth Enablers

Our Growth Enablers are resources available to our companies to help them to grow. Our strong progress in the year was supported by their further development, for example in the expansion of the resources in our M&A teams, as discussed above, and the strengthening of the leadership teams in our international hubs. We also increased investment in our Innovation and Digital programmes, and set out a new vision for how Finance & Risk can enable our companies to grow. Our Strategic Communications team has been active in supporting our companies in telling their story, thereby better connecting them with their customers.

Cash flow

88%

of adjusted¹ profit

R&D spend

+11%

Acquisitions during the year

4

This month we are launching a new Halma brand design and website to better communicate the Halma story to our stakeholders, particularly how we are accomplishing our purpose through our unique culture.

Talent and culture are critical components of every business' success. The change we made at the end of 2017 to streamline our Executive Board, reducing the number of Sector Chief Executive roles from four to two, has been a great success. It has re-established the importance of the Divisional Chief Executive (DCE) role, reduced complexity, shortened lines of communication, improved decision-making and eased networking across Halma. This has enabled us to attract stronger talent with greater autonomy and responsibility. Our DCEs now play a more significant leadership role in Halma with increased interaction with the Executive Board.

Good progress on executing our strategy

It is over a year since we launched our Halma 4.0 strategy, which provided our companies with a clear strategic framework including how to address the diverse challenges and opportunities presented by the digital age. We have made good progress in developing our digital growth strategies, although their current contribution to revenue growth is modest. We expect them to play a more significant role in the future.

We have three elements to our growth strategy:

- **Core growth**, for example, through new product development or the international expansion of existing companies, remains our main focus. We have continued to increase investment to support it, with R&D spend up by 11% to £63m (2018: £57m).
- **Convergence growth** helps Halma companies to unlock value by creating new solutions, and often new business models, by combining the capabilities and technologies of more than one Halma company, or by a Halma company doing the same through an external partnership. During the year, nine projects involving over 20 Halma companies went through our Convergence Accelerator programme and the commercialisation of some of them will continue in the coming year.

- **Edge growth** is created from new digital business opportunities via partnerships with external companies which have many leading-edge capabilities that we do not wish to acquire. We have been very active in building these partnerships, with discussions initiated by companies across all our sectors from a number of events in Singapore and Israel (the latter in collaboration with OurCrowd, an equity crowdfunding platform). We have also launched a collaboration with Hitachi to help us to scale and execute some of our digital business ideas, with two Halma companies already participating and further projects being planned.

We will continue to refine our digital strategy and policies to create a robust framework for our digital growth. This will include how we will organise and share data, define its ownership and comply with regulatory requirements with a structured and systematic approach.

We are developing key performance indicators to track our Innovation & Digital progress, and will report on these in the coming year.

Outlook

Halma had a successful year, achieving record revenue and profit, delivering our 40th consecutive year of dividend per share growth of 5% or more and making further increased strategic investment supported by our strong balance sheet. We have a strong purpose, culture and growth strategy focused on niches in a diverse range of markets where demand is supported by resilient long-term growth drivers, offering us both organic and acquisition growth opportunities.

The new financial year has started well, and order intake has continued to be ahead of both revenue and order intake for the comparable period last year. We expect to make good progress in the year ahead.

Andrew Williams
Group Chief Executive

¹ See highlights.

Safer

The biggest challenge for highways authorities around the world is to maintain safety on ever-busier road networks.

327 billion

miles driven on UK roads in 2017

38.2 million

licensed vehicles on UK roads

250+ million

licensed vehicles on the road in the EU

Enhancing road safety and building smart motorway networks

Providing a safe environment on essential transport routes is a major focus for Halma acquisition, Navtech Radar. ClearWay technology is now deployed in five continents to tackle issues of safety and traffic flow.

Just one of these patented radar units covers up to 1km of highway and all carriageways. The detection can be configured on a lane by lane basis, in all directions. ClearWay's intelligent rules-based software automatically alerts a control centre of incidents and issues an alarm within 10 seconds, enabling a quick response as well as alerting other road users to the incident in a timely manner.

Unlike many other solutions, ClearWay is unaffected by adverse conditions, such as poor weather, smoke and bright sunlight. This makes it the most reliable solution for smart motorways and tunnels, significantly enhancing road safety.

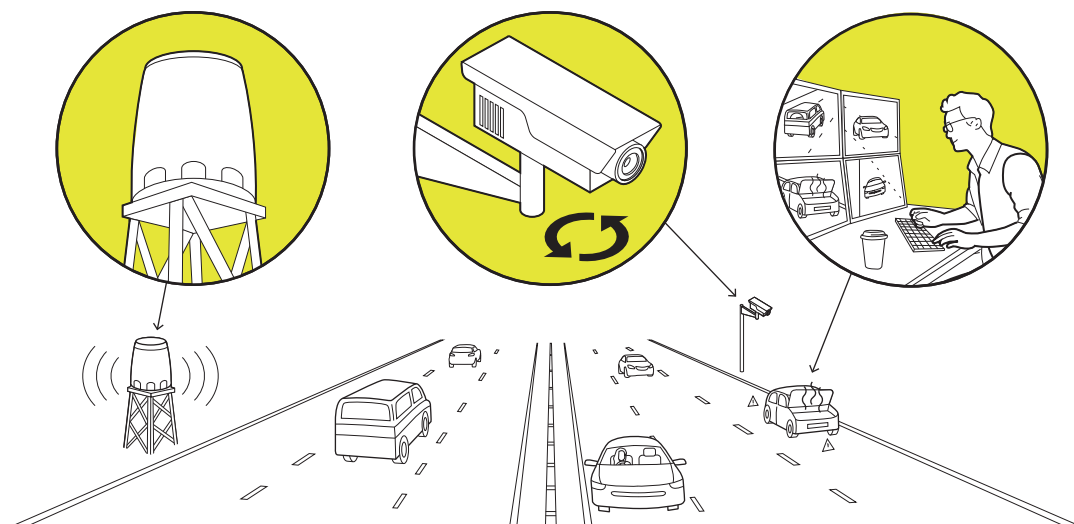
Navtech's ClearWay can be found in the 4.5 km long Mastrafjord Tunnel and the 5.8 km long Byfjord Tunnel near Stavanger in Norway.

ClearWay™

ClearWay is effective in all weather and light conditions with a low false alarm rate

Cameras are directed towards the incident

Operators are alerted in real-time when an incident is detected



Process Safety

Our markets



Gas detection

Instruments and systems that detect hazardous gases and analyse air quality.



Industrial access control

Systems to manage the movement of people in high risk areas, preventing accidents and ensuring that critical processes operate safely.



Pressure management

Explosion protection devices and systems to protect pressurised vessels and pipework in high stakes processes.



Safe storage and transfer

Real-time corrosion monitoring and valve interlocking systems that safeguard people and processes.

Process Safety's technologies protect people and assets at work, across a range of critical industrial and logistics operations.

Process Safety

Performance

KPIs	2019	Group target
Revenue growth ¹	+7%	–
Organic revenue growth ¹ (constant currency)	+7%	≥5%
Profit growth ¹	+5%	–
Organic profit growth ¹ (constant currency)	+5%	≥5%
Return on Sales ²	23%	≥18%
R&D % of Revenue ³	3.5%	≥4%

Contribution to Group

£m	2019	2018	2017	2016	2015
Revenue	198	185	167	155	159
Profit ⁵	46	43	40	40	45

1 Revenue and adjusted⁴ operating profit⁵ are compared to the equivalent prior year figures.

2 Return on Sales is defined as adjusted⁴ operating profit⁵ expressed as a percentage of revenue.

3 R&D expenditure expressed as a percentage of revenue.

4 Adjusted to remove the amortisation and impairment of acquired intangible assets, acquisition items and restructuring costs (see note 1 to the Accounts).

5 Adjusted⁴ operating profit before central administration costs after share of associate.

6 Adjusted⁴ operating profit⁵ and organic growth rates are alternative performance measures used by management. See notes 1 and 3 to the Accounts.

Sector progress summary

The sector delivered good revenue and profit growth while investing for improved performance. Revenue growth was 7%, on both a reported and organic constant currency basis, with the UK and the USA performing well, somewhat offset by a decline in the Africa, Near and Middle East region. With stable gross margins and investments to strengthen the sector's competitive position and improve performance, profit increased 5% on both a reported and organic constant currency basis. Return on Sales remained strong, although there was a decline as a result of reorganisation costs.

Gas Detection and Industrial Access Control performed strongly. Pressure Management's profit growth was affected by a combination of end market conditions and product mix. Safe Storage and Transfer underwent a reorganisation, including the addition of strong leadership and the consolidation of manufacturing operations. These steps position the sector for growth in 2020 and beyond.

Early in the year, the sector M&A strategy was reviewed to ensure better alignment with our purpose and key market growth drivers, resulting in a redefinition of our subsectors. Subsequently, we have developed a stronger pipeline of prospects.

Strategy

Process Safety plays an important part in delivering Halma's purpose of making the world safer and cleaner in critical industrial operations.

We are investing in Core growth to develop new, differentiated products that address specific needs in selected industry sectors. Examples include connected gas detection products that allow our customers access to safety-critical data, and the launch of a high temperature H₂S detector specifically addressing needs of Middle Eastern customers in the Oil and Gas industry. We are expanding into adjacent markets, for example through new pressure safety units focused on the food, pharmaceutical and industrial markets.

Highlights

Revenue

£198m

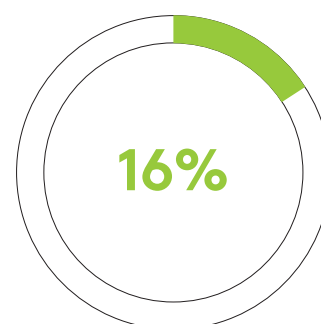
+7%

Adjusted operating profit⁵

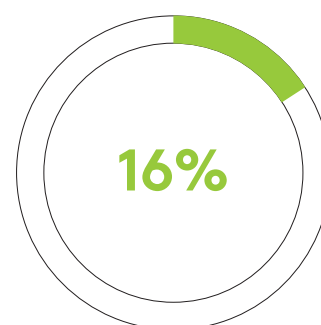
£46m

+5%

% of Group revenue



% of Adjusted operating profit⁵



7%

Organic constant
currency revenue growth

23.0%

Return on Sales

3.5%

R&D as a % of Revenue

Partnerships are playing an increasingly important role in our strategy. In Gas Detection, we are utilising Halma's Convergence Accelerator and working with external partners to generate revenue from an early stage venture in China, focused on air quality and odour monitoring solutions. Industrial Access Control is augmenting its mechanical and electromechanical products with software and data solutions to meet the safety and productivity needs of warehouse operators and factory production lines.

We have invested in our M&A capability to fuel growth into new, adjacent subsectors which are aligned with Halma's purpose and have strong long-term growth drivers. Increasingly there is the potential for digitisation, through technology enhancements to our existing portfolio, and for international growth, with Asia as a key focus.

Market trends and growth drivers

Our Process Safety businesses continue to benefit from increasing health and safety regulation, a growing population and urbanisation. With an estimated 340 million injuries and 2.3 million fatalities in the workplace each year, it is likely that health and safety regulations will continue to tighten. Our ability to find new applications in adjacent industrial markets is broadening our growth opportunities, both organically and through acquisition.

Several of our businesses, notably in Pressure Management, operate in markets driven by the increasing need for energy and other critical resources. Global energy demand is expected to grow by over 25% between 2017 and 2040, with developing country demand expected to increase by 45%. The diversification of energy resources means we are repurposing our solutions to alternative energy markets, where we expect good growth: the global renewable energy market is expected to grow at a compound annual growth rate of 4.9% between 2017 and 2025.

In Gas Detection, the market is expected to grow by over 7% pa to 2025, driven by ongoing industrialisation, increased regulation, greater demand for continuous monitoring of harmful substances to protect worker safety, and the accelerated use of wireless sensors and connected devices.

Performance

Revenue grew by 7% to £198m (2018: £185m). Profit grew by 5% to £46m (2018: £43m). On an organic constant currency basis, revenue and profit grew by 7% and 5% respectively.

In Industrial Access Control, progress was very strong, particularly in US logistics. We expect further growth to come from that industry's focus on safety and productivity. We have also invested in sales and marketing resources in Asia to accelerate the potential adoption of our products in the region.

In Gas Detection, we delivered strong growth in China, from both our traditional gas detectors and from a newly developed odour monitoring solution. We made significant investments in product development and people, while maintaining strong returns.

Pressure Management delivered revenue similar to last year with a small decline in profit. US oil and gas market conditions were not favourable, particularly in the second half, due to pipeline constraints in the Permian Basin.



Safe Storage and Transfer has invested in streamlining operations and leadership to build a stronger platform for growth in this solid market.

Return on Sales was 23.0%, a decline from 23.5% in 2018 as a result of reorganisation costs, and Return on Capital Employed remained strong. R&D investment increased by 10.2% to £7.0m (2018: £6.3m).

Outlook

Process Safety continues to benefit from its long-term market growth drivers, and diversity of its end markets, and has strengthened the leadership in many of its businesses.

Increasing innovation, stronger marketing activity, together with increased strength in leadership, are expected to deliver further progress in the coming year.



Crowcon

Crowcon is a global leader in gas detection instruments. Combining deep application expertise with emerging technologies, Crowcon makes portable and fixed gas detection equipment protecting people from gas hazards.

Crowcon operates globally through a network of regional offices and authorised channel partners. Used across a range of industries, Crowcon's technology is helping to create healthier and safer

workplaces, protecting people and the environment from gas hazards.

Crowcon has been working hard at broadening their business with support from the Halma support functions, which has been a key component in their growth this year. Under the leadership of our APAC General Manager, they have built a team who are developing unique products in China for China, which could have worldwide potential.



"A team from Crowcon successfully completed Halma's Convergence Accelerator programme last year, resulting in the launch of an odour monitoring system addressing the issue of dangerous air quality levels. This fledgling team is moving at a rapid pace, and already winning new business."

James Gravestock
Managing Director, Crowcon

Primary Growth Enablers used:



Mergers & Acquisitions



International Expansion



Talent & Culture



Finance & Risk



Digital Growth Engines



Innovation Network



Strategic Communications

Infrastructure Safety

Our markets



Fire detection

Networked fire detection systems, cloud-based fire compliance services, wired and wireless fire detection components.



Fire suppression

Systems to automatically extinguish fires, protecting people, property and assets.



Elevator safety

Safety and communications components and systems that make elevators smarter, simpler and safer.



People and vehicle flow

Sensors for automatic doors in public, commercial and industrial buildings. Advanced radar systems that make highways and airports safer and more efficient.



Security sensors

Security sensors, control panels and apps to protect commercial, residential and public buildings.

Infrastructure Safety's technologies save lives, protect infrastructure and enable safe movement.

Infrastructure Safety

Performance

KPIs	2019	Group target
Revenue growth ¹	+17%	–
Organic revenue growth ¹ (constant currency)	+11%	≥5%
Profit growth ¹	+21%	–
Organic profit growth ¹ (constant currency)	+16%	≥5%
Return on Sales ²	21.8%	≥18%
R&D % of Revenue ³	6.1%	≥4%

Contribution to Group

£m	2019	2018	2017	2016	2015
Revenue	409	349	315	265	234
Profit ⁵	89	73	65	56	50

1 Revenue and adjusted⁴ operating profit⁵ are compared to the equivalent prior year figures.

2 Return on Sales is defined as adjusted⁴ operating profit⁵ expressed as a percentage of revenue.

3 R&D expenditure expressed as a percentage of revenue.

4 Adjusted to remove the amortisation and impairment of acquired intangible assets, acquisition items and restructuring costs (see note 1 to the Accounts).

5 Adjusted⁴ operating profit before central administration costs after share of associate.

6 Adjusted⁴ operating profit⁵ and organic growth rates are alternative performance measures used by management. See notes 1 and 3 to the Accounts.

Sector progress summary

The sector delivered a very strong performance with revenue growing 17% and profit 21%. All subsectors delivered double-digit revenue and profit growth, with progress in all major geographical regions. Together with a small improvement in gross margins, this led to higher Return on Sales even after an increase in R&D investment.

The sector made four acquisitions in a productive year for M&A. Navtech Radar has enhanced our People and Vehicle Flow business, building on our radar technology expertise. The Elevator Safety subsector, already benefiting from last year's Microkey acquisition, was further enhanced by the purchase of Rath Communications, which moves it into high growth adjacent markets such as 'area of refuge'. The Fire Detection subsector added Limotec, a leading Belgian fire control panel manufacturer and system seller, together with LAN Controls, a software focused business that enables remote monitoring of fire systems and ensures their correct maintenance.

Strategy

Infrastructure Safety makes the world a safer place by protecting commercial, industrial and public buildings and spaces. It addresses increasing life safety concerns, more stringent regulatory requirements and accelerating demand for connected infrastructure systems globally both by product and digital innovation, and by acquiring companies with technological expertise, strength in new geographies and a presence in adjacent markets. Our focus is on less cyclical, niche applications, with high barriers to entry.

We seek to expand our geographic footprint organically, utilising hubs in Asia Pacific, and through acquisitions, such as the Limotec and Rath Communications acquisitions.

Our strategy is supported by relentlessly focusing on talent, both by developing our people and attracting new talent from outside.

Highlights

Revenue

£409m

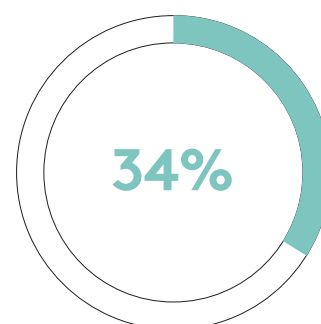
+17%

Adjusted operating profit⁵

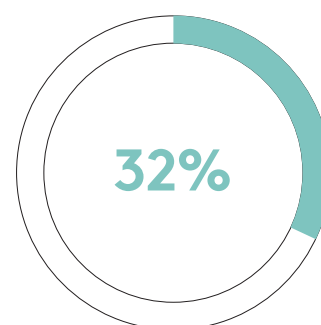
£89m

+21%

% of Group revenue



% of Adjusted operating profit⁵



11%

Organic constant
currency revenue growth

21.8%

Return on Sales

6.1%

R&D as a % of Revenue



Our companies make excellent use of the Digital Growth Engines. This includes the Convergence Accelerator programme to drive new business concepts, particularly in connected systems. This will move us up the digital value chain and provide opportunities to deliver value from data. By leveraging the Microkey acquisition, we are providing new connected elevator solutions that bring together insights gained from data generated by the many safety components we supply to elevator manufacturers and maintenance companies. We are also acquiring companies with digital business models and knowhow, such as LAN Controls.

Market trends and growth drivers

Our Infrastructure Safety markets are driven by an expanding and ageing population, urbanisation and increasing regulation, with increasing demand for digital innovation. According to a recent UN report, the world's urban population is expected to increase by 2.5 billion by 2050. We expect this to drive demand for better infrastructure and transportation safety and security, as more people live in more densely populated areas.

These long-term trends are particularly relevant in developing economies. For example, the fire detection market is forecast to grow at 4% pa globally between 2017 and 2022, with a greater increase of 8% pa in India and 5% pa in China.

The growth of intelligent building solutions offers further opportunities. The market is expected to more than quadruple by 2027, as digital technology allows building owners to have greater access to data across all building services at a lower cost. Our Fire and Security businesses are well placed to take advantage of this trend, with their fast-developing data, remote monitoring and control capabilities.

The elevator maintenance market is faster growing with higher profitability than the OEM elevator market which continues to be highly competitive. Growth is driven by increasing urbanisation and regulation. There are opportunities to enhance efficiency through remote monitoring and preventative maintenance. We also see strong growth opportunities in related niches, such as the 'area of refuge' market we entered with the Rath Communications acquisition.

Similar trends are creating new opportunities for our People and Vehicle Flow companies. An example is the greater demand being placed on road infrastructure, where the limited scope to physically expand capacity is driving the demand for Navtech Radar's technology to improve road safety and capacity.

Performance

Revenue grew by 17% to £409m (2018: £349m) and profit by 21% to £89m (2018: £73m). Organic constant currency revenue grew by 11% and profit by 16%. There were strong performances in the UK, Europe, USA and the Africa, Near and Middle East region, with lower growth in Asia Pacific. Acquisitions accounted for 6% of revenue and profit growth. Currency had a positive effect on both revenue and profit growth.

Return on Sales improved to 21.8% (2018: 21.0%) and Return on Capital Employed remained above Group targets. R&D investment increased by 22% to £24.9m (2018: £20.4m).

The People and Vehicle Flow business was particularly buoyant in Europe and Asia. This subsector also benefited from the Navtech Radar acquisition.

Fire Detection made good progress in all geographies, with double-digit growth in the UK, Europe and Asia Pacific. The addition of LAN Controls brought new connected technology capability.

Fire Suppression and Security Sensors both contributed good growth, with Elevator Safety continuing its transition to becoming a partner which makes elevators smarter, simpler and safer. Rath Communications strengthens our position in the USA and provides access to a new niche, the regulation driven 'area of refuge' market.

Outlook

Our growth drivers of increasing regulation, population growth, urbanisation and digitisation are expected to sustain growing demand for our products and services worldwide. We enter the year with good momentum and a solid M&A pipeline.

Avire

Avire is a global manufacturer of safety and communication solutions for elevators, helping to make elevator technology and maintenance smarter, simpler and safer. Headquartered in the UK, with manufacturing facilities in the Czech Republic, Barcelona, Shanghai, Singapore and the USA, Avire's technology is installed in over four million buildings around the world.

Avire is formed from six businesses – E-Motive, Janus, Memco, Microkey, T L Jones, and its most recent acquisition, Rath Communications. Together, they produce world-leading products and services, from elevator displays and light curtains to the Avire Ecosystem, a growing range of devices that leverage data and work with the cloud-based Avire Hub.



“We have completed acquisitions in Europe and the USA, and invested in sales and engineering in these markets too. The acquisitions of Microkey and Rath Communications have added new digital capabilities, a stronger presence in key international markets and a new market niche for our future growth.”

Rob Lewis

Managing Director, Avire

Primary Growth Enablers used:



Mergers & Acquisitions



International Expansion



Talent & Culture



Finance & Risk



Digital Growth Engines



Innovation Network



Strategic Communications

Cleaner

Contaminated ballast water
can destroy marine life and
pose a serious threat to
human health.

7,000+

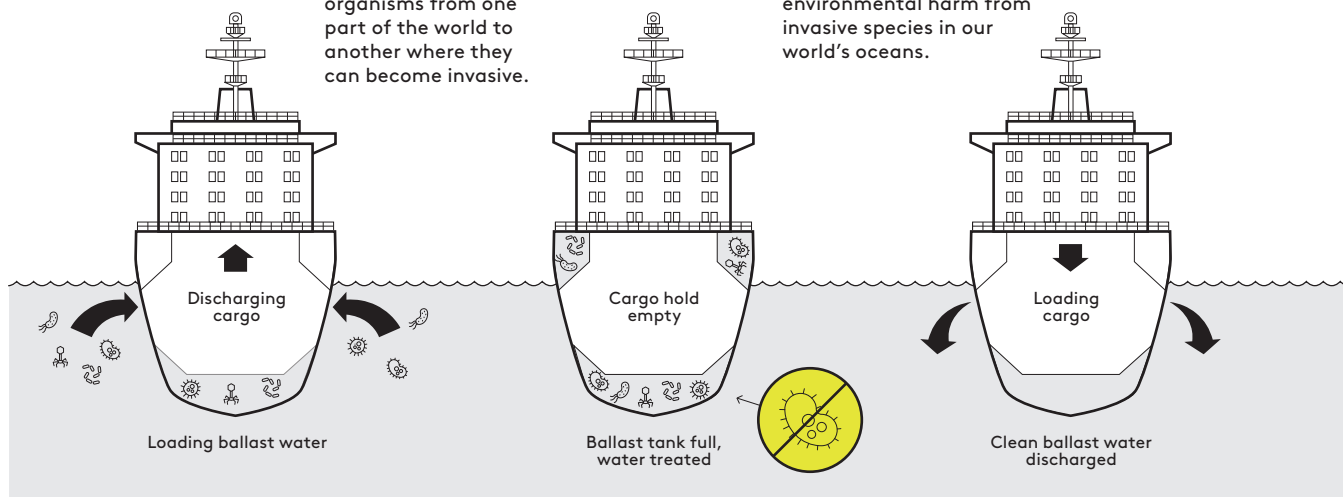
marine species are transferred in
ballast water every hour of every day

10 billion

tonnes of ballast water is transported annually by ships –
equivalent to four million Olympic-sized swimming pools

Ballast water is essential for a vessel's stability and safety, but carries with it thousands of different organisms from one part of the world to another where they can become invasive.

Using UV cleaning technology, ballast water is treated on uptake and discharge to reduce the risk of further environmental harm from invasive species in our world's oceans.



Protecting our oceans by reducing marine pollution

Maritime transport accounts for 90% of world trade. Taking into account the volume of goods that can be shipped on one vessel, it is considered to cause the least environmental damage in comparison to other modes of transportation. It does not, however, come without a cost to the environment.

In addition to crew and cargo, ships can transport invasive species, bacteria and disease through ballast water. Ballast water is taken aboard by ships from the ocean for a number of reasons: to provide greater stability in poor weather conditions or to balance the cargo load. This water is often taken on when a ship's cargo is unloaded and then later discharged.

At any one time, a container ship can carry 100,000m³ of ballast water, containing more than 10,000 marine and aquatic plant and animal species, and as a result these can travel thousands of miles across the world. Contaminated ballast water can destroy marine life and pose a serious threat to human health. Ultraviolet (UV) is one of the most compact and effective methods of treating contaminated ballast water, eliminating the potential transfer of invasive species.

Hanovia is a world leader in UV disinfectant and chemical reduction technology. They are working with marine specialist Wärtsilä to provide a robust range of ballast water treatment systems and services, specifically designed to meet the requirements of new environmental regulations.

Environmental & Analysis

Our markets



Spectroscopy and photonics

World-class optical, opto-electronic and spectral imaging systems that use light to analyse materials in applications including healthcare, food safety, research, and industrial process control.



Water analysis and treatment

Systems that help the world monitor and improve the quality of water used for drinking, industrial processes and recreation.



Environmental monitoring

Technologies used to monitor air and water pollution, analyse gases, and ensure that water networks operate efficiently.

Environmental & Analysis provides technologies that monitor and protect the environment and ensure the quality and availability of life-critical resources.

Environmental & Analysis

Performance

KPIs	2019	Group target
Revenue growth ¹	+15%	–
Organic revenue growth ¹ (constant currency)	+11%	≥5%
Profit growth ¹	+21%	–
Organic profit growth ¹ (constant currency)	+13%	≥5%
Return on Sales ²	22.2%	≥18%
R&D % of Revenue ³	6.4%	≥4%

Contribution to Group

£m	2019	2018	2017	2016	2015
Revenue	299	259	219	189	164
Profit ⁵	66	55	42	34	27

1 Revenue and adjusted⁴ operating profit⁵ are compared to the equivalent prior year figures.

2 Return on Sales is defined as adjusted⁴ operating profit⁵ expressed as a percentage of revenue.

3 R&D expenditure expressed as a percentage of revenue.

4 Adjusted to remove the amortisation and impairment of acquired intangible assets, acquisition items and restructuring costs (see note 1 to the Accounts).

5 Adjusted⁴ operating profit before central administration costs after share of associate.

6 Adjusted⁴ operating profit⁵ and organic growth rates are alternative performance measures used by management. See notes 1 and 3 to the Accounts.

Sector progress summary

The sector achieved record results, with strong revenue growth of 15% and profit increasing 21%. Organic constant currency revenue and profit growth were a very good 11% and 13% respectively. There was strong growth in the USA and UK, and good growth in Mainland Europe. Return on Sales increased from 21.2% to 22.2%, as we extended our product and solutions range and invested in markets that benefit from long-term growth drivers.

Strategy

Our solutions improve the availability and quality of life-critical natural resources such as air, water and food, and improve the environment and wellbeing. Leveraging Halma's Growth Enablers, we focus on developing new market-led solutions and increasing our geographical reach organically and through partnerships, especially in emerging markets.

Our R&D effort includes developing new sensors that capture accurate and effective environmental and scientific information. We are enhancing this technology by investing in digital systems that provide real-time and remote management information.

We continually seek to attract, develop and promote high quality, talented people and ensure that our teams represent our diverse end markets and are enhanced to match our strategic capability needs.

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 air, water and food.
- increasing environmental monitoring and regulations.
- worldwide population growth, urbanisation and rising standards of living.

Highlights

Revenue

£299m

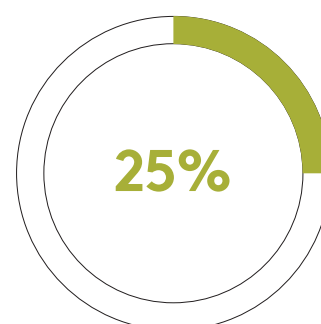
+15%

Adjusted operating profit⁵

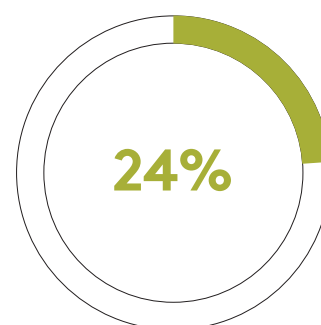
£66m

+21%

% of Group revenue



% of Adjusted operating profit⁵



11%

Organic constant
currency revenue growth

22.2%

Return on Sales

6.4%

R&D as a % of Revenue

Population growth continues to outpace the availability of key resources. By 2050, water shortages are expected to affect over 50% of the global population and this will be exacerbated by increasing urbanisation. We expect these trends to drive demand for our water testing and disinfection technologies, and our water network monitoring solutions which help to ensure integrity of networks.

Air pollution is a growing health risk in both developing and developed countries. Airborne particulates are a top cause of premature deaths in the EU, contributing to an estimated 391,000 deaths in 2016. Our spectroscopy systems assist in the precise detection of contaminants, while our environmental companies support emissions and air quality monitoring and calibrate pollution monitoring equipment.

According to the World Health Organization, one in ten people fall ill each year from eating contaminated food and 420,000 people die each year as a result. Some of our more recent development activities are focused on ensuring the quality of the food supply chain.

Environmental regulations and actions move at a different pace around the world. Differential rates of growth in governmental and academic research spend cause the near-term dynamics of regional/market segments to vary. We continue to invest globally and across our segments in anticipation of sustained growth over the medium-term, even if we experience some short-term volatility.

Performance

Revenue grew by 15% to £299m (2018: £259m) and profit by 21% to £66m (2018: £55m). At constant currency, organic revenue growth was 11% and organic profit growth was 13%. Acquisitions made in the prior year accounted for 3% of revenue growth and 7% of profit growth. Currency had a small positive effect of 1% on both revenue and profit.

Return on Sales improved to 22.2% (2018: 21.2%) as we generated operating leverage from strong revenue growth and gross margins, while continuing a focused investment strategy. Return on Capital Employed was strong.



First half performance was very strong, with growth of 23% in revenue and 33% in profit. This included a contribution from Mini-Cam, acquired in late 2017, and delivery of some larger Photonics projects. There was a more typical performance in the second half, with good growth of 9% in revenue and 10% in profit.

There was revenue and profit growth in all three subsectors, with the Environmental subsector contributing strongly due to a combination of very good organic growth and the Mini-Cam acquisition. We saw significant progress in the USA, which benefited from the larger Photonics projects, and also the UK. There was good growth in Mainland Europe and more moderate growth elsewhere, which was expected given a particularly strong prior year in Asia Pacific. We have continued to invest in the quality and diversity of our teams to allow us to better address the evolving needs of our markets and customers.

We further increased R&D spending which remains well above the Group average as a percentage of sales. This is spread across our core business, as well as developing new Convergence and Edge opportunities. This included the development and commercialisation of more digital sensors and solutions in our Water and Environmental subsectors, which will continue to generate growth in the future. There was also investment in some internal startups focusing on digital applications with good growth potential.

Outlook

We will continue to increase investment to drive collaboration, technology development, and development of digital and data management capabilities that have begun to demonstrate commercial success through some new business models.

Our acquisition pipeline is growing as we have improved engagement with businesses complementary, or adjacent, to our existing portfolio.

We expect to continue to deliver revenue and profit growth, while maintaining our existing high level of returns, as our solutions are increasingly focused on the long-term growth drivers in our markets.

Ocean Optics

As a specialist applied spectral knowledge company, Ocean Optics is helping to refine and deliver new approaches to solving problems with optical sensing technologies.

Headquartered in Florida in the USA, with a presence in Europe, India and China, Ocean Optics' technologies use the power of light to analyse, measure and better understand our

world, creating a safer, cleaner, healthier future for everybody.

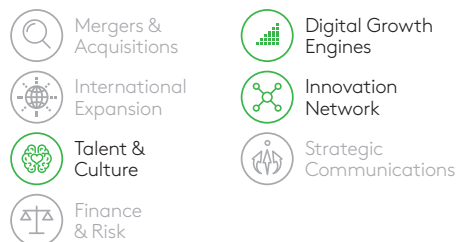
In 2017, a small, ambitious team developed a new digital offering through an internal startup, Wave Illumination. From this, the team successfully launched the WaveGo handheld spectrometer, which has been awarded a prestigious Red Dot Design Award.



“We have been harnessing opportunities within Halma to equip ourselves to grow, from enhancing communications to leveraging talent from the Halma Future Leaders programme.”

Lora Allemeier
President, Ocean Optics

Primary Growth Enablers used:



Healthier

Two million people in the USA are prescribed oxygen treatment, which studies have shown can cause discomfort for patients with life-threatening conditions.

2 million

People in the USA are prescribed oxygen therapy

9.6 million

Deaths worldwide from cancer in 2018

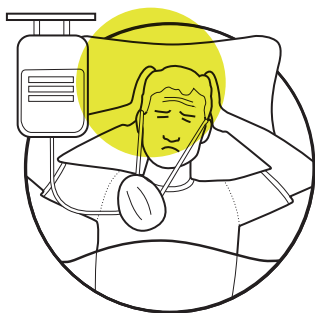
Transforming the comfort of oxygen treatment

Oxygen is commonly prescribed for cancer patients with advanced disease. However, patients that use oxygen can suffer from severe dryness, irritated skin and nose bleeds.

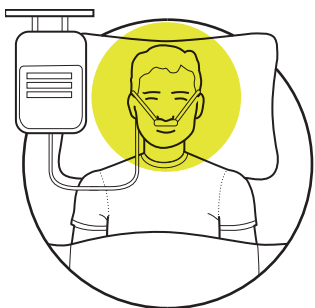
In addition to patients requiring oxygen for palliative and life-critical care, two million people in the USA are using oxygen therapy to prevent damage to their hearts and brains, and make it easier to carry out activities that might otherwise be difficult with certain medical conditions such as chronic lung disease.

Motivated by personal experiences of cancer, a small team at Perma Pure designed a portable device that quietly and safely humidifies oxygen and delivers comfortable warmed air through the cannula. The O2asis Personal Humidifier, awaiting FDA approval, provides twice the humidification of current methods, delivering comfort and relief when people need it most.





Studies have shown that discomfort from lack of humidification has caused some patients to stop oxygen therapy



Studies have also shown that heated humidification is more comfortable for some people and prevents the drying effect of oxygen when patients need it most

Medical

Our markets

Provider solutions



Diagnostics

Pumps, probes, valves and connectors used by OEMs and laboratories for demanding fluid handling applications.



Sensor technology

Real-time location monitoring systems to improve quality of care, safety and operational efficiency in hospitals and healthcare facilities.

Patient care



Ophthalmology

Surgical instruments and diagnostic devices to assess eye health and assist with eye surgery.



Patient assessment

Diagnostic devices for everyday and specialised healthcare, including blood pressure monitoring.

Medical's technologies enhance the quality of life for patients and improve the quality of care delivered by healthcare providers.

Medical

Performance

KPIs	2019	Group target
Revenue growth ¹	+8%	–
Organic revenue growth ¹ (constant currency)	+10%	≥5%
Profit growth ¹	+15%	–
Organic profit growth ¹ (constant currency)	+13%	≥5%
Return on Sales ²	25.1%	≥18%
R&D % of Revenue ³	3.7%	≥4%

Contribution to Group

£m	2019	2018	2017	2016	2015
Revenue	306	284	261	199	199
Profit ⁵	77	67	67	52	45

1 Revenue and adjusted⁴ operating profit⁵ are compared to the equivalent prior year figures.

2 Return on Sales is defined as adjusted⁴ operating profit⁵ expressed as a percentage of revenue.

3 R&D expenditure expressed as a percentage of revenue.

4 Adjusted to remove the amortisation and impairment of acquired intangible assets, acquisition items and restructuring costs (see note 1 to the Accounts).

5 Adjusted⁴ operating profit before central administration costs after share of associate.

6 Adjusted⁴ operating profit⁵ and organic growth rates are alternative performance measures used by management. See notes 1 and 3 to the Accounts.

Sector progress summary

The sector achieved record results, with strong growth. Revenue increased 8% and profit 15% (10% and 13% respectively on an organic constant currency basis), and there was growth in all major geographies and all subsectors. Return on Sales increased, even though there was increased investment in talent and new capabilities, with further underlying growth in R&D spend.

Strategy

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

We serve niche applications in global markets. We aim to continue growing by investing in our existing portfolio and acquiring additional companies.

Key strategic initiatives to support this growth include:

- increasing collaboration to drive geographic expansion and product and service innovation, with an increasing focus on data and digital solutions.
- increasing R&D investment to adapt to quickly changing market needs and population trends.
- acquiring businesses in both existing and adjacent market niches.
- recruiting and retaining high-calibre, diversified talent.

Market trends and growth drivers

The sector's long-term growth is supported by increasing demand due to worldwide population growth and ageing, increasing life expectancy, and the greater prevalence of chronic illnesses such as diabetes, obesity, hypertension and cancer. The development and availability of new medical diagnostic and surgical technologies are important market trends, as is the increasing access to healthcare in developing economies.

Highlights

Revenue

£306m

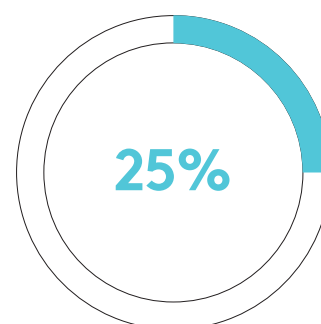
+8%

Adjusted operating profit⁵

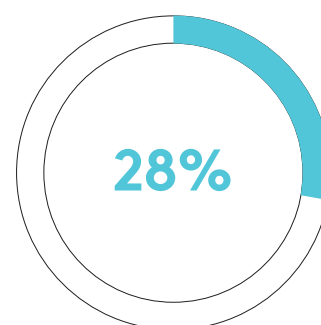
£77m

+15%

% of Group revenue



% of Adjusted operating profit⁵



10%

Organic constant
currency revenue growth

25.1%

Return on Sales

3.7%

R&D as a % of Revenue

The world's population is expected to increase by almost one billion in the next 30 years, and the number of people aged over 60 is expected to double, increasing the prevalence of significant health risk factors.

An ageing population is a key driver for our ophthalmology and hypertension management businesses. Cataract surgery is one of the most frequent operations carried out worldwide, with more than 25 million operations annually, creating ongoing demand for our surgical instruments. In China, about 325 million adults have high blood pressure, with only one-third treating it.

The market for our critical fluidic components is projected to grow 6% annually, in part being led by more directed and personalised diagnostic methods combined with increased testing efficiency. North America and Europe continue to be our largest markets, with Asia exhibiting the fastest growth rate.

Healthcare facilities are seeking to improve patient outcomes, reduce costs and ensure the safety of patients and staff. This is driving the global market for our real-time location Sensor Technology business.

The growth of the global medical device market is resulting in further regulatory tightening, especially in China and Europe. Our regulatory experience and our niche focus allow us to adjust to these trends and direct resources towards areas that provide the best opportunity for sustained growth.

Performance

Revenue grew by 8% to £306m (2018: £284m). Organic constant currency revenue growth was 10%. Profit grew to £77m (2018: £67m), an increase of 14.8%. This included a 13% organic constant currency increase. Following a very strong first half with revenue growth of 10% and profit growth of 22%, as expected we delivered a more typical rate of growth in the second half, with revenue up 6% and profit ahead 10%.



Return on Sales improved from 23.6% to 25.1%, due to an improvement in gross margin and good control of overheads. We continued to increase our investment in new product development, and in digital growth engine projects aimed at adding data and services capabilities. R&D spend declined by 2.6% to £11.5m (2018: £11.8m) but grew by 1.7% excluding Accudynamics. Return on Capital Employed remained strong, and above Group targets.

We saw revenue growth in all subsectors, with Diagnostics performing very well, benefiting from new OEM customer product launches. The Ophthalmology and Sensor Technology subsectors also delivered strong growth; the former through continued international expansion and growth in core products and the latter from greater penetration into its core market of real-time location services, particularly in acute care facilities.

There were revenue increases in all major regions, with strong growth in the USA, our largest geographic market. We also saw good growth in the UK, Mainland Europe and Asia Pacific.



We made two small asset acquisitions for CenTrak, adding new technology and improved distribution capabilities in the USA and Mainland Europe. We sold Accudynamics, one of our Diagnostics businesses.

We have continued to improve the calibre and diversity of our leadership talent at both our operating company and sector management levels, to support delivery in our core markets as well as adding new capability for growth in adjacent niches.

Outlook

Strong demographic trends, and continued advances in diagnostic and surgical techniques are driving demand for our products and services. Through increased penetration into developing markets, continued new product and service development and investment in our talent, we expect to continue to outperform the market. The pressure to reduce healthcare costs coupled with changing payor systems and outcome measures provide ongoing challenges.

Our acquisition pipeline is improving as we continue to assess targets adjacent to, and within, our existing niches. The combination of acquisitions and continued organic revenue and profit growth momentum positions us well for continued progress.

SunTech Medical

SunTech Medical is the leading manufacturer of high-performance, clinical-grade motion tolerant blood pressure technology. Their products help clinicians diagnose and treat patients in the most challenging environments, where normal blood pressure monitors are inadequate.

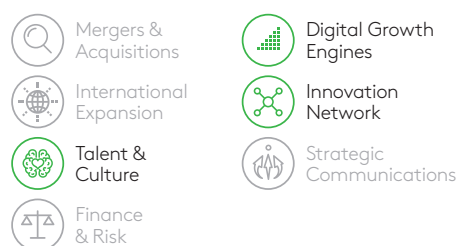
This year, SunTech took advantage of Halma's Future Leaders Programme, with two graduates on rotational placements at their North Carolina headquarters. The Halma Future Leaders helped SunTech identify new revenue streams, working closely with the R&D and Sales & Marketing teams.



"As SunTech has grown, so too has the need to create a more purposeful culture and attract high-calibre talent. Halma encourages the development of high potential people within companies, as well as providing a framework for cross-company mentoring and advancement."

Rob Sweitzer
President, SunTech Medical

Primary Growth Enablers used:



Key performance indicators

Link to Growth Enablers



Mergers & Acquisitions



Talent & Culture



Digital Growth Engines



Strategic Communications



International Expansion



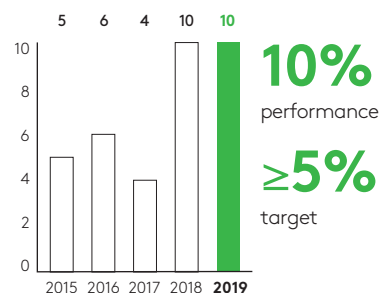
Finance & Risk



Innovation Network

Key performance indicator	Organic profit growth (%) (constant currency)	Acquisition profit growth (%)	EPS growth (%) (adjusted earnings per share)
	7 3 4 9 11 11% performance ≥5% target	6 8 1 4 3 3% performance ≥5% target	9 10 17 13 17 17% performance ≥10% target
Strategic focus	Through careful selection of our market niches and strategic investment in people development, international expansion and innovation we aim to achieve organic growth in excess of our blended market growth rate, broadly matching revenue and profit growth in the medium term.	We buy companies with business and market characteristics similar to those of existing Halma operations. Acquired businesses have to be a good fit with our operating culture and strategy in addition to being value enhancing financially.	The measure of how successful we are in growing our business organically and by acquisition coupled with strong financial disciplines, including those related to tax and capital allocation, is captured in the Group's adjusted earnings per share.
Comment	Organic profit growth at constant currency was strong and was substantially ahead of our target for the second consecutive year. All sectors grew, and the Infrastructure Safety, Environmental & Analysis and Medical sectors reported double-digit percentage growth in organic constant currency profit.	Acquisition profit growth was below our target, but was more than compensated for by strong organic growth. We made four acquisitions and two small asset purchases. The contribution from acquisitions will be a focus in the year ahead and we have high levels of prospecting activity in our M&A teams.	We delivered strong growth in adjusted earnings per share and exceeded our target. The increase reflects both organic and acquisition profit growth and was higher than the increase in adjusted profit before tax due to the lower effective tax rate this year.
Definition	Organic profit growth is calculated at constant currency and measures the change in adjusted profit achieved in the current year compared with the prior year from continuing Group operations. The effect of acquisitions and disposals made during the current or prior financial year has been eliminated.	Acquisition profit growth measures the annualised profit (net of financing costs) from acquisitions made in the year, measured at the date of acquisition, expressed as a percentage of prior year profit.	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; the effect of equalisation of benefits for men and women in the defined benefit pension plans; and associated taxation thereon.
Target	The Board has established a long-term organic growth target of at least 5% pa, slightly above the blended long-term average growth rate of our markets.	Acquisitions must meet our demanding criteria and we continue to have a strong pipeline of opportunities to meet our minimum 5% growth target.	We aim for the combination of organic and acquisition growth to exceed an average of 10% pa over the long-term. The Directors consider that adjusted earnings represent a more consistent measure of underlying performance.
Remuneration linkage	Growth in organic profit is a key element of the Economic Value Added (EVA) performance which forms the basis of the annual bonus plan for Group, sector and company boards, requiring consistent annual and longer-term growth, with disciplined financial management.	Growth in acquired profit is the second key element of the EVA performance which forms the basis of the annual bonus plan for Group, sector and company boards, requiring consistent annual and longer-term growth, with disciplined financial management.	EPS provides a clear link to the aims of the business growth strategy. It is a key financial driver for our business and provides a clear line of sight for our executives. EPS is 50% of the performance condition attaching to the Executive Share Plan.

Organic revenue growth (%) (constant currency)



Through careful selection of our market niches and targeted strategic investment, we aim to achieve organic growth in excess of our blended market growth rate, broadly matching revenue and profit growth in the medium term.



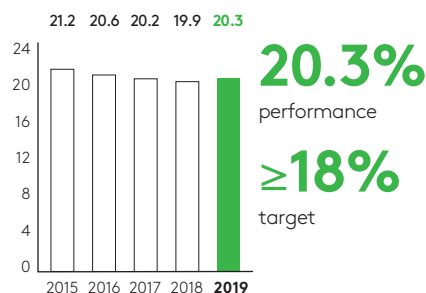
Organic revenue growth was strong and substantially ahead of our target for the second consecutive year. There was growth in all sectors, with three out of four sectors reporting double-digit percentage increases. All major regions delivered growth, with double-digit percentage increases in the UK and in the USA, our largest market.

Organic revenue growth is calculated at constant currency and measures the change in revenue achieved in the current year compared with the prior year from continuing Group operations. The effect of acquisitions and disposals made during the current or prior financial year has been eliminated.

The Board has established a long-term minimum organic revenue growth target of 5% pa, slightly above the blended long-term average growth rate of our markets.

Organic revenue drives earnings growth which contributes to the EVA performance. This forms the basis of the annual bonus plan for Group, sector and company boards, requiring consistent annual and longer-term growth with disciplined financial management.

Return on Sales (%)



We choose to operate in market niches which are capable of delivering growth and high returns. The ability to sustain these returns is a result of maintaining strong market and product positions sustained by continuing product and process innovation.



There was an increase in Return on Sales, which remained well above our minimum target and within our longer-term target range of 18%-22%. There was a strong contribution from all four sectors.

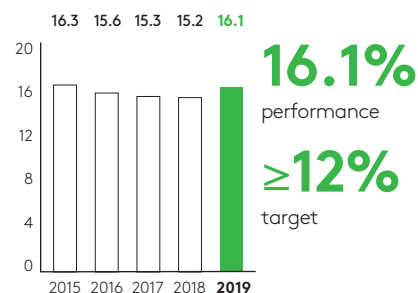
Return on Sales is defined as adjusted profit before taxation from continuing operations expressed as a percentage of revenue from continuing operations.

We aim to achieve a Return on Sales within the 18% to 22% range while continuing to invest to sustain growth.

Return on Sales is a measure of the value our customers place on our solutions and of our operational efficiency. High profitability supports the generation of high economic value and cash generation. We choose a range in order to maintain a balance between short-term performance and investment for longer-term growth.

ROTIC (%)

(Return on Total Invested Capital)



We choose to invest in high return on capital businesses operating in markets which are capable of delivering growth and high returns. The ability to sustain growth and high returns is a result of maintaining strong market and product positions sustained by continuing product and process innovation.



ROTIC increased to 16.1%, well ahead of our target and substantially in excess of our Weighted Average Cost of Capital which is estimated to be 7.9% (2018: 7.7%). Our focus continues to be on delivering organic and acquisition growth while maintaining high returns.

ROTIC is defined as the post-tax return from continuing operations before amortisation and impairment of acquired intangible assets; acquisition items; profit or loss on disposal of operations; the associated taxation thereon and the effect of the US tax reform measures (2018 only), as a percentage of Total Invested Capital.

A range of 12% to 17% is considered representative of the Board's expectations over the long term to ensure a good balance between growth, investment, and returns.

ROTIC performance, averaged over three financial years, is 50% of the performance condition attaching to the Company's Performance Share Plan and the 2015 Executive Share Plan.

Key performance indicators

Continued

Link to Growth Enablers



Mergers & Acquisitions



Talent & Culture



Digital Growth Engines



Strategic Communications



International Expansion



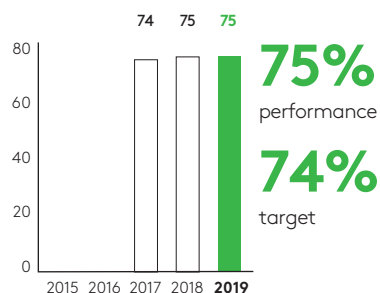
Finance & Risk



Innovation Network

Key performance indicator	Cash generation (%)	International revenue growth (%)	Research and development (% of revenue)
	87 86 86 85 88 88% performance ≥85% target	16 7 19 16 3 3% performance ≥10% target	4.8 5.1 5.3 5.2 5.2 5.2% performance ≥4% target
Strategic focus	Strong cash generation provides the Group with freedom to pursue its strategic goals of investment in organic growth, acquisitions and progressive dividends without becoming highly leveraged. Our decentralised structure ensures that cash management is controlled at the individual company level and then transferred to the central treasury function.	The safety, health and environmental markets in developing regions are evolving quickly. We continue to invest in establishing local selling, technical and manufacturing resources to meet this current and future need.	We have maintained high levels of R&D investment and spending on innovation. The successful introduction of new products is a key contributor to the Group's ability to build competitive advantage and grow organically and internationally.
Comment	Our cash conversion was strong and increased to 88%, ahead of our target, reflecting our continuing focus on cash management, including good control of working capital.	International revenue increased by 3%, below our target. Delivering more consistent growth outside the UK, the USA and Mainland Europe will be a key focus in 2020. We achieved 16.0% growth in revenue on average across the UK, Mainland Europe and the USA to deliver a strong overall result.	Total R&D spend in the year increased by 11% to a record level of £62.7m (2018: £56.5m). R&D spend as a percentage of revenue remained at 5.2%. All sectors increased R&D expenditure, after adjusting for the effect of the disposal of Accudynamics in the Medical sector.
Definition	Cash generation is calculated using adjusted operating cash flow as a percentage of adjusted operating profit.	Total sales to markets outside the UK, the USA and Mainland Europe compared with the prior year.	Total research and development expenditure in the financial year (both that expensed and capitalised) as a percentage of revenue from continuing operations.
Target	The goal of Group cash inflow exceeding 85% of profit has relevance at all levels of the organisation and aligns management action with Group needs. We ensure that strong internal cash flow and availability of external funding underpin our strategic goals of organic growth, acquisitions and progressive dividends.	The emphasis on international revenue growth at twice the rate of overall organic growth reinforces the importance of emerging markets and our strategy of establishing operations close to our end markets.	New products contribute strongly to organic growth, maintaining high returns and building strong market positions. The 4% minimum investment target is appropriate to the mix of product life cycles and technologies within Halma.
Remuneration linkage	Strong cash generation is closely correlated with high return on capital which is a key component of our EVA bonus plan and our ROTIC Executive Share Plan vesting measure.	International markets are an important component of organic growth which, in turn, drives the year-on-year improvement in EVA demanded by our Annual Bonus plan.	Successful research and development investment is a key component of sustaining strong growth and returns which, in turn, help to drive EVA, EPS and ROTIC – all key elements of our annual bonus and LTIP plans.

Employee Engagement (%)



Halma conducts an annual survey of its employees to assess engagement across the Group. This provides visibility of engagement at the Group, sector and company levels.

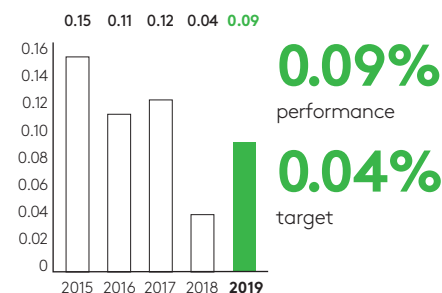


2017 was our inaugural engagement survey which established the baseline for our target. Overall, employee engagement remained strong this year and was in the line with the external normative data.

The engagement of employees as measured through an externally facilitated survey over nine dimensions: engagement, empowerment, accountability, collaboration and teamwork, communication, development, ethics and fair treatment, innovation and leadership.

Our target remains to match or beat the baseline achieved in 2017 of 74% engagement.

Health & Safety (%) (accident frequency rate)



Safety is critical and a major priority for the Group. Halma collects details of its worldwide reported health and safety incidents and encourages all Group companies to seek continuous improvement in their health and safety records and culture.



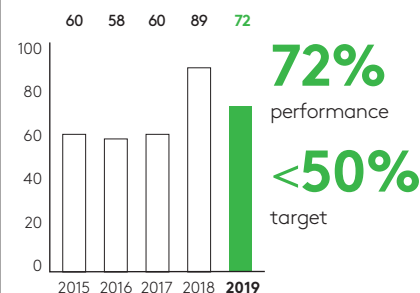
The Health & Safety AFR performance this year was 0.09% (2018: 0.04%) representing an increase against last year. We continue to review all reported incidents and there are no specific underlying patterns which cause concern.

The year-to-date Accident Frequency Rate (AFR) is the total number of reportable* incidents in the period divided by the number of hours worked in that period by employees (including temporary staff and any overtime) multiplied by 100,000 hours (representing the estimated number of working hours in an employee's work lifetime). The AFR figure represents an indication of how many incidents employees will have in their working lives.

* Specified major injury incidents are reportable incidents which result in more than three working days lost

The target is set at the lowest target we have achieved as a Group and was reset at 0.04 last year.

Development programmes (%) (management development)



Our range of leadership development programmes are targeted towards developing our talent and equipping them with the right skills to manage, lead and deliver on our growth strategy.



During the year, we put 168 of our senior leaders through a range of management and leadership courses.

The percentage of senior leaders who have attended a development programme compared with the estimated pool of qualifying participants.

Our new development programmes offer more bespoke training and development, aligned to our strategy, and target the specific needs of our employees and companies. As we are now aiming to cover a broader range of talent, we will be reviewing our management development programmes KPI over the coming year.

Halma's culture reflects the collective capabilities of our people and is one of our unique strategic assets.

We bet on talent

It attracts high achievers with low egos, striving to make a positive difference in the world. It avoids unnecessary bureaucracy and protocol in preference for acting with speed and precision to maximise impact. It encourages us to imagine the future and then create it, working seamlessly with internal and external partners to ensure our purpose is fulfilled. Our people therefore have an immediate and disproportionate impact on our performance.

Our growth and change trajectories in recent years, combined with our purpose and culture, enable us to attract world class leaders to run our companies, and lead the sectors and central teams. However, as set out in Halma's DNA (page 4), we have fiercely protected

the traits that make us unique, helping internally to foster greater awareness of our capabilities and core strengths, and attract and retain likeminded people to ensure Halma's continued growth.

Diversity and inclusion

We see diversity as a positive advantage. The diversity of our portfolio of companies provides stability and broadens the scope for growth. The diversity of our people helps us stay agile as the needs of our customers change and as business adapts. Our people have told us through the annual engagement survey that the fact that we provide an 'environment where diverse points of view and perspectives are valued' is the most impactful driver of our innovation. We have taken positive steps this year to increase the diversity of our organisation, from the company level to the Group level. For example, we continue to prioritise increasing our gender and ethnic diversity on all leadership teams across the Group.

We have brought in three new Divisional Chief Executives this year – two of whom are women. We are committed to gender pay equality and, while we have parity by role, we must address the representation gap in operating company management and have set ourselves goals to do so.

Fostering an innovation mindset

We held the second Convergence Accelerator programme launch in December 2018. This group-wide initiative is designed to rapidly identify and evolve new business models, products and services. This year, we added a new element to the programme, Convergence Coaches, volunteers from across Halma who have been trained on the mindsets and methodology and then were paired with the teams to provide guidance and an outside perspective, challenging assumptions along the way.

We want to improve how we make commercial decisions about new kinds of business opportunities, including startups and partnerships, particularly as we move more quickly and see more opportunities. The Convergence Accelerator not only helps us to develop these specific ideas, but it is also building this particular capability to work in partnerships, both internal and external.

The Convergence Accelerator was run from start to finish in four short months. Four teams pitched their business model and opportunity to 50 of the Halma leadership team in Buckinghamshire in March 2019, and this resulted in three teams being funded for the next phase of development and the remaining team redirected to explore a potential new market that emerged from their work.

We attract talented people



Sharon Bracken,
President, Perma Pure

"At Halma, we operate in a small business environment, which enables agility. My team at Perma Pure can focus on innovation and growth, creating technologies that serve our customers in our market niches. At the same time, we have the support of the central functions, our peers across the Group, and an ecosystem of partners. This allows me to be entrepreneurial and make the impact I was looking for. The Halma model is so refreshing and, on top of that, it's a supportive and enriching culture to be part of."



Bill Stoval,
Divisional Chief
Executive, Halma plc

"I joined Halma earlier this year and have been working with CenTrak, learning about its innovative technology that is helping healthcare facilities improve patient care. Most of the companies I have worked at aspire to make the world better, but when you look at Halma's purpose to grow a safer, cleaner, healthier future, and our technologies across the Group, we are really living the purpose every day. At Halma, the team is all driving towards the same goal whether that's accomplished by improving patient care, tackling preventable blindness or providing safe, clean water. Everyone I meet at Halma is passionate about solving real problems in the world, and I am extremely motivated by that."



Employee engagement

Halma's purpose helps to motivate and engage all our employees globally. This year, our impact was brought to life with our first ever group-wide campaign, Halma Gift of Sight (page 51). The campaign was an opportunity to raise awareness of the impact that our five eye health companies make in diagnosing and treating conditions that cause preventable blindness while simultaneously screening our employees for sight-threatening conditions such as glaucoma and diabetic retinopathy.

To date, the campaign has screened employees across the Group and we have received feedback from the companies that individuals feel more connected to our technology and our purpose.

It is proven that an engaged workforce outperforms a less engaged one and we continuously monitor and seek to improve areas that are important to our employees' engagement. We conduct an annual survey each February, which provides us insight for the next year's actions. Each operating company, sector and function receive individual reports. We were pleased that 85% of our global employee population completed the survey, up 9% from last year, while our overall engagement score remained stable. We saw improvements in leadership and communications across the Group, reflective of the efforts we have made in these areas.

Our award-winning internal collaboration and communications platform, HalmaHub continues to provide a space for all employees in the Group to connect with each other, build new networks and share best practice.

6,000+

Total number of employees

75%

Engagement performance

HalmaHub empowers our people and enables growth

HalmaHub is our award-winning internal communications and collaboration platform. As a portfolio of entrepreneurial companies tackling some of the key problems facing the world today, we recognised that we had significant opportunities to accelerate growth by learning from one another, collaborating, solving problems and innovating.

With our partner Hive Learning, experts in collaborative learning technologies, we have built a platform that connects over 80% of our online employees across 20 countries. HalmaHub democratises information, allowing our employees to share knowledge, skills and ideas every day in an agile and secure way.

Employees around the world have been using the platform to tap into the expertise of our network. This has led to the creation of entirely new business models, product collaborations and accelerated the pace of change across the Group. From seeking support for entering new markets, sharing data, learnings, insights and opportunities the HalmaHub is a vital business resource.

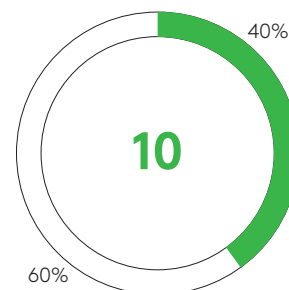
On HalmaHub's first anniversary in November 2018, it became an award-winning platform at the 2018 Learning Technologies Awards achieving 'Best use of social and collaborative learning technologies'. Then again in February 2019, the platform was recognised with a Silver award for 'External Learning Solution of the Year' at the 2019 Learning Awards.

3,317

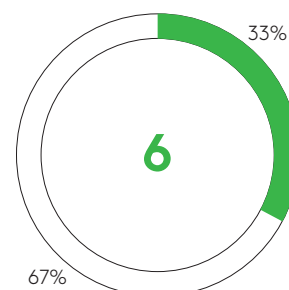
Employees are active users of the HalmaHub

Gender diversity

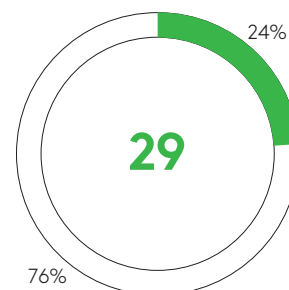
Board of Directors¹



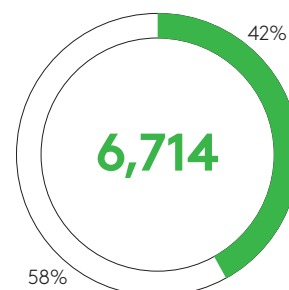
Executive Board²



Senior management³



Other employees



● Female
○ Male

- 1 Includes non-executive Directors of the Company.
- 2 Includes the four executive Directors who are also shown in the Board of Directors chart.
- 3 Defined as sector boards and direct reports to Executive Board members.

Our stakeholders

Maintaining strong stakeholder relationships is essential to Halma's long-term sustainable success.

Shareholders

Our shareholders are a key beneficiary in the value that we create. We are committed to transparent and open engagement with our investors.

Key areas

- Strategy and implementation.
- Operational and financial performance.
- Capital allocation.
- M&A.
- Talent and succession planning.
- Sustainability and Environmental, Social and Governance matters.

How we are engaging

The Group Chief Executive and Chief Financial Officer engage with investors and potential investors throughout the year through meetings and investor roadshows. The Chairman invites the Company's top shareholders to meet to discuss the annual results announcement and any other matters, and remains available to meet shareholders throughout the year. The non-executive Directors are available to meet with shareholders at the AGM. A Head of Investor Relations was appointed during the year who maintains an ongoing dialogue with investors and analysts regarding financial, operational and environmental, social and governance issues. The Head of Investor Relations provides regular reports to the Board on these interactions.

Value created

Total Shareholder Return, see page 15

Operating companies

Our decentralised model places our companies close to their end markets and under the management of their own board of directors, empowering entrepreneurial action. Our companies are key stakeholders which collectively deliver our organic growth and are vital to the success of our growth strategies.

Key areas

- Operational financial performance.
- R&D investment.
- Talent development.
- Collaboration.
- International expansion.

How we are engaging

The Board is in regular communication with our companies through site visits, presentations and the annual Leadership conference. This ensures alignment relating to the development and performance of the companies and of Halma's strategic priorities and direction.

Value created

Development programmes, see page 43

Acquisition prospects and business partners

Our companies and sector M&A teams continue to build relationships with businesses that could become acquisition prospects or strategic business partners.

Key areas

- Financial performance.
- R&D investment.
- Collaboration.
- Delivery of initiatives.
- International expansion.

How we are engaging

We supplement our organic growth and broaden our expertise, and the products and services we offer to customers, through acquisitions of companies in core and adjacent market niches.

Our convergence growth strategy relies on us to excel at identifying and collaborating with partners to develop new products, services or business models by combining our technologies with new expertise or partnerships inside or outside Halma. The executive management team are in continuous dialogue with our business partners.

Value created

Acquisition profit growth, see page 40

How our Board takes decisions

The Board recognises that it has a duty to act in the best interests of the Company for the benefit of its shareholders, as well as considering other stakeholder interests. Factors the Board consider include:

- How the decision fits with our purpose.
- Likely long-term consequences of the decision.
- The value created for our shareholders.
- Impact on our people, processes and performance.
- Effect on communities and the environment.
- Importance of fostering business relationships with customers and suppliers.
- The need to maintain high standards of business conduct.

Our people

Developing and attracting high-quality talent is a key driver of our success. We strive to build leadership teams which are diverse, effective and engaged.

Key areas

- Development and progression.
- Remuneration.
- Diversity.
- Workplace policies.
- Collaboration.

How we are engaging

Our award-winning communications platform, HalmaHub, enables our employees to keep up to date with the latest news across the Group, collaborate with colleagues and share experiences and content. Employee engagement surveys are conducted annually and provide valuable insight on the issues that matter to our workforce and our culture. We run management courses throughout the year to provide targeted development opportunities and the tools needed to deliver enhanced operational and financial performance in line with our growth strategy. The Board's engagement with the workforce is described on pages 78 and 79.

Value created

Employee engagement, see page 43

Suppliers

Developing strong relationships with our suppliers is key to the operational success of our businesses and ensures that we have agility to develop new and market competitive solutions to meet our customers' needs.

Key areas

- Social and ethical impact.
- Payment practices.
- Long-term partnerships.

How we are engaging

Our companies work with suppliers to ensure that we can deliver the best products and services for our customers and have the infrastructure in place to respond to market developments. Our principal suppliers are subject to regular engagement, including audits, and are encouraged to operate with the high ethical standards that are set out in our Code of Conduct.

Value created

£599m total supplier expenditure

Community

We have a duty to conduct business in a responsible and sustainable way that aligns with our purpose and values, and supports the communities in which we operate.

Key areas

- Environmental and social impact.
- Improving quality of life.
- Protecting people.

How we are engaging

Our products protect people and improve the quality of life for everyone worldwide. We protect people in industrial processes, on transport and in public spaces; help to prevent and detect disease; and protect the environment. Being located close to our end markets, our companies are well placed to monitor their local impact and to support the needs of their communities.

Value created

Gift of Sight campaign, see page 51

Customers

Our customers play an essential role in ensuring the sustainability of the Group. By delivering our products and services to the end market where they serve to protect and improve the quality of life, they play a pivotal role in the fulfilment of our purpose.

Key areas

- Innovative solutions.
- Long-term relationships.
- Value.
- Service.

How we are engaging

Our companies understand the needs of their customers. They work closely with customers to offer and develop innovative solutions using our technology and deep application knowledge.

Long-standing relationships are essential to ensure that we continually deliver innovative solutions for our customers to help them succeed. Our executive management team engage regularly with customers.

Value created

Research and development investment, see page 42

UN Sustainable Development Goals (SDGs)

Halma's approach to sustainability is defined by our purpose of growing a safer, cleaner, healthier future for everyone, every day.

We aim to play a positive role in society over the long-term, both through our products and services, many of which help to solve issues which are fundamental to human wellbeing, and through behaving responsibly in our markets and in the communities where we have operations.

Sustainability review

In the year, our Board reviewed our approach to sustainability. This was supported by a benchmarking and engagement exercise conducted by EcoAct, a leading international environmental consultancy, which reviewed our performance against our peers and sought input from a range of stakeholders on what matters to them.

As a result of this review, we have decided to focus on those areas where we can have the most impact, given what we do and where we operate, and to define our focus using the framework of the UN Sustainable Development Goals (SDGs). Our initiatives in these areas will be led by Marc Ronchetti, who has been appointed as the Board member responsible for sustainability (including health and safety).

Progress highlights

- Three-year CO₂e intensity target met for the third consecutive three-year period.
- Further reduction in CO₂e intensity targeted for a supplementary year while we evaluate setting a science-based target.
- Four SDGs chosen to be the focus of our sustainability initiatives.
- Maintained CDP 'Awareness C' rating.
- Continue to be a constituent of the FTSE4Good Index.
- Launched our first ever global campaign, Gift of Sight.

UN Sustainable Development Goals (SDGs)

We have chosen four SDGs to be the focus of our sustainability initiatives.

Each of these is closely aligned to our purpose, and represents an area where we can have impact, given what we do and where we operate.



Good health and wellbeing

The global challenge

Ensure healthy lives and promote wellbeing for all ages.

Indicators relevant to Halma

- Reduce premature mortality from non-communicable diseases through prevention and treatment.
- Reduce the death and injury rate from road traffic accidents.
- Reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination.

Our impact

Halma's technology helps to diagnose and treat disease earlier and more accurately; to improve road safety; and to reduce water and air pollution.



Clean water and sanitation

The global challenge

Ensure availability and sustainable management of water and sanitation for all.

Indicators relevant to Halma

- Increase the proportion of population using safely managed drinking water services.
- Improve water quality by reducing pollution and minimising release of hazardous chemicals and materials.
- Substantially increase water-use efficiency.

Our impact

Halma's products and services help to ensure access to clean drinking water; to ensure efficient and effective wastewater treatment; and to maintain robust water and wastewater networks, minimising leakage and maintaining pressure.



Industry, innovation and infrastructure

The global challenge

Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation.

Indicators relevant to Halma

- Promote inclusive and sustainable industrialisation and raise industry's share of employment.
- Upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes.
- Upgrade the technological capabilities of industrial sectors in all countries, encouraging innovation and substantially increasing research and development spending.

Our impact

Halma is continuously developing innovative technologies to increase industrial efficiency and safety. In addition, Halma's growth strategy provides a major opportunity to help our customers with the challenges of automation and digitisation. Halma's research and development expenditure has consistently been above 5% of revenues for the last 4 years.



Sustainable cities and communities

The global challenge

Make cities and human settlements inclusive, safe, resilient and sustainable.

Indicators relevant to Halma

- Reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality, and municipal and other waste management.
- Provide universal access to safe, inclusive and accessible green and public spaces.

Our impact

Halma's technology makes cities safer, through fire and security protection and elevator safety products in public buildings, and through products and services addressing safety in public spaces, including enhancing road safety. Halma's environmental and analysis technology helps to promote cleaner cities, the availability of clean drinking water, and the monitoring of gaseous emissions and treatment of wastewater.

Environment

Protecting our environment

Environmental issues, including climate change, are a challenge affecting all businesses globally and an issue we must address collectively to preserve our planet for future generations.

Halma recognises that all of our activities have an environmental impact. Our approach is to limit this impact by having relatively low capital intensity manufacturing processes and by operating geographically close to our end markets. We also encourage our companies to improve energy efficiency, reduce waste and emissions and, in terms of materials, to reduce their use or make more efficient use of them. Operating in this way helps ensure that our environmental impact is relatively low when compared to other manufacturers.

Key environmental impacts have been identified as emissions to air and water, water and energy consumption, and waste production. In addition to the information set out in this section of the Report, we publish annual data on our website on energy consumption, waste and transportation. All Group companies are encouraged to undertake ISO 14001 accreditation, where warranted, and for the year to 31 March 2019, approximately 22% of the Group's revenue was derived from companies with an ISO 14001 accreditation.

Products promoting a cleaner tomorrow

Halma companies are world leaders in a number of technologies which help to minimise environmental damage, and we are committed to the development of equipment for measuring and monitoring environmental changes and controlling the impact of industrial activities over the long-term.

Our principal environmental technologies are water leakage detection and wireless monitoring, gas emissions monitoring, water and effluent analysis, ultraviolet (UV) water treatment and optical sensing. We promote the use of UV water sterilisation, which eliminates the need to use dangerous chemicals, as well as making products that minimise the waste of clean water.

Our carbon footprint

Halma has a clear policy on carbon which is published on our website. The Carbon Policy has been set by the Board and our Chief Financial Officer, Marc Ronchetti, has principal responsibility for coordinating and monitoring the Policy.

We are committed to reducing our carbon footprint. The Board recognises the challenges of reducing energy consumption and absolute CO₂ emissions while growing an international business through acquisition and portfolio expansion. We have, since 2010, set a target of reducing our total carbon emissions relative to revenues by 10% over consecutive three-year periods. This intensity target has now been achieved for three consecutive periods, the latest ending in 2019.

Looking forward, we are exploring a new approach to long-term carbon targets, setting them in line with climate science, to support the transition to a low-carbon economy and protecting our people, planet and economy from the effects of global warming. Science-based targets require detailed analysis and planning to develop and implement. We anticipate that this work will be completed for launch in the 2020 financial year. In the meantime, we have taken the decision to target a further reduction in carbon intensity for the year to March 2020, in line with the reductions achieved

in the previous periods. We will report on our performance against this intensity target in our 2020 Annual Report and disclose our proposed approach to setting a long-term carbon target.

Our Scope 3 emissions, which include business travel and employee commuting, is the Group's largest source of greenhouse gas emissions. We have developed a Travel Policy which encourages colleagues to utilise video conferencing facilities in preference to physical meetings to reduce travel costs and our Scope 3 emissions. Our Company Car Policy, which is subject to regular review, also supports the Group's commitment to sustainability by setting a general cap on permissible CO₂ emissions for all company-owned vehicles and vehicles used by employees who have taken a cash allowance in lieu of a company car.

Carbon reporting

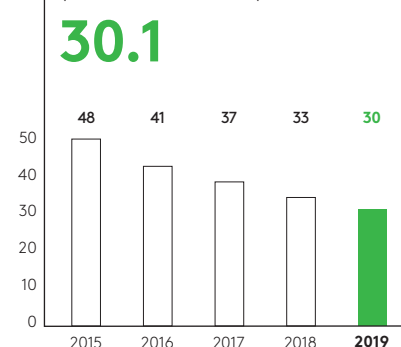
Our transparent approach to environmental performance reporting is evidenced by our voluntary participation in the CDP Climate Change questionnaire; in 2019 we maintained our 'Awareness C' rating.

We comply with all mandatory energy and carbon compliance, and reporting requirements. We have reported on all the emission sources required under the Companies Act 2006 (Strategic Report and Directors' Report) Regulations 2013. We have employed the Operational Control definition to outline our carbon footprint boundary; included within that boundary are Scope 1 and 2 emissions from manufacturing sites and offices which we own and operate. Excluded from our footprint boundary are emissions from manufacturing sites and offices which we do not own and control and emissions considered non-material by the business.

GHG emissions data for the period 1 April 2018 to 31 March 2019

	2019 CO ₂ e emissions global tonnes	2018 CO ₂ e emissions global tonnes
Scope 1: Combustion of fuel and operation of facilities	4,424	4,771
Scope 2: Electricity, heat, steam and cooling purchased for own use	13,457	14,043
Scope 3: Business air travel, WTT (Well to Tank)	18,587	17,281
Total gross emissions	36,468	36,095
Intensity measure of tonnes of CO ₂ e gross emissions per £m of revenue	30.1	33.5

CO₂e emissions
(tonnes/£m of revenue)



We have reported on emissions from Scope 1 and 2 emissions sources with some Scope 3 emissions sources included (business air travel and Well to Tank emissions).

We have used the GHG Protocol Corporate Accounting and Reporting Standard (revised edition) and guidance provided by the UK's Department for Business, Energy & Industrial Strategy (BEIS) on voluntary and mandatory carbon reporting. Emission factors were used from the UK Government's GHG Conversion Factors for Company Reporting 2018. In addition, IEA 2018 factors were used for electricity.

Halma has worked with external providers of energy efficiency and carbon reduction solutions since 2010 to ensure compliance with the Carbon Reduction Commitment Energy Efficiency Scheme (CRC). We are in full compliance with the CRC requirements and will continue to purchase allowances to meet our compliance obligation until the scheme comes to an end in October 2019. The Streamlined Energy and Carbon Reporting framework (SECR) will replace CRC in 2019 and we are already planning for disclosure in line with the new regulations in future Annual Reports.

Halma complied with the first phase of the Energy Savings Opportunity Scheme (ESOS) regulations in 2015. We are currently collating energy data and conducting audits to comply with phase 2, well ahead of the December 2019 deadline. The insights gained from the current round of site energy surveys will be shared with local management, to drive efficiencies and carbon reductions, and reviewed centrally so that any common themes or recommendations can be communicated across the Group.

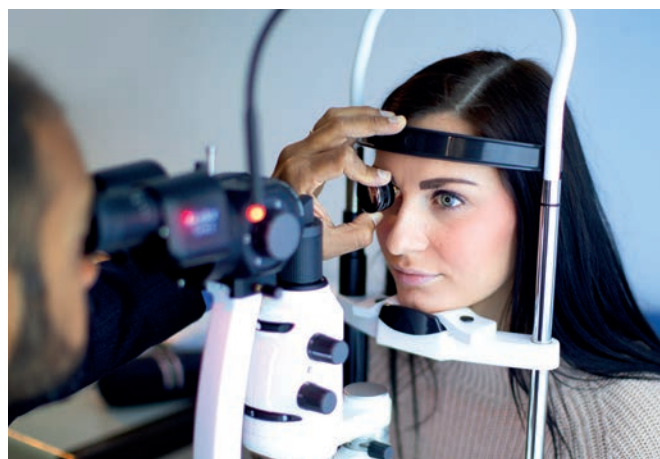
Working to eradicate preventable blindness: Gift of Sight campaign

On World Sight Day, 11 October 2018, we launched a global campaign to raise awareness of preventable blindness and improve the health of our employees. We set out to do this by offering eye health screenings for Halma's employees, at their place of work, to help detect sight-threatening conditions like glaucoma and diabetic retinopathy. Coupled with a monetary contribution for each employee who gets their eyes screened, as well as fundraising by Halma's employees whose donations would be matched, the campaign supports the work of our charitable partner, the Himalayan Cataract Project (HCP). As of May 2019, we have screened over 1,800 employees across 25 Halma companies and raised more than US\$100,000 for HCP. We're on track to screen more than one third of our global workforce.

Preventable blindness is set to treble to affect more than 115 million people by 2050. Blindness creates social dependency, reduces the workforce, shortens lives, and robs children of education.

At Halma, we have been working to tackle the problem of preventable blindness for many years. Our companies Volk, Keeler, Medcel, MST and Visiometrics make specialist equipment for eye care professionals to monitor eye health and carry out sight-saving procedures.

We also partner with international NGOs focused on curing blindness in underserved communities around the world. For example, by providing organisations like HCP with the tools and training to spot conditions like glaucoma, we support them in saving the sight of thousands of people every year.



115m

People affected by preventable blindness by 2050

40

Halma companies signed up to conduct eye health screenings through 2019

1,800+

Halma employees screened for sight-threatening conditions such as glaucoma and diabetic retinopathy

4,700+

Sight-restoring surgeries made possible through Halma's contribution

Society

Our role in society

Halma has a positive role in society. Every day, our products protect and improve the quality of life for people worldwide – protecting people in industrial processes, on transport and in public spaces; helping to prevent and detect disease; and in protecting the environment. As a growing company with global operations, we provide opportunities for our people worldwide, based on merit and free from discrimination, in an appropriate working environment and in safe working conditions. Our positive role is underpinned by our ethos, and our desire to embrace diversity and inclusion is supported by some of the specific policies and initiatives set out below. For information on our talent development programmes and how we engage with our employees, see Our People on page 44.

Our ethos and Code of Conduct

Our culture is one of honesty, openness, integrity and accountability. Halma requires its employees to act fairly in their dealings with fellow employees, customers, suppliers and business partners. Halma has a Code of Conduct which applies to operations owned or controlled by Halma and their officers and employees, and each officer or employee who joins the Group is required to acknowledge that they have read the Code and understood its importance. We also expect our external business partners and suppliers to be aware of the Code and apply similar ethical standards in their operations. The Code of Conduct aims to ensure that Halma maintains consistently high ethical standards globally, while recognising that our businesses operate in markets and countries with cultural differences and practices. It was updated in 2018, has been translated into nine languages, and is issued to all Halma employees and published on our website.

Equal opportunities

We are committed to promoting equality of opportunity for all employees and job applicants. We aim to create a working environment in which all individuals are able to make best use of their skills, free from discrimination or harassment, and in which all decisions are based on merit.

It is a Group policy to not discriminate against staff or candidates on the basis of age, disability, gender, gender reassignment, marital or civil partner status, pregnancy or maternity, race, colour, nationality, ethnic or national origin, religion or belief, or sexual orientation.

Diversity and inclusion

We are committed to ensuring the diversity of the people in our business and believe that the inclusion of all enriches our products, performance and the lives of our employees. Our culture encourages talented people of all backgrounds, beliefs or any form of personal identity to be involved, respected and inspired to develop to their full potential. Each year, our Board reviews our policies and their implementation to ensure that we maintain a diverse and inclusive organisation.

We have identified two specific areas for improvement in our diversity, particularly at managerial levels:

- We aim to have at least 20% of our executives geographically based outside Europe and the USA to better reflect the proportion of revenue generated in these markets.
- We aim to increase the overall proportion of female executives on operating company boards.

We place considerable value on involving our employees and keeping them informed on matters affecting them and the performance of the Group. This is achieved through formal and informal meetings, internal communications, our internal communications platform HalmaHub, and our Annual Report. Employees and their representatives are consulted on a wide range of matters affecting their current and future interests. We also recognise that specific groups of employees may benefit from sharing their views and common interests, and in 2018 created affinity groups for Women in Halma, Working Parents and LGBT colleagues.

Health and safety

Health and safety is critical to the Group and a top priority for company management. Marc Ronchetti, Chief Financial Officer, is the Director responsible for Halma's health and safety compliance. Halma has a strong health

and safety record, driven by a deeply embedded culture of safety. Our Health & Safety Policy requires businesses to manage their activities in a way which avoids causing unnecessary or unacceptable risks to health and safety. The Policy was updated in 2019, to reinforce the Board's 'tone from the top' and to provide clear guidelines for our businesses on managing health and safety risks to ensure a safe work environment.

Halma collects details of its worldwide reported health and safety incidents through its central financial consolidation system and the Board monitors health and safety performance. The Group's Accident Frequency Rate (AFR) is one of our non-financial KPIs (see page 43).

In line with Halma's autonomous structure, operational responsibility for compliance with local health and safety regulations resides with the board of each operating company. However, we routinely monitor health and safety performance across the Group and companies are encouraged to seek continuous improvement and to promote a strong health and safety culture. Approximately 16% of the Group's revenue is derived from companies who have been accredited with BS OHSAS 18001, a minimum standard for occupational health and safety management best practice.

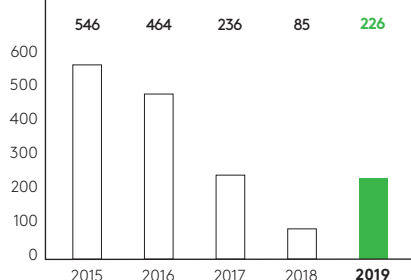
Our Policy requires businesses to carry out an independent health and safety review every three years to assess compliance and to ensure that there is a consistent and adequate level of reporting and investigation of health and safety incidents across the Group.

The Group's health and safety performance remained strong with an Accident Frequency Rate of 0.09%, although it was up from 0.04% recorded last year. We thoroughly review the root cause of any accidents to ensure that we take preventative measures, including further training and education of our employees. Since its introduction, more than 2,100 employees have been enrolled in our online training programmes.

There were no work-related fatalities in 2019 or in prior years and details of recorded injuries during the year and the prior four years are set out opposite.

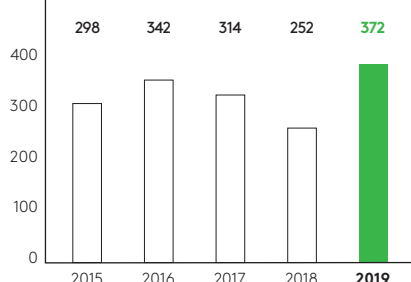
Days lost due to reportable work-related injuries*

226



Total recorded injuries to all employees

372



* Specified major injury incidents are reportable incidents which result in more than three working days lost.

Human rights

Halma's Human Rights and Labour Conditions Policy reflects the core requirements of the Universal Declaration of Human Rights and the Group observes the ILO Declaration on Fundamental Principles and Rights at Work, including the conventions relating to forced labour, child labour, non-discrimination, freedom of association and right to collective bargaining.

Our Group Chief Executive, Andrew Williams, has overall responsibility for ensuring that human rights considerations are integral to the way in which existing operations and new opportunities are developed and managed. Compliance with, and respect for, these fundamental principles are integrated throughout our organisation.

Managers and supervisors must provide leadership that promotes human rights as an equal priority to other business issues. All employees are responsible for ensuring that their own actions do not impair the human rights of others, and are encouraged to bring forward, in confidence, any concerns they may have about human rights.

Modern Slavery Act

Halma is committed to conducting its business ethically and in line with all relevant legislation including human rights laws. Halma has published three Modern Slavery Act Statements since September 2016, which detail the progressive steps taken annually to tackle modern slavery and human trafficking. Since the introduction of the Act, we have worked to raise awareness of this important agenda.

A detailed guidance note has been provided to all businesses to raise awareness of the Act and the issue of modern slavery in business and supply chains. Each business has been required to consider the potential issue of modern slavery and human trafficking within their business and supply chain. In addition, online compliance training on the Modern Slavery Act has been rolled out to senior management, all subsidiary board members and other relevant employees across the Group. Over 2,200 employees have been enrolled on this training and this is an important tool to assist our business management in understanding their responsibilities and consider the Act in their operations. In addition, this year, we are working with Stop the Traffik to undertake a risk assessment of our businesses and supply chain, with a view to further strengthening our efforts in this area.

Whistleblowing

Halma has a group-wide whistleblowing policy which applies to all employees and Halma operations as well as joint venture partners, suppliers, customers and distributors relating to our businesses. While we encourage an open culture where any issues can be raised and handled locally at business level, we recognise that there will be times when it is not appropriate, or a person will not be comfortable raising a concern through line management. An independent third-party provider, Expolink, is appointed to operate a confidential reporting service to enable employees to raise any concerns they

may have in confidence, via telephone or web-reporting. Where permitted by law, employees may report anonymously if they wish.

All reports are treated confidentially and are provided to the Company Secretary and, where appropriate, the Talent & Culture Executive for the relevant sector. All reports are appropriately investigated and concluded. Halma is committed to ensuring that anyone raising a concern in good faith is not subject to any victimisation or detrimental treatment.

Anti-bribery and anti-corruption

Halma has a zero-tolerance policy on bribery and corruption which extends to all business dealings and transactions in which the Group is involved. This includes a prohibition on making political donations, offering or receiving inappropriate gifts or making undue payments to influence the outcome of business dealings. Every business records and reports on any gifts, hospitality or charitable donations which exceed the Group policy limits. Our Policy and guidance in this area is well understood, routinely reviewed and compliance is checked as part of the half year and year-end control process. We also require customers and suppliers who contract on our standard business terms to comply with anti-corruption and anti-bribery laws. Online anti-bribery and anti-corruption compliance training covers senior management, all subsidiary board directors and other relevant employees. Over 2,400 employees from across the Group have been enrolled.

Our suppliers

Halma encourages its suppliers to operate with the high ethical standards that are set out in our Code of Conduct. One particular area of concern for our customers and other stakeholders is whether certain metals that may originate in conflict zones are included in our products. US Securities and Exchange Commission (SEC) rules require US publicly traded companies to certify whether such conflict minerals are contained within their products. In order to assist our customers who are subject to this SEC rule, we have a Conflict Minerals policy which gives guidance to all companies on how to determine whether any of the four minerals or their derivatives classified by the US government as 'conflict minerals' are contained in any product.

Strategic risk management to enable growth

Our approach

Strategic finance and risk management is one of our Growth Enablers. We believe success is achieved by involving our employees at all levels in the organisation and empowering them to manage risks and take advantage of opportunities. Our risk awareness culture allows management to make better commercial decisions and helps to maximise the benefits of our decentralised business model. A good risk management culture provides a solid foundation upon which our business can scale and grow.

Our risk governance framework

The Board is responsible for determining the nature and extent of the principal risks it is willing to take to achieve its strategic objectives.

Each company or function within Halma identifies risks and opportunities as part of their strategic reviews, assesses how these are currently controlled and whether any further actions are required. A similar exercise is performed at sector and Group level to develop an overall 'bottom up' picture of risk for the Group. The principal and emerging risks identified by the Board and Executive Board are compared with the bottom up risk picture to ensure appropriate alignment of risk and execution of risk appetite.

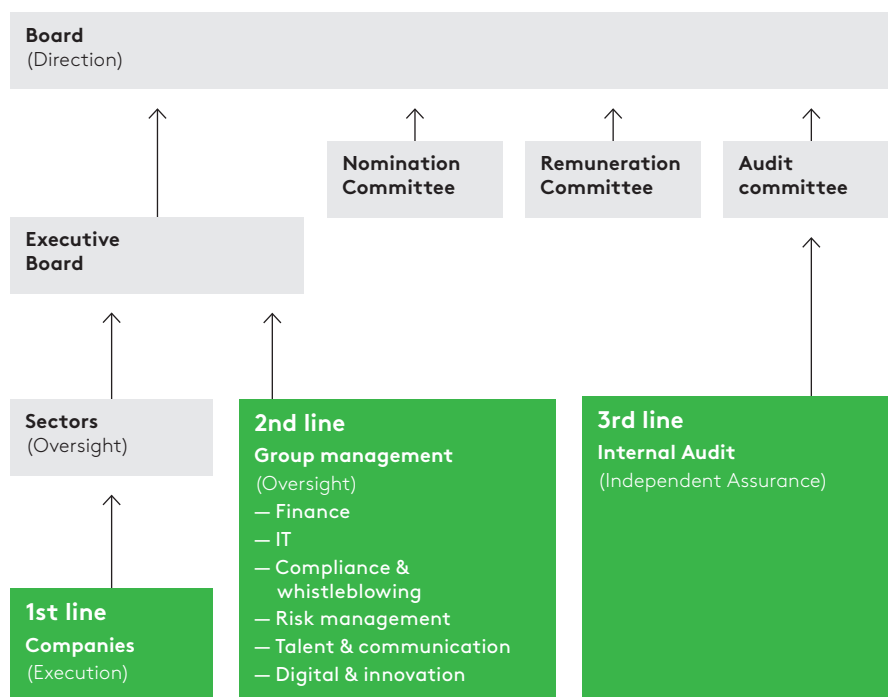
During the year, updates from management to the Board covered all of our principal risks. The Audit Committee, on behalf of the Board, obtained assurance that the risk management and internal control system was operating effectively throughout the organisation and that risks were being managed in line with the risk appetite set by the Board. In addition to reports from management, the Board and Audit Committee received updates from Group Risk about how the risk management process was operating across the organisation.

On behalf of the Board, the Nomination Committee ensured an optimum balance of skills, knowledge and experience within the executive management team to deliver the strategy and effectively manage risk, while the Remuneration Committee ensured the right reward system to drive an appropriate culture of high performance with commensurate controls.

Our control framework

Halma's decentralised business model provides significant autonomy to companies, within the structure of a clear control framework.

Risk Governance Framework



This framework ensures there is sufficient oversight and clear identification of matters reserved for the Board. The key elements of this framework include:

- Monthly reporting by companies on performance, including risks, with regular oversight by sector and Group management.
- Clear accountabilities and delegation of authority throughout the organisation.
- Six monthly self-certifications by companies on required minimum controls for finance, legal and IT.
- Independent six-monthly peer reviews of companies' reported financial results by Finance Directors.
- Independent validation of controls and certifications by Internal Audit during audits.
- Existence of a whistleblowing hotline which is available for all employees.

Our areas of focus during the year

There were no changes to the composition of our principal risks during the year, but work has continued to ensure we are managing them effectively by anticipating and responding to change. Key developments during the year included:

- Coordinated Executive Board and plc Board review of our principal and emerging risks. This included a review of the control framework and assurance obtained for each risk to ensure alignment with risk appetite. Input from sectors and Group functions was also obtained as part of this process.
- Implementation of integrated risk, control and assurance software to enable us to more effectively and efficiently manage our risks (see case study).
- Clarification of accountabilities within the risk management process at all levels, captured in an annual risk and control calendar.
- Creation of a digital growth framework to give greater clarity, support and guidance for our business as we continue to develop more digital capabilities through innovation and are more data driven (Cyber and Innovation risks).
- Completion of the project to achieve and maintain compliance with the General Data Protection Regulation (Legal Compliance risk).
- Brexit contingency planning and close monitoring of developments (Economic and Geopolitical Uncertainty risk).

The RiskHub – increasing the use of technology to enable us to manage risk more effectively

Effectively and efficiently managing our risks and taking advantage of opportunities enables us to deliver our growth strategy. During the year, we increased our use of technology by implementing risk, control and assurance software that provides an integrated view of the following at all levels of the Group:

- Risk – completion of risk assessments, including controls and actions.
- Control – control self certifications against Halma's

minimum required controls, including any actions to address control gaps.

- Assurance – capture of actions identified from assurance activities, including internal audits.

This provides us with increased visibility of risk, control and assurance, enabling us to spend less time creating and collating information and more time acting on insights to better manage risk.



Above: Crowcon's Operations Director Fraser Mackay on a daily 'Gemba' walk, performing a health check of the factory floor and ensuring operations are running smoothly. Daily Gemba walks help to mitigate risk, improve efficiency and drive innovation.

Principal risks and uncertainties

1. Cyber

Risk Owner: Inken Braunschmidt

Gross risk level

High

Change

Increased

Risk appetite

Averse

Growth Enablers



Risk and impact

Loss of digital intellectual property/data or ability to operate systems due to internal failure or external attack. There is resulting loss of information or ability to continue operations, and therefore financial and reputational damage. The increase in this risk reflects the growing threat from cyber crime around the world.

How do we manage the risk?

- Clear ownership of cyber risk, with Board level expertise. IT function reports into Chief Innovation & Digital Officer.
- Development of digital framework, including digital growth and cyber risks.
- Minimum required IT controls defined. All companies certify compliance every six months. Any gaps are tracked until addressed.

- Monthly cyber KRI/KPI reporting in place across the Group.
- Regular online IT awareness training for all employees using computers.
- Disaster recovery and back-up plans in place, required to be tested regularly.
- Regular reviews by Group IT and Internal Audit.

2. Organic Growth

Risk Owner: Andrew Williams

Gross risk level

High

Change

No change

Risk appetite

Open

Growth Enablers



Risk and impact

Failing to deliver desired organic growth, resulting in missed expected strategic growth targets and erosion of shareholder value.

How do we manage the risk?

- Clear Group strategy to achieve organic growth targets, supported by detailed company strategies and seven Halma Growth Enablers with Executive Board owners.
- Sector management ensure that the Group strategy is fulfilled through ongoing review and chairing of companies.
- Continued investment in R&D and innovation with KPIs monitored at Board level.

- Regional hubs, for example in China and India, support local growth strategic initiatives for all companies.
- Agile business model and culture of innovation to take advantage of new growth opportunities as they arise.
- Regular monitoring of financial performance at all levels, including by the Board.
- Remuneration of company executives and above is based on profit growth.

3. Making and Integrating Acquisitions

Risk Owner: Andrew Williams

Gross risk level

High

Change

Increased

Risk appetite

Open

Growth Enablers



Risk and impact

Missing our strategic growth target for acquisitions due to insufficient acquisitions being identified or poor due diligence or poor integration, resulting in erosion of shareholder value. The increase in this risk reflects the current competitive market and also the need to acquire more to achieve our target as Halma continues to grow.

How do we manage the risk?

- Acquisition of companies in existing or adjacent markets that are well known.
- Dedicated M&A Directors with Group Chief Executive, Chief Financial Officer and plc Board scrutiny and approval of all acquisitions.
- Regular reporting of the acquisition pipeline to the Executive and plc Board.
- Careful due diligence by experienced staff who bring in specialist expertise as required.

- Valuation model used for all acquisitions to ensure price paid is appropriate.
- Integration checklist covering control and compliance areas used to ensure consistent high quality and efficient integration into Halma.
- Clarity of strategy and agile business model to take advantage of new growth opportunities as they arise.

4. Talent and Diversity

Risk Owner: Jennifer Ward

Gross risk level

Medium

Change

No change

Risk appetite

Open

Growth Enablers



Risk and impact

Not having the right talent and diversity at all levels of the organisation to deliver our strategy, resulting in reduced financial performance.

How do we manage the risk?

- Comprehensive recruitment processes to recruit the best and brightest talent.
- Development of talent and diversity across companies, including through development programmes, to create competitive advantage and motivated leaders to deliver the strategy.
- Succession planning process to identify and develop future leaders.

- Future leaders programme to develop graduates.
- Ongoing focus to increase employee diversity at all levels worldwide. Diversity metrics are monitored by the Board.
- Senior management reward structure is aligned with the strategic priorities of the companies, sectors and Group.

Link to Growth Enablers



5. Innovation

Risk Owner: Inken Braunschmidt

Gross risk level

High

Change

Increased

Risk appetite
Seeking

Growth Enablers



Risk and impact

Failing to innovate to create new high-quality products to meet customer needs or failure to adequately protect intellectual property, resulting in a loss of market share and poor financial performance. The increasing speed of innovation and potential for disruption has increased this risk.

How do we manage the risk?

- Product development is devolved to the companies who are closest to the customer, with support and guidance provided by sector management.
- Chief Innovation & Digital Officer promotes and accelerates innovation by companies, with support from sector management.
- Digital strategy in place relating to innovation, with a consistent language for growth and innovation. (Implementation is via four growth engines: 1. Growth sprints, 2. Convergence Accelerator, 3. Digital Edge Hub, 4. Innovation Hot Spots).

- Active collaboration of ideas and best practices between companies.
- Head Office approval of all large R&D projects to ensure alignment with strategy.
- Halma Innovation Awards reward and encourage innovation.
- Companies are encouraged to develop and protect intellectual property.

6. Competition

Risk Owner: Andrew Williams

Gross risk level

Medium

Change

Increased

Risk appetite
Open

Growth Enablers



Risk and impact

Failing to adapt to market and technological changes, either through organic or M&A activity, resulting in reduced financial performance. Just as our innovation risk has increased, the threat of disruption from competitors has increased.

How do we manage the risk?

- Focus on niche markets with high barriers to entry and seek to achieve strong market positions.
- Halma's decentralised business model enables operational resources to be closer to customers, and companies are empowered to monitor, anticipate and respond to changing market needs.
- Regular company and sector board meetings which review markets, competition and product innovation.

- Ongoing discussions with customers and monitoring of market and technological changes to identify new opportunities.
- Halma Chief Innovation & Digital Officer provides leadership and oversight for digital innovation and arranges Innovation Hotspot visits for Halma leaders to see disruption examples in action.

7. Economic and Geopolitical Uncertainty

Risk Owner: Andrew Williams

Gross risk level

High

Change

Increased

Risk appetite
Cautious

Growth Enablers



Risk and impact

Risk of decline in financial performance due to recession or geopolitical changes and its potential impact on the carrying value of goodwill. The increase in risk reflects increased political uncertainty, including Brexit and USA/China trade relations.

How do we manage the risk?

- Diverse portfolio of companies across the four sectors, in multiple countries and in relatively non-cyclical specialised global niche markets helps to minimise the impact of any single event operating in one market.
- Regular monitoring and assessment of potential risks and opportunities relating to geopolitical or economic uncertainties. A Brexit Committee is in place to monitor developments and support companies.

- Identification of any wider trends by the Halma Executive Board that require action.
- Local companies have the autonomy to rapidly adjust to changing circumstances.
- Annual assessment of the carrying value of goodwill.

Principal risks and uncertainties

Continued

8. Natural Disasters

Risk Owner: Andrew Williams

Gross risk level

Medium

Change

No change

Risk appetite

Cautious

Growth Enablers



Risk and impact

Being unable to respond to large-scale events or natural catastrophes such as hurricanes, floods or fire, resulting in inability of one or more parts of our business to operate, therefore causing financial loss and reputational damage.

How do we manage the risk?

- All parts of the Group are required to have business continuity plans in place which are tailored to manage the specific risks they are most likely to face and these are required to be tested periodically.
- The geographic diversity of companies limits the impact of any single event and Halma has manufacturing capability in multiple locations which provides flexibility.
- Business interruption insurance is in place to limit any financial loss that may occur.

9. Communications

Risk Owner: Jennifer Ward

Gross risk level

High

Change

No change

Risk appetite

Open

Growth Enablers



Risk and impact

Missed opportunities for growth and attainment of our strategy should we not clearly articulate our value propositions to potential partners, customers, employees or acquisition targets.

How do we manage the risk?

- Halma plc Board members for Communications and Investor Relations.
- Clear brand and communications strategy to enable clear understanding and alignment with Group strategy.
- Proactive brand and communications approach to reach existing and potential audiences to attract and engage them to drive new growth opportunities.
- Development of pitch books, purpose and strategy impact stories, product-solution case studies, and investment collateral that are delivered to the appropriate targets via direct, indirect, social media and investor channels.
- Monitoring of external, social and investor media to gauge sentiment, brand health and protect reputation.
- Periodic employee engagement survey to gain feedback on the effectiveness of internal communication.
- Communication platform to enable rapid collaboration and information sharing.

10. Non-compliance with Laws and Regulations

Risk Owner: Marc Ronchetti

Gross risk level

High

Change

No change

Risk appetite

Averse

Growth Enablers



Risk and impact

Failing to comply with laws and regulations resulting in damage to reputation and/or fines/penalties.

How do we manage the risk?

- High-quality management resources who implement controls to monitor and comply with legal requirements in all countries we operate.
- Companies ensure high product quality and compliance with legal standards.
- High ethical standards which are captured in Halma's Code of Conduct. All employees are required to read and sign up to it.
- Employees across the Group perform regular online compliance training.
- A whistleblowing hotline is in place and available for use by all employees.
- All parts of the Group complete six-monthly control self-certifications which include legal compliance.
- Completion of a coordinated project to achieve compliance with GDPR.

Link to Growth Enablers



11. Financial Controls

Risk Owner: Marc Ronchetti

Gross risk level
Medium
Change
Decreased
Risk appetite
Averse
Growth Enablers



Risk and impact

Failure in financial controls either on its own or via a fraud which takes advantage of a weakness, resulting in financial loss and/or misstated reported financial results. This risk has reduced following an update of the minimum expected controls for companies and a coordinated focus to address the most common financial control gaps identified.

How do we manage the risk?

- Local directors have legal, as well as operational, responsibility as they are statutory directors of their companies. This fits with Halma's decentralised model to ensure an effective financial control environment is in place.
- To mirror the decentralised model, Halma Group Finance prescribes the minimum expected financial controls to be in place and requires companies to certify every six months that these controls are operating effectively. These include segregation of duties, delegation of authorities and financial accounts preparation checks.
- Six-monthly peer reviews of reported results for each company to provide independent challenge. Internal Audit also performs periodic risk-based reviews.
- A whistleblowing hotline is in place and available for use by all employees.

12. Treasury Management

Risk Owner: Marc Ronchetti

Gross risk level
Medium
Change
Increased
Risk appetite
Averse
Growth Enablers



Risk and impact

There is a risk that the Group's cash resources are inadequate to support its activities. There is an inadvertent breach of funding terms/covenants or that there is volatility on the Group's Sterling reported result due to unhedged exposure to foreign currency movements. Geopolitical uncertainty has increased the risk of foreign exchange fluctuations.

How do we manage the risk?

- A long-term Revolving Credit Facility is in place.
- Sources of funding, headroom and liquidity forecasts are regularly assessed and monitored.
- Funding terms are built into company policies and requirements, including export controls to sanctioned countries.
- A Group Treasury Policy includes hedging and there is regular monitoring of foreign currency exposure at local company and Group level.

13. Product Failure

Risk Owner: Andrew Williams

Gross risk level
Medium
Change
No change
Risk appetite
Averse
Growth Enablers



Risk and impact

A failure in one of our products results in serious injury, death or damage to property, including due to non-compliance with product regulations, resulting in financial loss and reputational damage.

How do we manage the risk?

- Companies have 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 and liability insurance is in place.
- Product compliance with regulations is checked as part of due diligence for any acquisition.



Record results and growth in all four sectors

“We continued to execute well against our growth strategy and our key performance indicators, leveraging our sustainable financial model and organisational structure across our global niche markets.”

Record results

Halma made strong progress in the period, delivering record revenue and profit for the 16th consecutive year. We continued to execute well against our growth strategy and our key performance indicators, leveraging our sustainable financial model and organisational structure across our global niche markets.

Revenue increased by 12.5% to £1,210.9m (2018: £1,076.2m) and adjusted¹ profit was up by 15.0% to £245.7m (2018: £213.7m) while statutory profit before taxation increased by 20.2% to £206.7m (2018: £171.9m). Cash generation was strong, and our financial position remains robust, allowing us to continue to support investment in growth, both organically and by acquisition. The Board is proposing a further dividend increase of 7%, the 40th consecutive year of dividend per share growth of 5% or more.

The revenue growth of 12.5% included a 10.0% increase in organic constant currency revenue. Acquisitions contributed

3.1% to growth (2.1% net of disposals). The adjusted profit increase of 15.0% included 11.1% organic constant currency profit growth. Both organic revenue and adjusted profit growth were substantially ahead of our KPI target of 5% growth or more, and more than compensated for the rate of growth from acquisitions, which, at 3.2% (3.6% net of disposals), was lower than our KPI of 5% growth or more.

There was a small net currency translation impact on revenue and adjusted profit, with revenue benefitting by 0.4% and adjusted profit by 0.3%.

Statutory profit before taxation of £206.7m is calculated after charging the amortisation of acquired intangible assets of £35.6m (2018: £34.7m), and other items of a net £3.4m (2018: £7.1m), which included a charge of £2.1m in relation to the equalisation of pension benefits for men and women in the Group's defined benefit pension plans (see “Pensions update” on page 65). Further detail on these items is given in note 1.

Strong revenue and profit growth

Revenue grew by 15.6% in the first half and 9.7% in the second half. There was a 1.8% negative effect from currency translation in the first half which reversed in the second half to give a small benefit of 0.4% for the year. Organic revenue growth at constant currency was an exceptionally strong 14.2% in the first half reflecting good performances across all four of our sectors as well as a benefit from the phasing of the delivery of some large orders received in the second half of the prior year. As expected, we also delivered good organic constant currency growth rate of 6.3% in the second half to give an impressive 10.0% growth rate for the year as whole.

Adjusted profit growth was 19.4% in the first half and 11.5% in the second half. As with revenue, the negative effect from currency translation in the first half reversed in the second half, giving a small benefit of 0.3% for the year. Organic profit growth at constant currency was again

Revenue and profit growth

	2019 £m	2018 £m	Increase £m	Percentage growth		
				Total	Organic growth ²	Organic growth ² at constant currency
Revenue	1,210.9	1,076.2	134.7	12.5%	10.4%	10.0%
Adjusted ¹ profit before taxation	245.7	213.7	32.0	15.0%	11.4%	11.1%
Statutory profit before taxation	206.7	171.9	34.8	20.2%	–	–

¹ In addition to those figures reported under IFRS Halma uses alternative performance measures as key performance indicators, as management believe these measures enable them to better assess the underlying trading performance of the business by removing non-trading items that are not closely related to the Group's trading or operating cash flows. Adjusted profit excludes the amortisation and impairment of acquired intangible assets; acquisition items; restructuring costs; profit or loss on disposal of operations; and the effect of equalisation of benefits for men and women in the defined benefit pension plans. All of these are included in the statutory figures. Note 3 to the Accounts gives further details with the calculation and reconciliation of adjusted figures.

² See highlights.

exceptionally strong at 16.1% in the first half and, at 7.2% in the second half, was slightly ahead of our expectations at the half year. The first half/second half split of adjusted profit was 46%/54%, compared to our typical 45%/55% pattern, reflecting the strong first half performance and a better risk profile for the year.

Growth in all four sectors

All four sectors delivered revenue and profit growth, both on a reported and organic constant currency basis. All sectors grew revenue on an organic constant currency basis in both the first and the second half.

We delivered double-digit organic constant currency profit growth in three of our four sectors. Infrastructure Safety was the strongest performer, with profit growth accelerating in the second half. Environmental & Analysis and Medical delivered strong growth, which comprised a slower second half following an exceptionally good first half. Process Safety achieved mid-single-digit growth, which included reorganisation costs of £1.5m to improve its competitive position and performance in the future.

Central and Growth Enabler costs increased, as expected, to £22.0m (2018: £15.3m) excluding the one-off charge of £2.1m for equalising pension benefits between men and women. This principally reflected increased investment to support our companies' growth over the medium-term, mainly in the digital transformation and innovation Growth Enablers, as well as in governance and compliance. We expect a further increase, albeit at a lower rate, in 2020, principally in Growth Enabler costs, and in the medium-term, these costs are expected to grow no faster than revenue.

Growth in our major regions

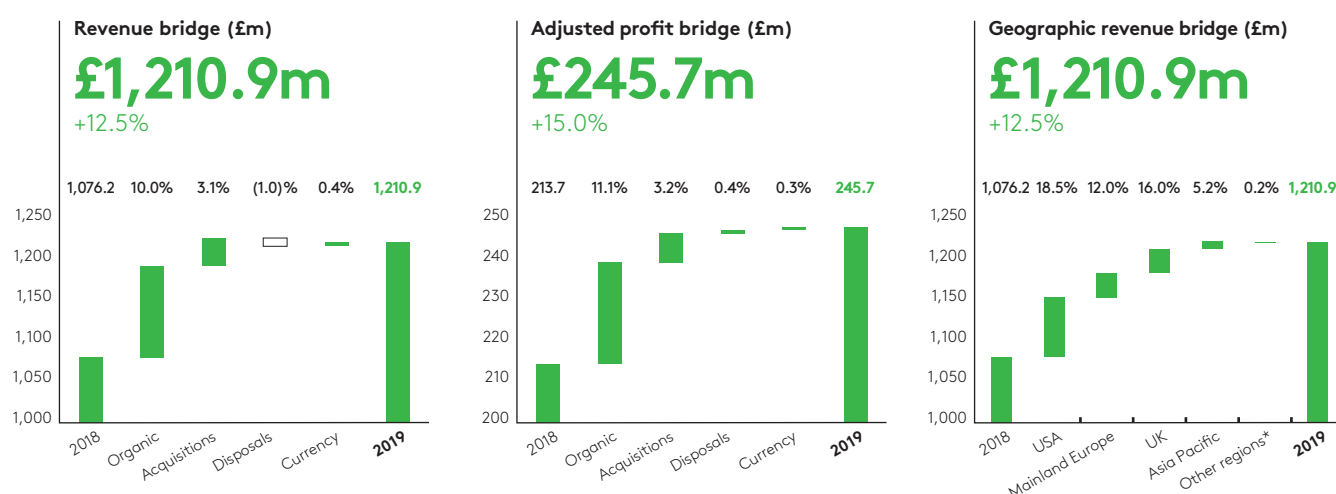
All major regions reported revenue growth, with the USA, Mainland Europe and the UK, performing strongly, with double-digit percentage increases. Following strong performances in 2018, growth in Asia Pacific and Africa, Near and Middle East slowed, with Other regions showing a small decline.

The USA delivered very strong growth of 18.5%, and remains our largest revenue destination, accounting for 37% of Group revenue, an increase of two percentage points compared to the prior year.

All sectors performed well, with Infrastructure Safety growing very strongly and Process Safety and Environmental & Analysis also delivering excellent growth. Mainland Europe revenue increased by 12.0%, driven by good performances in Infrastructure Safety and Environmental & Analysis. The UK also grew well with revenue increasing by 16.0% and all sectors except Medical, which accounts for only 7% of UK revenues, growing at a double-digit percentage rate.

Asia Pacific grew 5.2%, with good growth in Process Safety, Infrastructure Safety and Medical, while Environmental & Analysis growth was slower following a strong performance last year. Our largest markets in the region grew well, with revenue in China increasing 8% against a tough comparative of 20% growth last year, and Australasia growing 16%. Performance in smaller markets was variable.

In the rest of the world, performance was mixed and revenue was broadly flat overall. In Africa, Near and Middle East, Infrastructure Safety grew strongly, but this was offset by declines in the other



* Comprises Africa, Near and Middle East & other countries.

Geographic revenue growth

	2019		2018		Change £m	% growth	% organic growth at constant currency
	£m	% of total	£m	% of total			
United States of America	443.2	37%	374.0	35%	69.2	18.5%	18.3%
Mainland Europe	266.3	22%	237.7	22%	28.6	12.0%	6.5%
United Kingdom	200.9	16%	173.3	16%	27.6	16.0%	11.5%
Asia Pacific	184.0	15%	174.9	16%	9.1	5.2%	4.5%
Africa, Near and Middle East	70.8	6%	69.7	7%	1.1	1.5%	(0.6)%
Other countries	45.7	4%	46.6	4%	(0.9)	(2.1)%	(6.1)%
	1,210.9	100%	1,076.2	100%	134.7	12.5%	10.0%

Financial review

Continued

three sectors, notably in Environmental & Analysis. Other regions saw challenging conditions for the Safety sectors, but growth in Environmental & Analysis and Medical. Of the larger markets in the rest of the world, Brazil delivered good growth.

Revenue from territories outside the UK/ Mainland Europe/the USA grew by 3.2%, below our 10% KPI growth target. Delivering more consistent growth in these regions will be a key focus in 2020, even though we achieved 16.0% growth in revenue in the UK/Mainland Europe/the USA to deliver a strong overall result.

On an organic constant currency basis, the USA was the fastest growing region, with 18.3% revenue growth with all sectors delivering double-digit organic revenue growth. Mainland Europe grew revenue by 6.5%. The UK grew 11.5%, with all sectors except Medical growing by more than 10%. Asia Pacific growth was 4.5%, while Africa, Near and Middle East and Other regions had a challenging second half across the sectors resulting in flat revenue and a decline, respectively, for the full year.

Increased returns

Halma's Return on Sales has exceeded 16% for 34 consecutive years. Our KPI target is to deliver Return on Sales in the range of 18–22%. This year Return on Sales increased to 20.3% (2018: 19.9%), with an improvement in all sectors except Process Safety, where Return on Sales remained strong at 23.0%, even though there was a decline of 0.5% due to reorganisation costs.

We successfully achieved our objective of continuing to invest in our businesses while delivering growth. This enables us to maintain a high level of Return on Total Invested Capital (ROTIC), the post-tax return on the Group's total assets including all historical goodwill. ROTIC improved to 16.1% (2018: 15.2%), once again well ahead of our KPI target of 12% and substantially in excess of Halma's Weighted Average Cost of Capital (WACC), estimated to be 7.9% (2018: 7.7%).

Currency impacts well managed

Halma reports its results in Sterling. Our other key trading currencies are the US Dollar, Euro and to a lesser extent the Swiss Franc and Chinese Renminbi. Over 45% of Group revenue is denominated in US Dollars and approximately 13% in Euros.

The Group has both translational and transactional currency exposure. Translational exposures are not hedged, while, for transactional exposures, 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 31 March 2019 approximately 68% 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 spend less in Euros than we sell and this year had a net exposure of approximately €35m.

We saw continued volatility in currencies throughout the year although by year end this had a relatively limited impact on the Consolidated Income Statement. Sterling strengthened on average in the first half of the year, giving rise to a negative currency translation impact of 1.8% on revenue and 2.2% on profit. However Sterling was weaker on average in the second half of the year, and for the year as a whole, currency translation had a small positive effect of 0.4% on revenue and 0.3% on adjusted profit.

Based on the current mix of currency denominated revenue and profit, a 1% movement in the US Dollar relative to Sterling changes revenue by £5.5m and profit by £1.1m. Similarly, a 1% movement in the Euro changes revenue by £1.5m and profit by £0.3m.

If currency rates through the 2020 year were US Dollar 1.30/Euro 1.16 relative to Sterling, and assuming a constant mix of currency results, we would expect no material effect on revenue and profit in 2020 compared with 2019. On this basis there would be a positive effect in the first half of the year, which would broadly reverse in the second half.

Increased financing cost

The net financing cost in the Income Statement of £10.0m was slightly above the prior year (2018: £9.7m). Average net borrowings were marginally lower this year, despite acquisition expenditure, but the average cost of financing was higher due to the currency mix of debt and higher US dollar interest rates (see the 'Average debt and interest rates' table on page 66 for more information).

Interest cover (EBITDA as a multiple of net interest expense as defined by our Revolving Credit Facility) was 33 times (2018: 32 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 the cost decreased to £1.2m (2018: £1.7m), reflecting the reduction in the deficit on our defined benefit plans.

Group tax rate

The Group has major operating subsidiaries in 10 countries and the Group's effective tax rate is a blend of these national tax rates applied to locally generated profits. A significant proportion (approximately one fifth) of Group profit is generated and taxed in the UK.

The Group's effective tax rate on adjusted profit was lower than the prior year at 18.6% (2018: 19.7%) mainly due to the decrease in the US federal tax rate in addition to some one-off credits in the year.

	Weighted average rates used in the Income Statement			Exchange rates used to translate the Balance Sheet	
	First half	2019 Full year	2018 Full year	2019 Year end	2018 Year end
US\$	1.33	1.31	1.33	1.30	1.41
Euro	1.13	1.14	1.13	1.16	1.14

For the year to 31 March 2020 we currently anticipate (based on the forecast mix of adjusted profits) a Group effective tax rate on adjusted profits of approximately 20%, with the increase compared to this financial year mainly driven by the mix of adjusted profits, including the full year effect of prior year acquisitions, and lower interest deductibility relative to profits.

On 2 April 2019, the European Commission published its final decision that the UK controlled Finance Company Partial Exemption (FCPE) constituted State Aid. In common with a number of other UK companies, Halma has benefited from the FCPE, and the total benefit in 2019 and prior periods is approximately £15.4m in respect of tax and approximately £0.6m in respect of interest. We are currently evaluating whether to appeal the European Commission's decision and the UK Government may also appeal, and therefore at present we believe that no provision is required in respect of this issue, although a cash payment of some, or all of, the amount due may be required in the next year which we would expect to be refundable in the event of a successful appeal.

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 2019 was strong. Cash generated from operations was £259.6m (2018: £214.4m) and adjusted operating cash flow was £225.2m (2018: £190.4m) which represented 88% (2018: 85%) of adjusted operating profit, ahead of our cash conversion KPI target of 85%.

A summary of the year's cash flow is shown in the table below and on page 66. The largest outflows in the year were in relation to acquisitions, dividends and taxation paid. Working capital outflow, comprising changes in inventory, receivables and creditors, totalled £16.3m (2018: £24.4m) and debtor days have reduced year-on-year, reflecting our continuing focus on cash management.

Dividends totalling £57.2m (2018: £53.4m) were paid to shareholders in the year. Taxation paid was £40.6m (2018: £41.1m). In the 2020 financial year, an acceleration of the payment timetable for UK Corporation Tax payments for larger companies will result in a one-off increase in cash taxation payable of approximately £5m.

Capital allocation and funding

Halma aims to deliver high returns, measured by ROTIC, well in excess of our cost of capital. We invest to deliver the future earnings growth and strong cash returns which underpin this ambition, and our capital allocation priorities are as follows:

Investment for organic growth

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

Value-enhancing acquisitions

We supplement organic growth with acquisitions in current and adjacent market niches. This brings new technology, intellectual property and talent into the Group and expands our market reach, keeping Halma well-positioned in growing markets over the long-term.

Regular and increasing returns to shareholders

We have maintained a progressive dividend policy for over 40 years and this is our preferred route for delivering regular cash returns to shareholders.

Increased 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 11.2%, a similar rate to revenue growth. R&D expenditure as a percentage of revenue was 5.2% (2018: 5.2%), well in excess of our KPI target of 4% or more. In the medium term we expect R&D expenditure to continue to increase broadly in line with revenue growth.

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 2019 we capitalised and acquired £11.6m (2018: £9.7m), impaired £0.7m (2018: £0.7m) and amortised £8.5m (2018: £6.9m). This results in an asset carried on the Consolidated Balance Sheet, after a £0.6m gain (2018: £1.0m loss) relating to foreign exchange, of £33.1m (2018: £30.0m). All R&D projects and particularly those requiring capitalisation, are subject to rigorous review and approval processes.

Capital expenditure on property, plant, equipment, computer software and other intangible assets was £31.3m (2018: £22.1m) or £29.1m excluding the Awarepoint and Elpas asset purchases made in the year. The expenditure on fixed assets was spread across all four sectors, supporting our operating capability, capacity and growth including investment in IT and systems upgrades.

Operating cash flow summary

	2019 £m	2018 £m
Operating profit	217.8	181.2
Net acquisition costs and contingent consideration fair value adjustments	0.3	7.7
Defined benefit pension charge	2.1	-
Amortisation and impairment of acquisition-related acquired intangible assets	35.6	34.7
Adjusted operating profit	255.8	223.6
Depreciation and other amortisation	31.3	28.4
Working capital movements	(16.3)	(24.4)
Capital expenditure net of disposal proceeds	(29.7)	(20.5)
Additional payments to pension plans	(11.4)	(10.8)
Other adjustments	(4.5)	(5.9)
Adjusted operating cash flow	225.2	190.4
Cash conversion %	88%	85%

Financial review

Continued

There was increased spend in three of our sectors with reduced spend only in Environmental & Analysis which had the highest spend in the prior year. In addition, we expanded our head office space this year to accommodate the increased investment in Growth Enablers. We anticipate capital expenditure of £35m in the coming year, reflecting significant new operating site, plant and equipment and IT investment in Infrastructure Safety and new operating capability in Environmental & Analysis.

Value-enhancing acquisitions

Acquisitions and disposals are an important part of our growth strategy, as they keep our portfolio focused on growing markets over the medium and long-term.

In the year we spent £64.5m on four acquisitions (net of cash acquired of £5.3m including acquisition costs). In addition, we paid £3.6m in contingent consideration for acquisitions made in prior years, giving a total spend of £68.1m. We made one disposal, realising £3.1m, net of transaction costs.

In addition to the four business acquisitions, our Medical division acquired various assets from Awarepoint and Elpas for total consideration of £2.6m to expand CenTrak's technology and market reach.

In our half year results, we reported on three acquisitions in the Infrastructure Safety sector: LAN Control Systems Limited, a relatively small technologically-driven bolt-on for an initial cash consideration of £1.0m; Limotec bvba for a cash consideration of €9.3m (£8.2m), on a cash and debt-free basis; and Navtech Radar Limited for an initial cash consideration of £21m on a cash and debt-free basis, with further earn-out considerations, capped at a total of £18m in cash, payable dependent on profit growth in each of the three financial years to the end of March 2021.

In January 2019, we acquired Business Marketers Group Inc., trading as Rath Communications, a provider of emergency communication systems for areas of refuge in the USA, for a cash consideration of US\$42.4m (£32.8m), on a cash- and debt-free basis.

There was one disposal in the period. In June 2018, the Medical sector sold the Accudynamics Fluid Technology business for US\$5.4m (£4.2m), resulting in a small loss on disposal of US\$1.2m (£1.0m). The original US\$31.8m consideration on acquisition in December 2010 primarily related to goodwill and customer intangibles, which have now been successfully retained within the Group to strengthen the product offering and market positions of other Halma Diagnostic device businesses.

The acquisitions completed in the current and prior year contributed to revenue in 2019 in line with expectations. We expect a good performance from these acquisitions in the coming year and in the long term.

Regular and increasing returns for shareholders

Adjusted earnings per share increased by 16.5% to 52.74p (2018: 45.26p). Statutory earnings per share increased by 10% to 44.78p (2018: 40.69p), lower than the increase in Adjusted earnings per share largely as a result of the one-off credit last year arising from revisions to US taxation rates.

The Board is recommending a 7.0% increase in the final dividend to 9.60p per share (2018: 8.97p per share), which together with the 6.11p per share interim dividend gives a total dividend per share of 15.71p (2018: 14.68p), up 7.0% in total. Dividend cover (the ratio of adjusted profit after tax to dividends paid and proposed) is 3.36 times (2018: 3.08 times).

The final dividend for 2019 is subject to approval by shareholders at the AGM on 25 July 2019 and will be paid on 14 August 2019 to shareholders on the register at 12 July 2019.

We aim to increase the per share dividend amount each year, while maintaining a prudent level of dividend cover, with approximately 35–40% of the anticipated total dividend being declared as an interim dividend. The Board's determination of recommended annual dividend increases takes into account the medium-term rate of organic constant currency growth and the financial resources required in executing our strategy, including organic investment needs and acquisition opportunities, whilst maintaining moderate debt levels.

Return on Sales²

20.3%

Return on Total
Invested Capital²

16.1%

Funding capacity extended

Halma operations are cash generative and the Group has access to competitively priced debt finance providing good liquidity for the Group. Group treasury policy remains conservative and no speculative transactions are undertaken.

In October 2018 we extended the £550m Revolving Credit Facility, put in place in November 2016, by a further year to 2023. The combination of good cash generation, a healthy balance sheet and committed external financial resources provides us with the capacity we need to invest in organic growth and acquisitions to meet our growth objectives as well as to sustain our progressive dividend policy.

At the year end, net debt was £181.7m (2018: £220.3m), a combination of £262.9m of debt and £81.2m of cash held around the world to finance local operations. The gearing ratio at year end (net debt to EBITDA) was 0.63 times (2018: 0.87 times). Although we are comfortable operating at this level of gearing, we would increase to two times gearing if the timing of acquisitions required it. Net debt represented 3% (2018: 5%) 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.

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.

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 31 March 2019 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 2019 year end had decreased to £39.2m (2018: £53.9m) before the related deferred tax asset. The value of plan assets increased to £292.2m (2018: £271.7m). In total, over 55% of plan assets are invested in return seeking assets providing a higher expected level of return over the longer term.

Plan liabilities increased to £331.4m (2018: £325.6m) due to the impact of equalisation of guaranteed minimum pension contributions for men and women and an increase in the inflation rate, partly offset by updated member experience data.

The plans' actuarial valuation reviews, rather than the accounting basis, determine any cash deficit payments by Halma. In 2019 these contributions amounted to £11.7m following a triennial actuarial valuation of the two UK pension plans, cash contributions increasing at 7% per annum aimed at eliminating the deficit were agreed with the trustees, consistent with our expectations.

On 26 October 2018, the High Court reached a judgment in relation to Lloyds Banking Group's defined benefit pension schemes which concluded that the schemes should equalise pension benefits for men and women as regards Guaranteed Minimum Pension benefits. The judgement has resulted in a one-off charge of £2.1m to the Income Statement which has been treated as an exceptional item and so excluded from adjusted profit.

New accounting standards

The Group adopted a number of new accounting standards and interpretations with effect from 1 April 2018, including IFRS 15 'Revenue from Contracts with Customers' and IFRS 9 'Financial Instruments'. There has been no material effect on the Group's accounts from these changes.

Further new standards and interpretations will be adopted for the Group's financial year commencing 1 April 2019. We do not expect their adoption to have any material impact on the Group's financial statements, with the exception of IFRS 16 'Leases', the most significant effect of which will be to bring the Group's land and building leases on to the balance sheet. IFRS 16 is expected to result in a small reduction in net assets of approximately £4m, comprising an increase in assets of approximately £45m, and an increase in liabilities (from the lease liability) of approximately £49m. Due to the varying time left to run-off the leases, we expect the net effect on the Group's profit and loss account to be immaterial, and there will be no impact on the Group's cash flow.

Further details of these new accounting standards and their application to the Group's accounts can be found in the notes to the financial statements.

Adjusted¹ Earnings
per share

+16.5%

Acquisition spend

£64.5m

Financial review

Continued

Non-operating cash flow and reconciliation to net debt

	2019 £m	2018 £m
Adjusted operating cash flow	225.2	190.4
Tax paid	(40.6)	(41.1)
Acquisition of businesses including cash/debt acquired and fees	(68.1)	(117.6)
Disposal of businesses	3.1	–
Net movement in loan notes	0.1	0.2
Net finance costs and arrangement fees	(8.3)	(7.3)
Dividends paid	(57.2)	(53.4)
Own shares purchased	(3.8)	(2.6)
Adjustment for cash outflow on share awards not settled by own shares	(4.9)	(3.3)
Effects of foreign exchange	(6.9)	10.8
Movement in net debt	38.6	(23.9)
Opening net debt	(220.3)	(196.4)
Closing net debt	(181.7)	(220.3)

Net debt to EBITDA

	2019 £m	2018 £m
Adjusted operating profit	225.8	223.7
Depreciation and amortisation (excluding acquired intangible assets)	31.3	28.4
EBITDA	287.2	252.1
Net debt to EBITDA	0.63	0.87

Average debt and interest rates

	2019	2018
Average gross debt (£m)	282.6	284.5
Weighted average interest rate on gross debt	2.47%	2.16%
Average cash balances (£m)	80.4	76.5
Weighted average interest rate on cash	0.50%	0.33%
Average net debt (£m)	202.2	208.0
Weighted average interest rate on net debt	3.26%	2.83%

Update on Brexit and USA/China tariff increases

We continue to closely monitor and assess any potential effects from the UK's exit from the European Union, and from tariff increases on certain goods by the USA and China. In 2019, approximately 9% of Group revenue came from direct sales between the UK and Mainland Europe, and approximately 4% between the USA and China. We have not seen any material effects to date, and consider that our decentralised model, with businesses in diverse markets and locations, enables our companies to adapt quickly to changing trading conditions. We expect that our companies' agility, and the support we are providing from the centre to help

them prepare for these changes, will help them to mitigate any potential effects, as well as enabling them to take advantage of opportunities that arise.

Finance and Risk as a Growth Enabler

We have delivered a strong financial performance this year, and in my first year as Chief Financial Officer, I am also pleased with the further development of the Finance and Risk function within Halma.

During the year, we reset our expectations, to be a team which not only ensures excellent financial controls and risk management but also truly enables the Halma 4.0 growth strategy.

We will achieve this through having the best talent, providing insightful and actionable data, maintaining appropriate risk frameworks and controls, supporting M&A activity, and ensuring we maximise the benefits from our external advisors and the use of new technology.

I would like to thank all my colleagues in Finance and Risk for their hard work which has contributed to another successful year for Halma.

Marc Ronchetti
Chief Financial Officer

Non-financial information statement

We aim to comply with the Non-Financial Reporting requirements contained in sections 414CA and 414CB of the Companies Act 2006. The table set out below, and the information it refers to, is intended to help stakeholders understand our position on key non-financial matters. This builds on existing reporting that we already undertake by participating in the following frameworks: CDP, the Financial Reporting Council's Guidance on the Strategic Report and UN Sustainable Development Goals.

Reporting requirement	Policies and standards which govern our approach	Additional information
Environmental matters	Environmental policy	Sustainability review, page 50
Employees	Code of Conduct	Sustainability review, page 52
	Whistleblowing policy	Sustainability review, page 53
	Health and Safety policy	Sustainability review, page 52
	Diversity and Inclusion policy	Our People, page 44 and Sustainability review, page 52
Human rights	Modern Slavery Act statement	Sustainability review, page 53
	Human Rights and Labour Conditions policy	Sustainability review, page 53
Social matters	Equal Opportunities statement	Sustainability review, page 52
	Our role in society statement	Sustainability review, page 52
	Gift of Sight campaign	Sustainability review, page 51
	Suppliers statement	Sustainability review, page 53
Anti-corruption and anti-bribery	Anti-Bribery and Anti-Corruption policy	Sustainability review, page 53
Description of principal risks and impact of business activity	–	Pages 56-59
Description of the business model	–	Pages 4-9
Non-financial performance indicators	–	Page 43
Stakeholder engagement	–	Pages 46-47
Outcome of non-financial policies and standards	Carbon emissions reporting	Page 50
	Employee engagement survey results	Page 43
	Gender diversity reporting	Page 45
	Health and safety reporting	Page 52
Due diligence processes implemented in pursuance of promoting non-financial policies and standards	Carbon emissions reporting and monitoring Monitoring employee engagement surveys All employees required to read and sign up to the Code of Conduct Whistleblowing reports reviewed by the Board Health and safety reporting and monitoring Modern slavery training and risk assessments Anti-corruption and anti-bribery training and monitoring	

The Strategic Report was approved by the Board of Directors on 11 June 2019 and signed on its behalf by:

Andrew Williams
Group Chief Executive

Marc Ronchetti
Chief Financial Officer

Cautionary note: this Strategic Report has been prepared solely to assist shareholders to assess the Board's strategies and their potential to succeed. It should not be relied on by any other party, for other purposes. Forward looking statements have been made by the Directors in good faith using information available up until the date that they approved the Report. Forward looking statements should be regarded with caution because of the inherent uncertainties in economic trends and business risks.

I am pleased to present Halma's Corporate Governance Report for 2019 in what has been another strong year for the Group.



This report aims to provide stakeholders with an understanding of the governance framework within which Halma and its companies operate. In last year's report, I outlined four key Board priorities:

- Focusing on talent and culture to support Halma's growth strategy.
- Communicating and executing the Halma 4.0 growth strategy – delivering strong organic and acquisition growth and developing our thinking in the areas of Convergence and Edge.
- Supporting our senior management by providing them with tools and insight to drive innovation and collaboration to monetise our technology and knowhow in the digital 'big data' space.
- Seeking new acquisition and partnering opportunities.

Progress in 2019

During the year, the Board successfully delivered against our priorities, details of which are set out in the Strategic Report. I am very proud of Halma's continued success and sustained growth which is underpinned by a culture of openness, transparency and collaboration throughout the organisation.

Effective succession

During the year, Marc Ronchetti joined the Board as Chief Financial Officer. Marc has already made a significant contribution and has brought a wealth of operational, technical and financial experience.

Board priorities for 2020

Looking forward to next year, the Board will continue to focus on the Group's talent and culture along with the following priorities:

- Leveraging Halma's Brand and launching a new global website.

- Furthering the Group's capabilities and pipeline of acquisition and partnering opportunities.
- Promoting gender diversity across all organisational levels and driving improvement in ethnic and international diversity across Halma.
- Monitoring the regulatory and commercial implications of the UK's exit from the EU and overseeing planning and preparation activities.
- Advancing the Group's international expansion initiatives.

Purpose and culture

The Board assesses and monitors the Group's culture and ensures its alignment with our purpose and strategy. Our strategy is powered by Halma's purpose of growing a safer, cleaner, healthier future for everyone, every day. The Group's culture is an essential component of our strategy as demonstrated by the Talent & Culture Growth Enabler. Our culture promotes autonomous and agile decision-making, constructive challenge, innovative diversity of thought, and a sense of shared purpose and open collaboration. It is essential that the Board and executive management act in a constructive and respectful manner, exhibiting the tone that we expect across our companies. Based on my interactions with the workforce, I am pleased to report that this is the case at all levels within Halma.

We also recognise the importance of aligning employees' interests with those of our shareholders. During the year, 91% of our UK employees participated in our all-employee share plan. Across the Group, over 30% of employees have received share incentives. Employees are also eligible to participate in cash based profit-share and bonus schemes.

UK Corporate Governance Code

In July 2018, the Financial Reporting Council published the revised UK Corporate Governance Code (the New Code). The Board has reviewed the changes brought about by the New Code, particularly its increased emphasis on company culture, values and workforce engagement. In response, the Board considered its approach to workforce engagement and monitoring of culture as further described on pages 78 and 79 of this report.

In addition, the Board has updated the matters reserved for its decision and will be approving changes to the terms of reference of its committees in accordance with the New Code Principles and Provisions. The Company will report on its application of the Principles of the New Code in the 2020 Annual Report and Accounts.

The Board recognises the importance of good governance and, throughout the year ended 31 March 2019, we have complied with the Provisions set out in the UK Corporate Governance Code 2016 (the Code). This report, along with the Committee reports, describes how the Board has applied Principles of the Code. I trust that you will find it useful in understanding Halma's governance structure which is the foundation of our growth strategy and our purpose.

Paul Walker
Chairman

11 June 2019

How the Board supported strategy

Halma's clear and focused strategy over many years has led to a strong financial performance and consistent dividend growth. The Board has supported the evolution of Halma's growth strategy and ensures that sufficient human and capital resources are available to enable our companies to deliver sustainable growth.

Strategic Growth Enablers



Mergers & Acquisitions

The Board's governance role

The Board has set a clear strategy which includes a significant growth element being delivered through M&A. Key resources, both in terms of people and finances, are made available to ensure that we can deliver this strategy. The M&A pipeline is regularly reviewed and discussed by the Board and all material acquisitions are subject to its approval. Post-acquisition value creation strategies are under regular review.



International Expansion

The Board's governance role

The Board has formally adopted matters reserved for its decision and a schedule of matters that it delegates to executive management. This governance structure ensures that major changes, financial commitments or new business developments are considered by the Board, while permitting local and sector autonomy to operate and grow our companies.



Talent & Culture

The Board's governance role

The Board recognises the importance of talent and culture in driving not only Halma's growth, but also the behaviour that we expect from our people across the Group. In September 2016, the Board recognised the importance of leading talent from the top and promoted Jennifer Ward to the Board. Talent discussions are a key feature at each Nomination Committee meeting.



Finance & Risk

The Board's governance role

The Board has established a clear and robust framework to control financial investment, oversee financial performance and to manage risks and opportunities.



Digital Growth Engines

The Board's governance role

The Board are aware of the changing landscape and the risks and opportunities that will arise as the digital revolution, and inherent data-related responsibilities, continue to proliferate.



Strategic Communications

The Board's governance role

The Board recognised the need for our companies to be more strategic in their communications with stakeholders. A key focus has been on adequately resourcing our central team to support our businesses in developing market-leading positions by connecting with customers through their brand, marketing, product positioning and the effective use of all media channels.

Board Composition and Diversity

The Board recognises the benefits of a diverse leadership team. The charts below illustrate the diversity and composition of the Board.

Composition



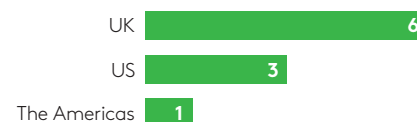
Gender



Age



Nationality



Tenure



Board of Directors

We have a team of ambitious leaders who are driven by our purpose and focused on growing the business.

Committee Membership

- A** Audit Committee
- N** Nomination Committee
- R** Remuneration Committee
- Chair of Committee
- Member of Committee



Adam Meyers
Sector Chief Executive,
Medical & Environmental

Appointed: April 2008

Career and experience: Adam became a member of the Halma Executive Board in 2003, as a Divisional Chief Executive, having joined Halma in 1996 as President of Bio-Chem Valve. Adam has significant knowledge and experience within the medical and environmental sectors and an understanding of these highly regulated markets. He has led the acquisition of several companies in the Medical & Environmental sector. Adam is a Systems Engineering graduate of the University of Pennsylvania.



Paul Walker
Chairman

Appointed: April 2013 (July 2013 as Chairman)

Career and experience: Paul gained extensive management, operational, financial and technology sector experience in his executive career as Chief Executive Officer of The Sage Group plc from 1994 to 2010, having previously been its Finance Director and Chief Financial Controller. In addition to the appointments listed below, he has held several board positions including as non-executive Director at Diageo plc and Mytravel Group plc. Paul provides strong leadership to the Board and is committed to robust corporate governance and stakeholder engagement. Paul qualified as a Chartered Accountant with Ernst & Young.

Current appointments:

Ashtead Group plc, non-executive Chairman
Sophos Group plc, non-executive Director
Experian plc, non-executive Director (Paul will retire as a Director of Experian plc on 24 July 2019)

N R



Jennifer Ward
Group Talent and Communications
Director

Appointed: September 2016

Career and experience: Jennifer joined the Halma Executive Board in March 2014 and has global responsibility for talent and culture as well as internal and external communications and brand across Halma. Prior to joining Halma as Group Talent Director, Jennifer spent over 15 years leading Human Resources, Talent and Organisational Development for divisions of PayPal, Bank of America and Honeywell. Jennifer brings a wealth of experience to the Board to ensure we secure and develop talent ahead of our growth needs and build a sustainable culture of high performance.



Andrew Williams
Group Chief Executive

Appointed: July 2004 (February 2005 as Group Chief Executive)

Career and experience: Andrew joined Halma in 1994 as Manufacturing Director of an operating company, becoming its Managing Director in 1997. He joined Halma's Executive Board in 2002 and was appointed as Group Chief Executive in 2005. Andrew has proven his ability to grow and acquire companies globally while evolving the Group portfolio for sustainable growth and high returns. He brings clear strategic leadership to the Board and has a deep understanding of the operating companies and the Group's stakeholders. He is a Chartered Engineer.

Current appointments:

Capita plc, non-executive Director

N



Marc Ronchetti
Chief Financial Officer

Appointed: July 2018

Career and experience: Marc joined Halma in 2016 as Group Financial Controller. He was previously Finance Director of the UK operations of Wolseley plc (now Ferguson plc) and prior to that held various group and divisional roles at Inchcape plc. Marc has gained commercial and financial experience across a range of senior finance roles focused on driving operational performance through financial insights. Marc qualified as a Chartered Accountant with PricewaterhouseCoopers.



Daniela Barone Soares

Independent non-executive Director

Appointed: November 2011

Career and experience: Daniela began her career in the private equity and investment banking sectors working at BancBoston Capital, Goldman Sachs and Citibank. Daniela was CEO of venture philanthropy organisation Impetus – The Private Equity Foundation and held senior roles at Save the Children UK. Daniela has considerable global knowledge of capital markets and sustainability, and has successfully led ventures with government institutions.

Current appointments:

Gove Digital, Chair
Evora S.A., non-executive Director
Trustee, The Haddad Foundation



Tony Rice

Senior Independent Director

Appointed: August 2014 (July 2015 as Senior Independent Director)

Career and experience: Tony has held senior management positions at a number of UK listed companies, spanning a range of sectors, and has extensive board level experience in companies operating internationally and in regulated industries. He was Chief Executive Officer at Cable & Wireless Communications plc and Tunstall plc and held a number of senior roles at BAE Systems plc. Tony has served as a non-executive Director of Spirit Pub Company plc, where he was Senior Independent Director and Remuneration Committee Chairman. Tony brings a wealth of UK listed company experience to his role as Senior Independent Director.

Current appointments:

Dechra Pharmaceuticals plc, Chair
Ultra Electronics Holdings plc, Chair
Whittington Hospital Trust, non-executive Director



Jo Harlow

Independent non-executive Director

Appointed: October 2016

Career and experience: Jo has significant international experience, gained most recently as Corporate Vice President of the Phones Business Unit at Microsoft. She previously worked at Nokia as Executive Vice President of Smart Devices. Before her move into consumer electronics, Jo worked in strategic marketing at Reebok and Procter & Gamble. Jo brings a wealth of expertise to the Board in digital, technology, sales and marketing.

Current appointments:

InterContinental Hotels Group plc, non-executive Director
J Sainsbury plc, non-executive Director
Ceconomy AG, Member of the Supervisory Board



Roy Twite

Independent non-executive Director

Appointed: July 2014

Career and experience: Roy is Chief Executive of IMI plc, having been appointed to the IMI Board in February 2007. During his career with IMI, Roy has held several senior management roles including Managing Director of IMI Norgren UK (2001), President of IMI Hydronic Engineering (2004), President of Retail Dispense (2007) and President of IMI Precision Engineering (2009) and Divisional Managing Director of IMI Critical Engineering (2011). Roy brings wide-ranging knowledge of the engineering sector along with extensive management and operational experience.

Current appointments:

IMI plc, Chief Executive



Carole Cran

Independent non-executive Director

Appointed: January 2016

Career and experience: Carole was Chief Financial Officer of Aggreko plc until December 2017, prior to which she held a number of senior finance roles within that group. Previously, she worked at BAE Systems plc in a range of senior financial positions, which included four years in Australia. Carole commenced her career in the audit division of KPMG where she qualified as a Chartered Accountant. Carole has extensive financial experience and has a strong focus on governance and risk.

Current appointments:

Forth Ports Ltd, Chief Financial Officer



Executive Board

The Executive Board is a management committee chaired by the Group Chief Executive, which primarily develops strategy, reviews operational matters and monitors business performance.



Andrew Williams
Group Chief Executive



Jennifer Ward
Group Talent and
Communications Director



Marc Ronchetti
Chief Financial Officer



Adam Meyers
Sector Chief Executive,
Medical & Environmental



Paul Simmons
Sector Chief Executive, Safety

Paul was appointed to the Executive Board in July 2016. He joined Halma in May 2010 and was Managing Director of two businesses: Avire, based in China from 2013 to 2014, and Apollo, before becoming Sector Vice President in 2014. Prior to joining Halma, he spent 9 years at 3M leading businesses in the UK and USA. He is responsible for acquiring new businesses and the organic growth of all the operating companies within Halma's Process Safety and Infrastructure Safety sectors. Paul holds a degree in Production Engineering.



Inken Braunschmidt
Chief Innovation and Digital Officer

Inken joined Halma and was appointed to the Executive Board in July 2017 and is responsible for driving Halma's Digital and Innovation Strategy. Prior to joining Halma, Inken was the Chief Innovation Officer of innogy SE, a renewables energy company based in Germany and a subsidiary of RWE. Previously, Inken was MD of RWE's Strategy and Management Consultancy practice. Inken studied Business Administration and Innovation & Technology Management at Kiel University and has a PhD in Technology Management.

Current appointments:
James Fisher and Sons plc, non-executive Director

Role of the Board and Principal Committees

The role of the Board is to provide entrepreneurial leadership, within a framework of prudent and effective controls, that promotes the interests of Halma over the long-term for the benefit of stakeholders. The Board sets the Group's strategic goals and has ultimate responsibility for its management, direction and performance. The Company's Articles of Association set out the Board's powers. The Board has adopted a formal schedule of matters reserved solely for its decision (a summary of which is set out on page 76) and certain decision-making and monitoring activities have been delegated to Board Committees or management, through a clearly defined delegated authority matrix.

The Board has established three principal Committees – the Nomination, Audit and Remuneration Committees – which review and monitor key areas on behalf of the Board and make recommendations for its approval. Each Board Committee operates under written terms of reference which are approved by the Board and made available at www.halma.com. The Chair of each Committee reports to the Board on their activities after each meeting and minutes are circulated to all Board members once they have been approved by the Committee. Further information on the activities and composition of each Committee is detailed within the Committee reports.

Board meeting attendance

During the year attendance by Directors at Board meetings was as follows:

Board attendance	Eligible	Attended
Paul Walker	7	7
Andrew Williams	7	7
Kevin Thompson ¹	3	3
Marc Ronchetti ¹	5	5
Adam Meyers	7	7
Jennifer Ward	7	7
Daniela Barone Soares ²	7	5
Jo Harlow	7	7
Roy Twite	7	7
Tony Rice	7	7
Carole Cran	7	7

¹ To ensure an orderly transition from Kevin Thompson (who retired from the Board as Finance Director on 19 July 2018), Marc Ronchetti also attended two Board meetings prior to his appointment to the Board on 1 July 2018.

² Daniela Barone Soares was unable to attend two Board meetings due to illness.

Division of responsibilities

The division of responsibilities between the Board members is set out below. A summary of the Board's activities throughout the year is shown on page 76.

Role	Name
Chairman's responsibilities	Governance — Promoting high standards of corporate governance. — Leading, chairing and managing the Board. — Ensuring all Board committees are properly structured and operate with appropriate terms of reference. — Regularly considering the composition and succession planning of the Board and its committees. — Ensuring that Board and committee performance is evaluated on a regular basis. — Ensuring adequate time is available for all agenda items and that the Board receives accurate, clear and timely information. — Ensuring that there is effective communication with shareholders. Strategy — Leading the Board in reviewing the strategy of the business and setting its objectives. — Promoting open and constructive debate in Board meetings. — Ensuring effective implementation of Board decisions with the support of the Group Chief Executive. — Ensuring that the Board manages risk effectively. — Consulting, where appropriate, with the Senior Independent Director on Board matters. People — Chairing the Nomination Committee. — Identifying and meeting the induction and development needs of the Board and its committees. — Developing a strong working relationship with the Group Chief Executive. — Ensuring a strong working relationship between executive and non-executive Directors. — Setting clear expectations concerning the Company's culture, values and behaviours. — Ensuring effective relationships are maintained with all major stakeholders in the business.
Group Chief Executive	— Providing coherent leadership and management of the Company with the Chairman. — Developing objectives, strategy and performance standards to be agreed by the Board. — Providing input to the Board's agenda. — Providing effective leadership of the Executive Board to achieve the agreed strategies and objectives. — Securing an Executive Board of the right calibre, with specific responsibility for its composition, and ensuring that its succession plan is reviewed annually with the Chairman and the non-executive Directors. — Monitoring, reviewing and managing key risks and strategies with the Board. — Ensuring that the assets of the Group are adequately safeguarded and maintained. — Building and maintaining the Company's communications and standing with shareholders, financial institutions and the public and effectively communicating the Halma investment proposition to all stakeholders. — Ensuring the Board is aware of the view of employees on issues of relevance to Halma.
Executive Directors	— Implementing and delivering the strategy and operational decisions agreed by the Board. — Making operational and financial decisions required in the day-to-day management of the Company. — Providing executive leadership to senior management across the business. — Championing the Group's values and reinforcing the governance and control procedures. — Promoting talent management, encouraging diversity and inclusion. — Ensuring the Board is aware of the view of employees on issues of relevance to Halma.
Senior Independent Director	— Acting as a sounding board for the Chairman. — Serving as a trusted intermediary for the other Directors. — Providing an alternative channel for shareholders and employees to raise concerns, independent of executive management and the Chairman.
Independent non-executive Directors	— Contributing independent thinking and judgement, and providing external experience and knowledge, to the Board agenda. — Scrutinising the performance of management in delivering the Company's strategy and objectives. — Providing constructive challenge to the executive Directors. — Monitoring the reporting of performance and ensuring that the Company is operating within the governance and risk framework approved by the Board.
Company Secretary	— Acting as a sounding board for the Chairman and other Directors. — Ensuring clear and timely information flow to the Board and its committees. — Providing advice and support to the Board and its committees on matters of corporate governance.

Corporate governance framework

As a decentralised organisation, it is critical that Halma's governance and control structure is robust, clearly communicated and operates effectively. A summary of the structure and responsibilities of each Board Committee and the Executive Board is set out below.

In addition to the principal Board Committees, the Board has established three topic-specific Committees to which it has delegated certain powers to negotiate, review and administer matters: the Share Plans Committee; Bank Guarantees and Facilities Committee; and Acquisitions and Disposals Committee.

The Executive Board is a management committee, chaired by the Group Chief Executive, which primarily develops strategy, monitors progress against the Group's strategic objectives (including talent and innovation) and reviews operational and business performance.

Our businesses benefit from an autonomous operational structure. In order to maintain oversight and control from a Group perspective and obtain assurance over the compliance and control environment, businesses must comply with Halma's suite of financial and non-financial policies and procedures.

A delegated authority matrix sets out the authority limits which have been delegated from the Group Chief Executive and Sector Chief Executives (SCEs) to the Divisional Chief Executives (DCEs) and business managing directors. This matrix ensures that businesses have a clear framework within which they can operate, balancing autonomy with the need for oversight and controls, and providing clarity as to whether financial commitments are approved at sector, Group or Board level.

The link between the operating companies and the Board governance structure is described below and illustrated in the Risk Governance Framework set out on page 54 in respect of the Group's approach to risk management. Each operating company in the Group has its own board of directors which meets regularly to fulfil its legal duties and to maintain operational and financial control of the company's affairs. The DCE is a member of, and chairs, each of their operating company boards and will meet with the Executive Board at least three times per year. The Group's policies and procedures set out the Group's requirements in the areas of financial reporting, health & safety, ethics, human resources, IT, legal compliance and administration.

These procedures are made available to all employees via the Group's communications platform, HalmaHub. Each SCE holds regular sector board meetings, attended by relevant managing directors and sector employees, to review financial and business performance and areas such as talent and M&A. The sector board also provides a valuable forum for businesses to share and collaborate. Each SCE prepares a report for the Executive Board, covering business performance, talent and culture and other matters discussed at, or arising from, their company and sector board meetings.

Board meetings

The Board has six scheduled meetings per year but will meet separately, as required, to discuss urgent matters or to approve event-driven items such as M&A transactions or trading updates. All Directors are issued with an agenda and meeting papers in the week prior to the Board meeting; papers are delivered via an electronic board portal for security and efficiency. The Board and each Director has access to the advice and services of the Company Secretary and each can obtain independent professional advice at the Company's expense.

Board Governance Structure



The Board's year

Activities

Strategy, Investor Relations & Communications	— Two-day strategy meeting. — New product development. — Strategic growth opportunities. — Investor relations and Environmental, Social & Governance strategy. — Talent and communications. — Presentations from operating companies. — Halma brand.
Financial & Operational	— Budget for 2020. — Half Year results, Full Year results and Trading updates. — Final and interim dividend. — Sector updates and DCE presentations. — Group Tax Strategy. — Employee Benefit Trust share purchases. — Share Incentive Plan allocation.
Governance, Compliance & Ethics	— Internal Board and Committee evaluations. — Chairman and non-executive Director fees. — AGM business. — 2019 Annual Report. — Compliance updates. — Cyber security updates. — Pensions update. — Modern Slavery Act Statement. — Reviewing Code of Conduct and key policies. — 2018 UK Corporate Governance Code.
Talent & Culture	— Succession planning and talent development. — Engagement survey results.
Mergers & Acquisitions	— Acquisitions (LAN Control Systems, Limotec, Navtech Radar and Rath Communications). — M&A pipeline. — Digital growth opportunities.
Standing Board agenda items	In addition to the Board matters considered above over the past year, at each meeting there are standing items, which include: — Review and approval of the previous minutes. — Status update on any matters outstanding from previous meetings. — Updates from each Board Committee on the activities since the last Board meeting. — Report from the Group Chief Executive. — Report from the Chief Financial Officer. — Investor Relations report. — M&A update. — Health & Safety review. — Risk review. — Legal and governance update.
Matters reserved for decision by the Board	— Setting the Group's long-term objectives and commercial strategy. — Approving annual operating and capital expenditure budgets. — Ceasing all or a material part of the Group's business. — Significantly extending the Group's activities into new business or geographic areas. — Changing the share capital or corporate structure of the Company. — Changing the Group's management and control structure. — Approving half year and full year results and reports. — Approving dividend policy and the declaration of dividends. — Approving significant changes to accounting policies. — Approving key policies. — Approving risk management procedures and policies, including anti-bribery and corruption. — Approving major investments, disposals, capital projects or contracts (including bank borrowings and debt facilities). — Approving guarantees and material indemnities (not otherwise delegated to the Bank Guarantees and Facilities Committee). — Approving resolutions to be put to the AGM and documents or circulars to be sent to shareholders. — Approving changes to the Board structure, size or its composition (following the recommendation of the Nomination Committee). — Assessing and monitoring the Group's culture and alignment with its purpose, values and strategy.

Composition of the Board

The Board is comprised of ten directors, who bring a wide variety of skills and experience to the Boardroom. With four executive Directors and six non-executive Directors (including the Chairman), there is a strong independent element to Halma's Board which encourages constructive challenge and ensures that the balance of power rests with the non-executive members of the Board.

The Chairman considers the current Board structure to be appropriate both in terms of size and the balance of skills around the table. This was echoed by the Directors in the recent internal Board evaluation questionnaire. The biographies of each Director, including an overview of their skills and experience, are set out on pages 70 and 71.

The Board has established a formal process for the search and appointment of new directors, details of which are set out in the Nomination Committee report on page 80.

Independence

The Board has reviewed the independence of each non-executive Director and, following an assessment of any relationships or circumstances which are likely to affect a Director's judgement, consider each to be independent of management. The Board believes that any shares in the Company held by the Chairman and non-executive Directors serve to align their interests with those of shareholders.

Tony Rice was appointed Senior Independent Director in July 2015 and is available as an alternative channel of communication for shareholders, independent from executive management and the Chairman.

Time commitment

The Board benefits from the variety of skills, experience and knowledge of each Director. Director availability and commitment of sufficient time to the Company is essential. Accordingly, the number of external directorships that a non-executive Director holds is an important consideration when recruiting and when annually evaluating the contribution and effectiveness of each non-executive Director.

Executive Directors are permitted to accept one external appointment following the prior approval of the Board provided that the appointment is beneficial to the development of the individual and the Company and does not present a conflict of interest with the Group's activities or require undue time commitment.

In addition to the scheduled Board meetings, non-executive Directors are expected to attend the Annual General Meeting, the annual strategy meeting and other key events, including operating company visits throughout the year. A time commitment of around 20 days per annum is the anticipated requirement for each non-executive Director. Prior to their appointment, confirmation is obtained from each non-executive Director that they can allocate sufficient time to the role.

Details of Board attendance during the year is set out on page 73 and attendance for each Committee is in the relevant Committee reports on pages 80, 84 and 89.

Induction and development

Newly appointed non-executive Directors follow a tailored induction programme, which includes dedicated time with Group executives and visits to companies within each of the sectors. Thereafter, non-executive Directors arrange site visits throughout the year, often around their other business travel commitments. The Chairman reviews the training and development needs of the Board, and each individual Director, at least annually.

While most Directors undertake their own programme of continuing professional development, briefings and presentations from subject experts are available to all Directors throughout the year. New or specialist topics may also be covered within the Board meeting agenda or as part of the annual leadership conference, which this year promoted our innovation activities.

Board evaluation

The Board undertakes a formal evaluation of its performance, and of each Director, on an annual basis. The principal Committees of the Board undertake a separate annual evaluation of their effectiveness, in accordance with their terms of reference.

For 2019, the Board undertook an internal evaluation led by the Chairman. This process involved a questionnaire being completed by each Director in advance of individual meetings with the Chairman. The key themes arising from the evaluation were reviewed and discussed by the Board. The outcome of the evaluation confirmed that the Board and its Committees continue to function effectively.

The following observations were noted: the Board structure was considered to be appropriate but gaps were identified in the ethnic and international diversity of the Board; and the Board should allocate additional time to discuss the Company's strategic objectives.

The Chairman and non-executive Directors meet without executive Directors present, to ensure that there is an opportunity to discuss potentially sensitive matters. At least annually, the Senior Independent Director meets with the non-executive Directors, excluding the Chairman, to evaluate the Chairman's performance.

The executive Directors are also given the opportunity to meet with the Chairman and/or the Senior Independent Director separately. The outcome of these meetings is fed back to individuals by the Chairman, Senior Independent Director or Group Chief Executive, as appropriate.

Re-election

All of the current Directors will stand for re-election at the forthcoming Annual General Meeting. Following the annual evaluation of the Board and its Committees, it is considered that all Directors standing for re-election continue to be effective, hold recent and relevant experience and demonstrate commitment to their role.

Biographical details of each Director standing for re-election are set out on pages 70 and 71 and in the Notice of Meeting, along with the rationale for recommending their re-election.

Liability insurance and indemnities

Each Director is covered by appropriate directors' and officers' liability insurance, at the Company's expense. In addition, there are Deeds of Indemnity in place, which provide an indemnity from the Company to each individual Director in respect of any proceedings brought against them personally by a third party, in their capacity as Director of the Company. The indemnity does not extend to certain areas, including: any liability to pay a fine imposed in criminal proceedings; defending criminal proceedings where the Director is convicted and such conviction is final; defending any civil proceedings brought by the Company or an associated company; or in any proceedings for disqualification of the Director.

Workforce engagement

New Code

In anticipation of the 2018 UK Corporate Governance Code (New Code) coming into effect, the Board has reviewed the mechanisms that it uses to engage with its workforce. Halma has not chosen one of the prescribed methods set out in the New Code, as it has alternative arrangements in place which it considers to be effective.

Workforce engagement mechanisms

The Board recognises the importance of engagement with all stakeholder groups and more information on this is set out in the Strategic Report on pages 46 and 47.

The Board has considered the three mechanisms set out in the New Code and determined that they would not

be the most effective mechanism for engagement with Halma's workforce due to the decentralised operating model and geographic spread of Halma's companies. Each operating company has its own legally constituted board which meets on a regular basis. One third are UK companies which are also subject to the duty to promote the success of the company under section 172 of the Companies Act and requires them to have regard to employee interests and the impact of board decision making on their stakeholders. The Chair of each of our 40+ companies meets with the Executive Board at least three times per year and with Halma plc Board at least annually, facilitating regular dialogue on workforce-related matters.

We consider that engagement by the local company board with their own workforce, as well as the engagement by the Halma Board with the Group's global workforce, provides an effective platform for compliance with the Code, provided that there are clear and open communication channels. To support this, work has been undertaken to put in place reporting mechanisms such that concerns and feedback raised at the operating company level is fed back into the Halma plc Board via each company Chair.

There are four executives with operational responsibility for all of our 40+ companies who regularly interact with the Halma plc Board, which ensures that there continues to be close interaction with our businesses. There are also frequent opportunities for the employee voice to be relayed and reported to the Halma plc Board via company management and operating company Chair reports and presentations.

The Board level position of Group Talent & Communications Director shows the importance that Halma places on developing, and communicating with, our workforce and the drive to improve engagement. The results of the annual employee engagement survey are included on page 43.

Monitoring culture

The Board assesses and sets the desired culture for the Group and has a responsibility to monitor that the corporate culture is embedded throughout the organisation. We consider that this culture promotes good governance across the Group and empowers our people to make decisions. It also encourages constructive challenge, innovation, diversity of thought and collaboration – which are critical factors in driving our strategy. Each year, the Board holds a strategy meeting at which the Talent & Communications Director provides detailed insight and feedback on the talent pool and corporate culture across Halma. In addition, the Board review whistleblowing reports submitted by the Company Secretary.

Recent improvements to our workforce engagement

During the year, a review was conducted by the Board to establish the channels that were already in place for the Executive and non-executive Directors to engage directly or indirectly with our 6,000+ international workforce. This review highlighted that there was Board engagement across all employee groups, with most activity concentrated at the senior management tier of approximately 325 employees. As a result of this review, the Board agreed a number of actions to increase the direct and indirect engagement that they have with the wider workforce:

- A clear reporting mechanism has been established to ensure that workforce concerns and issues can be communicated by the Chair of each operating company directly to the executive Directors, Chairman and Company Secretary.

- A more structured approach to company visits by Directors has been adopted, allowing for time to be spent with employees and for feedback from Director visits to be shared with the Board.
- The role of the Senior Independent Director has been expanded to be an alternative channel for employees to raise concerns.
- More structured interaction between the non-executive Directors and employees at company events and conferences has been put in place.
- Clear communication on HalmaHub provides visibility of the Board and a summary of the contribution that each individual Director brings and how employees can engage with them directly.

How the Board engages with our workforce

HalmaHub

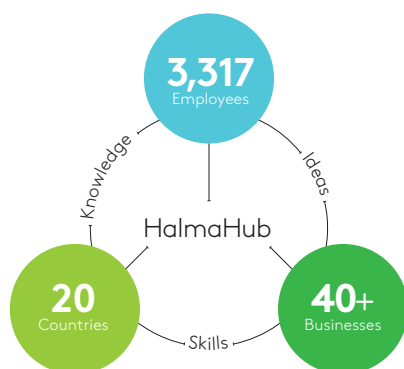
HalmaHub is a mobile-first, social and collaborative platform, which has helped accelerate the pace of innovation across the Group and enhanced our culture of collaboration.

Recognising the opportunity to amplify the ambition and impact of Halma's diverse and geographically dispersed businesses, HalmaHub connects more than 3,000 employees across 20 countries to share knowledge, skills and ideas every day. This has accelerated the pace of change across the Group and led to the creation of entirely new business models and product collaborations.

In November, HalmaHub was awarded 'Best use of social and collaborative learning technologies' at the 2018 Learning Technologies Awards.

The Board strongly believes that our mechanisms for engaging with our workforce are appropriate for our organisational structure and, most importantly, are an effective means of bilateral engagement. The graphic below gives a summary of the mechanisms now in place to facilitate effective engagement with the various groups across our workforce:

Board engagement mechanisms	Workforce groups included			
	Central Functions and Wider Workforce	Operating Company Boards	Sector Board	Executive Board
HalmaHub	●	●	●	●
Workforce engagement survey	●	●	●	●
Company & other site visits	●	●		
Senior Independent Director available	●	●	●	●
Accelerate CEO & Accelerate Halma	●	●	●	●
Operating Company Chair reports		●	●	
Halma plc Board, Committee and strategy meetings		●	●	●
Accelerate CFO	●	●	●	
Sector Board meetings		●	●	
Executive Board meetings & reports			●	●
Development, Digital Accelerator and Graduate programmes	●	●	●	●



Nomination Committee report

Committee composition and attendance

	Eligible	Attended
Paul Walker ¹	2	2
Carole Cran	2	2
Daniela Barone Soares ²	2	1
Jo Harlow	2	2
Tony Rice	2	2
Roy Twite	2	2
Andrew Williams	2	2

1 Chair.

2 Daniela was unable to attend one Committee meeting due to illness.



Last year, I reported on the process that that Committee had undertaken to identify and appoint a suitable successor for Kevin Thompson, who retired as Group Finance Director in July 2018. I am pleased to report that the appointment of Marc Ronchetti as Chief Financial Officer from 1 July 2018 has been an excellent decision and the significant period of handover from Kevin has ensured a very smooth transition. The analyst and investor commentary on Marc at the Half Year was very positive and his work in developing Halma Finance 4.0 and ensuring that the Finance function is established as a Growth Enabler to support Halma's digital growth strategy is testimony to the strengths that Marc brings to the role. The Committee has had the benefit of using the Group Finance Director/CFO succession to test its approach to succession planning and it continues to review and monitor succession potential for the Group Chief Executive and other key roles.

During the year, the Committee focused on talent at and below Executive Board level with a view that high potential colleagues within the senior management tier could be developed into a potential successor for Executive Board level members. The monitoring and assessment of such talent over the next couple of years should lead to a clearer view on potential internal candidates who could succeed the Group Chief Executive in the future.

Following the change in organisational structure from four Sector Chief Executives to two and the upgrade in role from Sector Vice President to Divisional Chief Executive (DCE), the Committee has received positive updates on the improvements in reporting and clarity that this has brought. The strength of the DCE in driving M&A and in recruiting and developing talent within their sector are key leadership qualities that the Committee will be looking for, along with strategic foresight and the ability to think digitally, in reviewing potential successors.

Following a robust review, the Committee were pleased to offer Carole Cran a further three-year term as non-executive Director and Chair of the Audit Committee.

I trust that you will find this report useful in understanding the activities of the Committee during the year.

Paul Walker
Chair

For and on behalf of the Committee
11 June 2019

Committee composition and induction

The Committee comprises, and has comprised of throughout the year, the Chairman, the Group Chief Executive and the five Independent non-executive Directors.

The Committee is chaired by Paul Walker but he would not chair a meeting which was dealing with the appointment of his successor.

The Committee is appointed by the Board and operates under written terms of reference, which are available at www.halma.com.

Only Committee members are entitled to attend meetings with the exception of the Group Talent and Communications Director.

Principal role and responsibilities

The primary duties of the Committee are:

- Reviewing the size, balance and composition (evaluating the skills, knowledge and experience) of the Board and its Committees, ensuring that they remain appropriate and to make recommendations to the Board on any changes.
- Leading the process for new Board appointments.

- Overseeing the succession planning requirements for the Board and other senior executives, including the identification and assessment of potential candidates and making recommendations to the Board for its approval.
- Keeping under review the leadership needs of the Group, for both executive Directors and other senior executives, including any recommendations made by the Group Chief Executive for changes to the executive membership of the Board.

Activities during 2019

Following a busy year in 2018 which included the search and successful appointment of the CFO, the Committee's focus during 2019 has been the ongoing review and monitoring of succession planning for Executive Board members, in particular the CEO. In January 2019, the Committee had an open discussion, facilitated by Jennifer Ward, on succession planning for Executive positions and reviewed the capabilities and potential of the Executive Board members, the DCEs and other senior management.

The Committee also considered the performance of Carole Cran whose first three-year tenure was due to expire.

As part of the review, the Chairman met separately with Carole to evaluate her performance and confirm her willingness to continue as a non-executive Director and Chair of the Audit Committee. The Committee held an open discussion, without Carole present, to consider her contribution and performance in both roles. It was recognised that Carole contributed effectively to the Board and that her financial skills and experience were most valuable in her role as Audit Committee Chair, which had clearly been demonstrated by the efficient and productive audit tender process which concluded in 2018 and her supervision of the subsequent auditor transition to PwC. Following this review, the Committee approved the extension of Carole's term of office for a further three years.

Board appointment process

The Board has an established approach for seeking and evaluating candidates for Board positions, which was applied for the appointment of the CFO last year. In summary, prior to the Committee making a recommendation to the Board for an appointment, it would undertake the following process:

- Identifying the skills, experience and knowledge required for and complementary to the role.
- Agreeing the role specification and capabilities required.
- Selecting a global executive search firm. Lygon Group (which has no connection with the Company) were the firm appointed for the CFO recruitment last year.
- Reviewing candidate profiles and preparing a shortlist of diverse candidates for interview.
- Making an in-depth assessment of a candidate's suitability for the role, based on an interview, psychometric testing and references by members of the Committee.
- Recommending the preferred candidate to the Board.

Diversity

Halma has a group-wide diversity and inclusion policy which sets out our commitment that candidates at all levels are fairly considered and paid regardless of their gender, race, age, sexual orientation, professional or academic background. Appointments are not made simply to maintain, or improve on, one element of diversity, but recruitment is based on merit, taking account of an individual's relevant skills and experience for the role, whilst recognising the benefits of building a diverse team. We request that recruiters collate a diverse range of candidates before we consider the merits of each applicant, to ensure that we get the opportunity to improve diversity.

The work that Halma is doing to improve diversity across the Group, along with our open and inclusive culture ensures that candidates are fairly considered. While further aims or targets may be set in the future relating to diversity, we are mindful that maintaining a flexible approach is favourable as it enables steps to be taken to achieve a genuinely diverse and talented Board and senior management team.

Board Diversity Policy

The Directors recognise the benefits of a diverse board and embrace diversity and inclusion in the widest sense. The Board has adopted a Board Diversity Policy, to complement the group-wide diversity and inclusion policy. This Policy confirms our commitment to ensure that candidates are fairly considered and paid regardless of their gender, race, age, sexual orientation, professional or academic background.

While we have achieved good progress on gender diversity at Board and Executive Board level, and our CEO's membership of the '30% club' shows our long-term commitment, we will continue to focus our efforts on driving gender diversity at senior levels throughout our business.

The Board supports the recommendation of the Hampton Alexander Review on gender diversity to have at least one third of the Board comprised of women. At the year end and at the date of this Report, the Board comprised 10 Directors, including four women (40% of the Board). The spread of nationalities is six British, three

American and one Brazilian. On the Executive Board, there are two women (33%) and four men (66%), with a spread of nationalities comprising three British, two Americans and one German.

Internal control effectiveness

The Board has overall responsibility to the shareholders for the Group's system of internal control and risk management and the review of the system's effectiveness is carried out with the assistance of the Audit Committee. While not providing absolute assurance against material misstatements or loss, this system is designed to identify and manage those risks that could adversely impact the achievement of the Group's objectives. The Group's risk management structure and process is detailed on pages 54 and 55. The Group's principal risks and uncertainties are detailed on pages 56 to 59.

The Board confirms that there is an ongoing process for identifying, evaluating and managing the significant risks faced by the Group and for determining the nature and extent of the significant risks it is willing to take in achieving its strategic objectives. The Board, advised by the Audit Committee, regularly reviews this process, which has been in place for the year under review and up to the date of approval of the Annual Report and Accounts. This risk framework is in accordance with the Guidance on Risk Management, Internal Control and Related Financial and Business Reporting. The Board has continued to improve and embed controls throughout the Group and will continue to keep the systems under review to ensure that the internal control and risk management framework remains fit for purpose.

The Board's regular review of the effectiveness of the Group's risk management and internal control systems (including financial, operational and compliance controls) is principally based on reports from management. These reports consider whether significant risks have been identified, evaluated, managed and controlled. The Group's external Auditor, PricewaterhouseCoopers, has audited the financial statements and has reviewed the financial control framework to the extent considered necessary to support the audit report.

Going concern

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 in the Strategic Report. In addition, note 27 to the financial statements includes the Group's objectives, policies and processes for managing its capital, its financial risk management objectives, details of its financial instruments and hedging activities, and its exposure to currency and liquidity risks. The Directors believe the Group is well placed to manage its business risks successfully. The Group's forecasts and projections, taking account of reasonably possible changes in trading performance, show that the Group should be able to operate within the level of its current committed facilities, which includes a £550m Revolving Credit Facility running until November 2023 of which £476m remains undrawn at the date of this report.

The Group contracts with a diverse range of customers and suppliers across different geographic areas and industries and no one customer accounts for more than 3% of Group turnover. With the factors above in mind, the Directors have a reasonable expectation that the Company and Group have adequate resources to continue in operational existence for the foreseeable future and continue to adopt the going concern basis in preparing the annual financial statements.

Longer term viability

In accordance with the UK Corporate Governance Code, the Board has considered the Company's longer term viability and sets out its Viability Statement opposite.

Relations with shareholders and other stakeholders

The Board oversees the Company's dialogue with shareholders. The Group Chief Executive and Chief Financial Officer have regular contact with investors and analysts. Reports prepared by the Head of Investor Relations are reviewed by the Board regarding the Company's dialogue with investors and analysts on financial, operational, environmental, social and governance matters. The Chairman is available to meet with shareholders throughout the year and the Senior Independent Director provides an alternative channel for shareholders to raise concerns, independent of the executive management and the Chairman. The Board attends the AGM which gives individual shareholders the opportunity to engage directly with the Directors and raise questions about the Company both formally and informally. The Board's engagement with other stakeholders is described on page 79.

Viability statement

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 principal risks and uncertainties, including an analysis of the potential impact and mitigating actions, are set out on pages 56 to 59 of the Strategic Report.

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. In drawing its conclusion, the Board has aligned the period of viability assessment with the Group's strategic planning process (a three-year period). The Board believes that this approach provides greater certainty over forecasting and, therefore, increases reliability in the modelling and stress testing of the Company's viability. In addition, a three-year horizon is typically the period over which we review our external bank facilities and is also the performance period over which awards granted under Halma's share-based incentive plan are measured.

In reviewing the Company's viability, the Board has identified the following factors which they believe support their assessment:

1

The Group operates in diverse and relatively non-cyclical markets.

2

There is considerable financial capacity under current facilities and the ability to raise further funds if required.

3

The decentralised nature of our Group ensures that risk is spread across our businesses and sectors, with limited exposure to any particular industry, market, geography, customer or supplier.

4

There is a strong culture of local responsibility and accountability within a robust governance and control framework.

5

An ethical approach to business is set from the top and flows throughout our business.

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. Scenarios modelled included increases and decreases in the level of acquisitions, major events such as litigation or product failure and a significant increase in pension deficit payments. Combinations

of the above scenarios were also modelled. 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 2022.

Audit Committee report

Committee composition and attendance

	Eligible	Attended
Carole Cran ¹	3	3
Daniela Barone Soares ²	3	1
Jo Harlow	3	3
Tony Rice	3	3
Roy Twite	3	3

1 Chair.

2 Daniela was unable to attend two Committee meetings due to illness.



I am pleased to present my third report as Chair of the Audit Committee, which builds on the significant work carried out over the last two years to review and improve the internal controls of the Group and the broader assurance framework. The focused efforts of management over this period have led to further clarity and strengthening of the internal control and risk management processes, to support the growth of the business.

The Committee recognises that it has a particular role in acting independently from the executive management to ensure that the interests of shareholders are properly protected in relation to financial reporting and internal control. Under my leadership, the Committee regularly reviews, monitors and assesses management's processes and judgements in relation to financial reporting and the preparation of the financial statements, and evaluates the findings and observations made by the Company's Auditor, PwC.

The aim of this report is to provide shareholders with an overview of the Committee's role, its structure and governance procedures in place and outline the areas of focus for the Committee during the year and up to the date of this Report.

The key activities of the Committee during 2019 can be summarised as follows:

- Reviewed on behalf of the Board the Half Year Report and Annual Report and Accounts and considered the key accounting judgements and estimates that affect the application of the policies and reported values.
- Reviewed the Half-Year and Year-End process for risk and assurance, which utilised new software to capture compliance and assurance information across the businesses.
- Reviewed the data & IT insights obtained from PwC's external audit cycle.
- Reviewed and received commentary from PwC on the FRC's Audit Quality Review Report on the firm.
- Reviewed the Group's whistleblowing and compliance procedures and improved the reporting to the Committee.
- Received an update on IT and cyber risk controls.
- Received an update on controls and compliance from each of the Sector CFOs and the Head of Tax.
- Approved the Tax Strategy and recommended its approval to the Board.
- Approved the updated Group Treasury Policy.

The Committee has noted the recommendations made by the Competition and Markets Authority (CMA) in its final report to the UK Government which are expected to form part of the wider reform of the audit market following an assessment of the findings from the Kingman Review and Brydon Review (on which I am a panel member). The audit market is likely to change in the coming years and the Committee will continue to monitor developments and respond accordingly.

I do hope that you find this report useful in understanding the operation and activities undertaken by the Committee over the year.

Carole Cran
Chair

For and on behalf of the Committee
11 June 2019

Committee composition

The Committee comprises, and has comprised of throughout the year, the Board's five independent non-executive Directors:

- Carole Cran (Chair)
- Daniela Barone Soares
- Jo Harlow
- Tony Rice
- Roy Twite

Carole Cran is Chair of the Committee and continues to have recent and relevant financial experience, and competence in accounting. She qualified as a Chartered Accountant with KPMG and has worked in senior financial positions at FTSE listed companies, and is currently Chief Financial Officer at Forth Ports Ltd. In February 2019, Carole was confirmed as a business representative on the review panel being led by Sir Donald Brydon to look at the quality standards delivered by UK auditors. Appointments to the Committee are made by the Board. The remuneration of the Chair reflects the additional responsibilities and time demand of the role over the other members of the Committee.

As part of the induction that all new non-executive Directors receive, members of the Committee will meet separately with key individuals, including the Chair, the Chief Financial Officer, the Director of Risk & Internal Audit and the external Auditor. While each non-executive Director will largely manage their own continuing development, the Committee receives written technical, legal and risk updates throughout the year and may request additional information on new or technical areas.

The Committee receives updates from the Auditor and other professional advisers, where appropriate, on matters relevant to financial reporting, internal control, audit and risk. The Committee as a whole has competence relevant to the Company's sector, with each member bringing valuable experience, diversity of thought and independent judgement. Biographies for each member of the Committee are set out on pages 70 and 71.

While only Committee members are entitled to attend meetings, the Chair invites the Chairman, executive Directors, Company Secretary, Director of Group Finance, Director of Risk & Internal Audit and representatives from the external Auditor to regularly attend meetings. Subject matter experts, such as IT and sector finance personnel, are invited to attend part of the relevant meeting to present updates to the Committee.

Governance

The Committee acts under written terms of reference which are approved by the Board and reviewed at least annually. The primary duties of the Committee as set out in the terms of reference are summarised below.

The Committee has three scheduled meetings per year, to coincide with the key events in the corporate reporting calendar and audit cycle. Meeting attendance is set out on page 84.

Both the Committee and the Committee Chair meet regularly with the Director of Risk & Internal Audit and separately with the external Auditor, without any executive Directors present. The Chair maintains regular contact with management, particularly the Chief Financial Officer, Director of Group Finance, Director of Risk & Internal Audit and the Company Secretary.

All members of the Committee further their internal network and knowledge of the businesses through company visits, corporate events and Halma's annual leadership conference.

The Chair sets the forward agenda for the year but allows for flexibility in the timing and the schedule to ensure that new or unforeseen areas can be appropriately reviewed. The agenda and meeting papers are circulated in a timely manner, in accordance with the terms of reference. The Chair reports to the Board on the key matters discussed and Committee minutes are subsequently circulated to all Board members and the external Auditor. Internal Audit reports that identify any significant control weakness, a compliance weakness or other risk that requires immediate management attention, are circulated to the Committee via the Company Secretary as soon as the report is issued.

Whistleblowing

During the year, the Committee had responsibility for reviewing the adequacy and security of the Group's arrangements for employees and contractors to raise concerns about possible improprieties in financial reporting or other matters. Halma has appointed an external third-party provider, Expolink, to operate a confidential, multilingual, telephone and web reporting service, 24/7, through which concerns can be raised. Further details are set out in the Sustainability section on page 53.

All reports are provided to the Company Secretary for review and to ensure that they are appropriately investigated. For any reports relating to fraud or financial matters, the Company Secretary has access to the services of Internal Audit. In line with other companies, most matters reported through Expolink relate to personnel/HR matters and, while these are not areas for review by the Committee, such matters are duly investigated in the same manner. During the year, the Committee undertook a review of the adequacy of the arrangements in place for individuals to raise concerns and it was satisfied that they remain appropriate and effective. For the financial year commencing on 1 April 2019, from which the UK Corporate Governance Code 2018 will apply, the responsibility for oversight and review of the effectiveness of the Group's whistleblowing arrangements will move to the Board.

External auditor

The external auditor is engaged to express an opinion on the Group and Company financial statements. The audit includes the review and testing of the data contained in the financial statements to the extent, and materiality level, necessary for expressing an audit opinion as to whether they present a true and fair view of the state of the Group and parent company affairs as at 31 March 2019. PricewaterhouseCoopers (PwC) were appointed Auditor to the Company, following a tender process, at the Annual General Meeting in 2017 – at which point, Deloitte ceased to be the Company's Auditor. The Senior Statutory Auditor is Owen Mackney.

Audit Committee report Continued

Audit tendering

The Committee has primary responsibility for recommending to the Board the appointment or re-appointment of the external auditor before it is put to shareholders at the AGM. The Committee will, at the appropriate time, lead the audit tender process. This process will be carried out at least every 10 years and, unless it is undertaken earlier, it is the Committee's policy to consider whether a tender is appropriate every five years, to coincide with the change in Senior Statutory Auditor. Accordingly, it is anticipated that the Committee will review the position in 2023 and should a tender not be considered appropriate at that time, the rationale will be stated within the Committee's Report.

Statement of compliance

The Company confirms that it complied throughout the year with the provisions of the Competition and Markets Authority's Statutory Audit Services for Large Companies Market Investigation (Mandatory Use of Competitive Tender Processes and Audit Committee Responsibilities) Order 2014.

Auditor objectivity and independence (including non-audit fees)

The Group has adopted a policy on 'Auditor Independence and Services provided by the External Auditor' which sets out the limited services that the external Auditor can provide to Group companies, which do not conflict with the Auditor's independence.

A summary of the Policy is set out on page 88. This Policy goes further than the restrictions in the FRC's revised Ethical Standard as it applies the restrictions worldwide (not simply to the Group's EU subsidiaries) with any exceptions requiring the approval of the Committee or, for amounts up to £15,000, the approval of the Committee Chair. The Committee believes that this additional restriction safeguards auditor independence and objectivity, as permitted exceptions require the Committee/Committee Chair to be satisfied that: the services are not prohibited non-audit services; the Auditor is the most suitable supplier for the services; and the independence of the Auditor would not be compromised. During the year only two such items have been approved. In addition to Halma's Policy, the Auditor runs its own independence and compliance checks, prior to accepting any engagement, to ensure that all non-audit work is compliant with the revised Ethical Standard and that there is no conflict of interest.

The audit fees payable to PwC for the year ended 31 March 2019 were £1.3m (2018: £1.2m) and non-audit service fees in line with the policy on auditor independence and services, were £0.1m (2018: £0.2m).

Financial statements and significant accounting matters

During the year and prior to the publication of the Group's results for the half year ended 30 September 2018 and the full year ended 31 March 2019, the Committee considered the significant

risks and material issues and judgements made in relation to the Group's financial statements, comprising:

- the value of goodwill, due to the significance of the amounts recorded on the Consolidated Balance Sheet, and the judgements and estimates involved in assessing goodwill for impairment.
- the risk that acquisitions are not accounted for correctly in line with IFRS 3 'Business combinations' including the recording of fair value adjustments and the identification and valuation of acquired intangible assets.
- the valuation of any contingent consideration arising on acquisitions in current and prior periods.
- the judgements and estimates involved in valuing defined benefit pension plans including the discount rate, the mortality assumption and the inflation rate.
- compliance risks with existing and evolving tax legislation.
- the carrying value of Capitalised Development Costs (CDCs).
- adoption of new accounting standards.

These issues were discussed with management at various stages during the year and during the preparation and finalisation of the financial statements. After reviewing the presentations and reports from management, the Committee is satisfied that the financial statements appropriately address the critical judgements and key estimates, both in respect of the amounts reported

Principal Role and Responsibilities

The Committee's primary duties, as set out in its terms of reference (available at www.halma.com) are:

Financial reporting

- Reviewing significant financial reporting judgements and the application of accounting policies, including compliance with accounting standards; ensuring the integrity of the financial statements and compliance with UK company law and regulation.
- Ensuring the Annual Report and Accounts are fair, balanced and understandable; monitoring the integrity of announcements containing financial information.

Internal control

- Monitoring the adequacy and effectiveness of the internal financial controls and processes.

Risk management

- Reviewing and providing oversight of the processes by which risks are managed; reviewing the process undertaken, and the stress-testing performed, to support the Group's Viability Statement and Going Concern Statement.

Compliance, fraud and whistleblowing

- Monitoring compliance with the UK Corporate Governance Code.
- Reviewing the adequacy and effectiveness of the Group's compliance functions; monitoring the processes in place to prevent and detect fraud and receiving reports on fraud attempts or incidents; reviewing the adequacy of arrangements in place to enable employees to raise concerns in confidence.

Internal audit

- Reviewing and approving the audit work plan and charter.
- Reviewing reports from audits and monitoring the status of remedial actions; monitoring the structure, composition and resourcing of the function.
- Reviewing the role and effectiveness of the function.
- Considering whether an independent third-party review of internal audit effectiveness and processes is appropriate.

External audit

- Managing the relationship with the Auditor.
- Monitoring and reviewing the independence and performance of the Auditor and formally evaluating their effectiveness.
- Reviewing the policy on non-audit services carried out by the Auditor; negotiating and approving the Auditor's fee, the scope of the audit and the terms of their engagement.
- Leading the audit tender process at least every 10 years.
- Making recommendations to the Board for the appointment or reappointment of the Auditor.

and the disclosures made. The Committee is also satisfied that the significant assumptions used for determining the value of assets and liabilities have been appropriately scrutinised, challenged and are sufficiently robust. The Committee has discussed these issues with the Auditor during the audit planning process and at the finalisation of the year-end audit and is satisfied that its conclusions are in line with those drawn by the Auditor in relation to these issues.

The Committee's process for challenging the assumptions of management and addressing the risks identified includes the following activities:

- Assessing treatments of contingent consideration payment arrangements against the requirements of IFRS 3 and IFRS 13.
- Focusing on, monitoring regularly and constructively challenging, the reasonableness of the assumptions used in impairment calculations by management.
- Challenging the appropriateness of judgements and forecasts used including discount rates, growth rates, the level of aggregation of individual cash generating units and methodology applied, and any other associated disclosures in note 11 to the Accounts.
- Assessing capitalisation of development costs in line with the accounting policy and standards.
- Assessing the assumptions in determining the pension obligations, particularly given market volatility and determining whether the key assumptions were reasonable.
- Considering the appropriateness and reasonableness of stated judgements and conclusions and that reporting was accurate.

As part of the above process the Committee specifically considered the following:

- The treatment and valuation of the contingent consideration payable in relation to CasMed, Cardios, Mini-Cam, FluxData, Visiometrics, LAN Controls and Navtech Radar.
- The fair value of acquired intangible assets and carrying values.
- The evidence supporting the going concern basis of accounts preparation, the Viability Statement and the risk management and internal control disclosure requirements.
- Accounting assumptions and disclosures of the defined benefit pension plans, including the impact of the High Court decision in the Lloyds Bank case on Guaranteed Minimum Pension (GMP) equalisation.

- The judgements around the carrying value of tax provisions and uncertainties, in particular, the potential impact on the Group of the European Commission's decision against the UK Government relating to the UK Controlled Foreign Company partial exemption being illegal State Aid.
- The tax financing restructure following US and UK legislation changes and the potential for the UK to leave the European Union.
- The treatment and valuation of the disposal of Accudynamics.
- The process followed and expected impact of adopting IFRS 16.
- The recommendations made for the Annual Report and Accounts 2019 by the Financial Reporting Conduct Authority, following a routine review of our 2018 Annual Report and Accounts.

Risk management and internal controls

The Committee maintains oversight of the risk management and internal control framework and monitors its effectiveness. During 2019, the risk management and internal control process was reviewed and, with the assistance of the Director of Risk & Internal Audit, both areas were refined to ensure that they remain robust and effective while complementing Halma's decentralised, autonomous, organisational structure which is integral to Halma's growth strategy. No significant failings or weaknesses were identified in the review process.

Full details of the internal control framework and approach to risk management are set out on pages 54 and 55.

Fair, balanced and understandable

To ensure that the report and accounts are fair, balanced and understandable, the Committee considers the output from a series of focused exercises that take place during the Annual Report and Accounts production process. These focused exercises can be summarised as follows:

- A qualitative review, performed by the Group's finance and secretarial functions of disclosures and a review of internal consistency throughout the Annual Report and Accounts. This review assesses the Annual Report and Accounts against objective criteria drawn up for each component of the requirement (individual criteria that indicate 'fairness', 'balance' and 'understandability' as well as criteria that overlap two or more components).

- A risk comparison review which assesses the consistency of the presentation of risks and significant judgements throughout the main areas of risk disclosure in the Annual Report and Accounts.
- A formal review of all Board and Committee meeting minutes by the Company Secretary to ensure that all significant issues are appropriately reflected and given due prominence in narrative reporting.
- Preparation and issue to the Audit Committee of the key working papers and results for each of the significant issues and judgements considered by the Audit Committee in the period.

The Directors' statement on a fair, balanced and understandable Annual Report and Accounts is set out on page 111.

Internal Audit

The Internal Audit function comprises the Director of Risk & Internal Audit and four audit managers, two based in the UK, one in the USA and one in China, to provide coverage across the Group's global operations. The risk-based audit work plan is agreed by the Committee annually and takes account of the rotational visits undertaken by the external Auditor under their audit programme. Progress against the work plan is reviewed at each Committee meeting, in order that any changes in priorities or resourcing can be discussed and agreed. Internal Audit reports are routinely issued to management and the external Auditor, and where there are any higher priority findings which require immediate management action, the report is circulated to the Committee with commentary from the Chief Financial Officer on the underlying issue(s) and remedial action(s) taken.

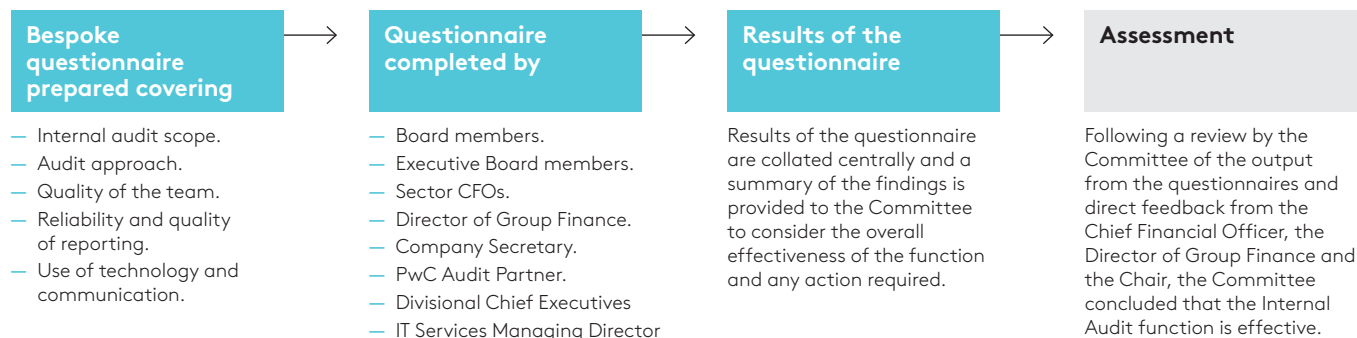
Audit Committee report

Continued

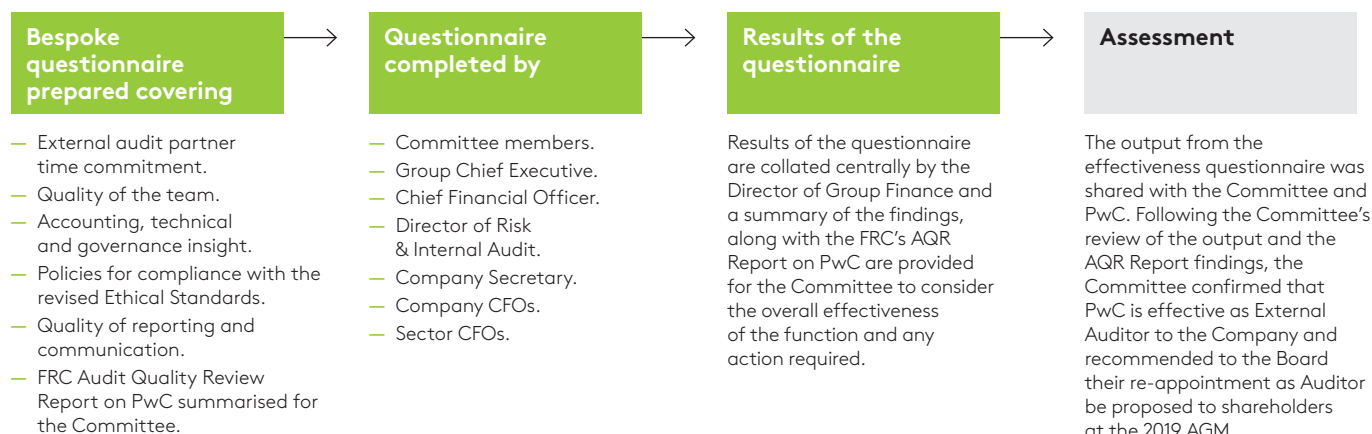
Auditor effectiveness

The Committee reviews annually the effectiveness of both the Internal Audit function and the External Auditor. The process for each review is conducted primarily by way of a tailored questionnaire.

Internal audit process



External audit process



Policy on auditor independence and services

Permitted audit-related services

Audit-related services are non-audit services, as specified in the revised Ethical Standard, that are largely provided by the external auditor and where the work is closely related to the work performed in the audit and where threats to auditor independence are clearly insignificant and safeguards need not be applied.

These audit-related services include:

- Reporting required by law or regulation to be provided by the auditor.
- Reviews of interim financial information; reporting on regulatory returns.
- Reporting to a regulator on client assets; reporting on government grants.
- Reporting on internal financial controls when required by law or regulation.
- Extended audit work that is performed on financial information and/or financial controls where this work is integrated with the audit work and is carried out on the same principal terms and conditions.

Non-audit services

(other than audit-related services)

The general policy is that the external auditor must not carry out any non-audit services (other than audit related services) for the Company. In exceptional circumstances, the Committee (or the Chair of the Committee for amounts up to £15,000) may approve the engagement but only where the services are not prohibited, the auditor is considered to be the most suitable supplier of the services and the external auditor's independence would not be compromised.

Prohibited non-audit services

Under this policy, the external auditor must not provide non-audit services to Halma, or any of its global subsidiaries, which fall within the general categories of services listed under the policy (including taxation, bookkeeping, payroll, design or implementation of risk management procedures, valuation services, legal services, internal audit services, services relating to financing/capital structure/investment/promotion or dealing in shares, HR services, organisational design or cost control) or any of the specific services as set out in the revised Ethical Standard and Staff Guidance Note 05/2016.

Fee cap for audit-related services

The external auditor can be engaged to perform audit-related services without the requirement for a separate tender process unless the anticipated fees exceed £150,000. If the anticipated fees are above £150,000, the Committee must approve the decision to engage the external auditor in advance, and always subject to the overall fee cap. The total fees for audit-related and non-audit services paid to the external auditor in any year cannot exceed 70% of the average fees for audit services charged over a three-year period. The Committee will be notified of all projects with the external auditor with estimated fees between £75,000 and £150,000 and, at each meeting, the Committee will receive a summary of all fees, audit and non-audit, payable to the external auditor.

Auditor effectiveness

The Committee reviews annually the effectiveness of both the Internal Audit function and the External Auditor. The process for each review is conducted primarily by way of tailored questionnaire.

Remuneration Committee report

Committee composition and attendance

	Eligible	Attended
Tony Rice ¹	5	5
Paul Walker	5	5
Daniela Barone Soares ²	5	3
Roy Twite	5	5
Carole Cran	5	5
Jo Harlow	5	5

1 Chair.

2 Daniela was unable to attend two Committee meetings due to illness.



On behalf of the Board, I am pleased to present my report as Chair of the Remuneration Committee for the year ended 31 March 2019.

The Committee undertook a significant review of the remuneration policy last year, which was put to shareholders at the 2018 AGM. I was gratified to note the strong support received from our shareholders – with over 97% voting in favour of our Policy. Changes implemented under the new Policy will see our Executive share awards that are granted in July 2019 being subject to a two-year holding period from vesting. The option of including stretching non-financial performance targets into the annual incentive structure is a helpful tool to drive the work to support our growth but we have yet to formulate the design of such targets and these would likely be tested at an operating company level before we recommended their adoption in the executive Director plan. While this remains a viable option, we do not envisage any non-financial elements being implemented before 2020 and for the executive bonus plan before 2021.

The Committee has noted recent changes in the UK Corporate Governance Code and investor guidelines on executive remuneration. Our focus for the coming year will be reviewing how these changes are best implemented for Halma, taking into account the Company's specific circumstances as well as the emerging market and best practice. This review will consider the pension contribution levels for executive Directors (both incumbents and new hires), the structure of the annual incentive (particularly the appropriate pay-out for target performance) and length/quantum of post-employment shareholding guidelines – all of which we know are important topics for shareholders.

Following Halma's entry into the FTSE 100 in December 2017, the continued strong performance has seen the Company move further up the index. The Committee has to be aware that in continuing to attract and retain the talent required to deliver the sustainable growth that we have become accustomed, we will have to consider benchmarking with FTSE 100 peers. While we are mindful that benchmarks can drive an upward trend for pay without sufficient justification, we have to keep in our sight any significant gaps between our Director salaries and the market median. With this in mind, the Committee agreed a modest 2.5% increase for the executive Directors with the exception of Jennifer Ward, whose pay increased just over 6% to reflect not only her significant contribution over the year around talent, diversity, brand development and succession planning but also to adjust for the fact that her base pay has not kept pace with her expanded role, and relative to other senior management talent in the Group.

We also reviewed the Chairman's fee which fell below the comparator median when adjusted last year and is now significantly behind the FTSE 51-100 median of £327,000 per annum. Paul Walker's strategic direction and leadership has been instrumental to Halma's growth in recent years and the Committee was unanimous in approving an increase of £30,000 to £280,000 per annum.

Remuneration outcomes for 2019

Once again, Halma has delivered a strong set of results and a solid performance against our KPIs. Revenue grew by 13%, adjusted EPS grew by 17% and the Board has proposed an increase in the dividend per share by 7%. The Group's Economic Value Added performance metric generated total annual bonus payments for the executive Directors of 150% of base salary,

with one third deferred into shares that become available after two years. The Total Shareholder Return for Halma is strong over a 10 year, 5 year and 3 year horizon. The three-year performance for average ROTIC and Adjusted Earnings Per Share has been robust and is reflected in the 90.83% vesting percentage for the Executive Share Plan awards. The Committee is satisfied that there is a strong and direct link between Company performance, on a number of metrics, and the rewards to senior management.

Shareholder voting at the 2019 AGM

I have written to our major shareholders to explain the rationale for the Committee's decisions on salary and fees as set out above and welcome their continuing engagement on remuneration matters. My colleagues on the Committee hope that all shareholders will find this Report useful in understanding the reward structure that we have in place to motivate and recognise our talent and ensure that they can continue to deliver strong and sustainable results. We hope that we will have your support when voting on the Remuneration Report resolution at the AGM. If you require clarification or wish to discuss any of the issues contained in the Report, please contact us and we will be happy to meet and discuss them with you.

Tony Rice
Chair

For and on behalf of the Committee
11 June 2019

Aligning awards to performance

How did we perform in the year?

Financial performance

Organic revenue growth¹

10%

Adjusted organic profit growth¹

11%

Dividends to shareholders

£60m

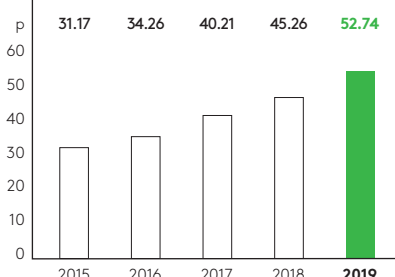
¹ See note 3 to the Accounts.

Long-term incentive plan – outcome against targets: 90%

Adjusted earnings per share (p)

52.74p

+16.5%

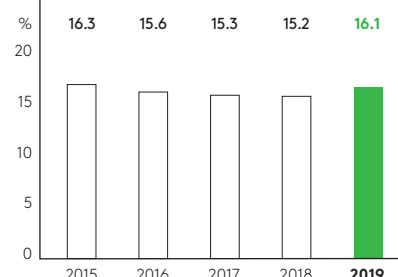


50% of PSP awards vest on achievement of three-year average EPS growth in excess of 12.5% (actual: 15.5 average growth = 50% vesting)

Return on total invested capital (%)

16.1%

+0.9%



50% of PSP awards vest on achievement of three-year average ROTIC in excess of 11% with full vesting at 17% (actual: 15.5% average = 40.8% vesting)

Total Shareholder Return (five years)

Graph as rebased to 100



How was performance reflected in remuneration?

£000s	Andrew Williams	Marc Ronchetti	Adam Meyers	Jennifer Ward
Salary	653	277	401	320
Benefits	33	11	19	22
Pension	170	52	43	60
Annual bonus	980	530	600	480
Share-based incentives				
Share incentive plan	3	3	–	3
Value on award (2016)	1,109	114	433	242
Share price increase to 31 March 2019	500	59	196	109
Total	3,448	1,046	1,692	1,236

Outcomes against metrics for the year:

Annual bonus plan Economic Value Added

Group target:

£203m

Group actual:

£236m
+16%

Ensuring shareholder alignment

Proportion of variable awards received in shares:

33.3%

of annual bonus incentives

Shares subject to mandatory two-year holding period:

100%

of vesting shares arising from performance share awards granted since the 2018 AGM

Proportion of variable awards received in shares:

100%

of long-term share incentives (excluding dividend equivalents)

Shareholding guideline:

200%

of salary for all executive Directors

Arrangements for the coming year

Policy element	2020 approach
Salaries absent a material change in responsibilities, executive Directors receive inflationary adjustments in line with all employees	No change with the exception of Jennifer Ward who receives a 6.2% increase to reflect her significant contribution during the year, to realign her base salary relative to other senior management.
Pension supplements up to 26% of base salary for former active members of the defined benefit pension plan and up to 20% of base salary for other executive Directors	No change
Annual bonus maximum 150% of salary satisfied 66.7% cash and 33.3% deferred into Company shares for two years	No change
Performance share awards granted at a maximum of 200% of salary; 2-year post-vesting holding period for awards granted since July 2018	No change
Clawback/malus applied to variable incentive awards	No change

Remuneration Policy

Compliance statement

This report has been prepared in accordance with the provisions of the Companies Act 2006 (the Act) and Regulation 11 and Schedule 8 of the Large and Medium-Sized Companies and Groups (Accounts and Reports) (Amendment) Regulations 2008 (as amended). The report also meets the relevant requirements of the Listing Rules of the Financial Conduct Authority and describes how the Board has applied the principles relating to directors' remuneration in the UK Corporate Governance Code. No changes to the Remuneration Policy, which was approved by shareholders at the 2018 AGM, are proposed but in accordance with the Act, the Annual Report on Remuneration will be proposed at the 2019 AGM of the Company at which the financial statements will be received.

In line with the Regulations, the following parts of the Annual Report on Remuneration are audited: the single figure for total remuneration for each Director, including annual bonus and performance share plan outcomes for the financial year ending 31 March 2019; plan interests awarded during the year; pension entitlements; payments to past Directors and payments for loss of office; and Directors' shareholdings and share interests. All other parts of the Annual Report on Remuneration are unaudited.

Element and objective	Operation and process
Executive Directors	
Salary A fair, fixed remuneration reflecting the size and scope of the executive's responsibilities which attracts and retains high calibre talent necessary for the delivery of the Group's strategy.	Reviewed annually or following a material change in responsibilities. Salary is benchmarked to market median levels periodically against appropriate comparators of a similar size and operating in a similar sector, and is linked to individual performance and contribution. Salary is the only element of remuneration that is pensionable.
Benefits To provide benefits that are competitive within the relevant market.	Benefits are appropriate to the location of the executive and typically comprise (but are not limited to) a company car, life insurance, permanent disability insurance, private medical insurance, relocation and tax advice for international assignments.
Pension To provide competitive post-retirement benefits, or the cash allowance equivalent, to provide the opportunity for executives to save for their retirement.	Executive Directors participate in either a Group Defined Contribution pension plan or the US 401k money purchase arrangement. Cash supplements in lieu of Company pension contributions may be made to some individuals at a level dependent upon seniority and length of service. Cash supplements may be reduced to reflect the additional employer social costs thereon. To the extent the pension contributions exceed the local tax allowance, the contributions may be paid to the executive, subject to taxes and social charges. Some executives are deferred members of the Group defined benefit pension plan which closed to future accrual in December 2014.
Annual Incentive To incentivise and focus management on the achievement of an objective annual target which is set to support the short-to medium-term strategy of the Group.	The structure of the Annual Incentive is reviewed at the start of the year to ensure that the performance measures and their weightings remain appropriately aligned with the Group's strategy and are sufficiently challenging. Performance targets are calibrated and set at the start of the year, with reference to a range of relevant reference points including the annual budget agreed by the Board. At the end of the year, the Committee determines the extent to which these targets have been achieved. Payment of one third of any bonus is in the form of an award of shares that is deferred for two years, with vesting normally subject to continued service. Dividend equivalents accrue over the vesting period. Dividend equivalents are paid in cash or shares at the end of the vesting period. Deferral into shares provides a link to the long-term strategy of the Group and enhances the retentiveness of the policy. A recovery and withholding provision enables the Company to recoup overpayments in the event of misstatement, error or misconduct, either through withholding future remuneration or requiring the executive to repay the requisite amount.

Remuneration Policy

This section of the report provides an overview of the Remuneration Policy for Executive and non-executive Directors which shareholders approved at the 2018 Annual General Meeting. The Policy came into effect on 19 July 2018 and is unchanged. A full copy of the Policy is available in the 2018 Annual Report and Accounts available on our website, www.halma.com.

The Policy is designed to promote the long-term interests of the Company by securing the high calibre executives needed to manage the Group successfully, and to align their interests with those of our shareholders by rewarding them for enhancing shareholder value. The Policy also seeks to reward achievement of stretching performance targets without driving unacceptable behaviours or encouraging excessive risk-taking.

There are six elements of the Policy for executive Directors, which are summarised in the table below.

Opportunity	Performance measures
Base salary increases will be applied in line with the outcome of annual reviews (normally with effect from 1 April). Salaries for the financial year under review (and the following year) are disclosed in the Annual Report on Remuneration. Salary increases for executive Directors will not normally exceed the average of the wider employee population other than in exceptional circumstances. Where increases are awarded in excess of the wider employee population, for example where there is a material change in the responsibility, size or complexity of the role, the Committee will provide the rationale in the relevant year's Annual Report on Remuneration.	Not applicable
Benefits may vary by role, and the level is determined to be appropriate for the role and circumstances of each individual executive Director. The maximum value will equate to the reasonable market cost of such benefits. It is not anticipated that the current cost of benefits (as set out in the Annual Report on Remuneration) would increase materially over the period for which this policy applies. The Committee retains the discretion to approve a higher cost in exceptional circumstances (e.g. relocation expenses or an expatriation allowance on recruitment, etc.) or in circumstances where factors outside the Company's control have changed materially (e.g. market increases in insurance costs). The rationale behind the exercise of such discretion will be provided in the relevant year's Annual Report on Remuneration.	Not applicable
Defined Contribution: maximum contribution of 20% of pensionable salary. Cash supplement: Halma contributes up to 26% of full salary if the executive Director is a former active member of the defined benefit pension plan. Defined Contribution/Money Purchase members whose contributions exceed the local tax allowance are paid the excess contributions, on pensionable salary, as a cash supplement, net of employer social costs. Defined benefit: now closed to future accrual, but provides a maximum pension equivalent to two thirds of final pensionable salary, up to a CPI-indexed cap; £157,083 for 2018 and £161,795 for 2019.	Not applicable
Maximum opportunity: 150% of base salary for all executive Directors. Target opportunity: 60% of maximum. Bonus payable at threshold: 0% of salary. In exceptional circumstances, the Committee has the ability to exercise discretion to override the formulaic bonus outcome within the limits of the scheme where it believes the outcome is not truly reflective of performance and to ensure fairness to both shareholders and participants.	The bonus is based on the achievement of financial performance targets, principally EVA. Other financial measures may supplement EVA at the discretion of the Committee. Such financial measures must comprise at least 80% of the overall bonus opportunity. The balance of 20% may be utilised, at the Committee's discretion, to support non-financial, but measurable, strategic growth priorities.

Remuneration Policy

Continued

Element and objective	Operation and process
Executive Directors	
Executive Share Plan (ESP) To incentivise executives to achieve superior returns to shareholders over a three-year period rewarding them for sustained performance against challenging long-term targets; to retain key individuals and align interests with shareholders, reflecting the sustainability of the business model over the long term and the creation of shareholder value.	Executive Directors are granted annual awards over Halma plc shares or a cash equivalent where required by regulations as determined by the Committee; awards vest after a period of at least three years based on Group performance. Dividend equivalents accrue over the vesting period. Dividend equivalents are paid in cash or shares at the end of the vesting period, and only on those shares which vest. A recovery and withholding provision enables the Company to recoup overpayments in the event of misstatement, error or misconduct, either through withholding future remuneration or requiring the executive to repay the requisite amount. A mandatory two-year holding period for vested awards relating to awards granted after the 2018 AGM also aids recovery of overpayments as referenced above.
Share Incentive Plan (SIP) To encourage share ownership across all UK-based employees using HMRC-approved schemes.	The SIP is an HMRC-approved arrangement. It entitles all eligible UK-based employees to receive Halma shares in a potentially tax-advantageous manner.
Chairman and non-executive Director fees To attract individuals with the requisite skills, experience and knowledge to contribute to the Board.	Non-executive Director (NED) fees are determined by the Board and may comprise a base fee, committee chairmanship fee and Senior Independent Director fee. The Chairman's fee is determined by the Committee.

Notes to the Policy Table

Payments from Existing Awards

The Committee will honour any commitment entered into, and executive Directors will be eligible to receive payment from any award made, prior to the approval and implementation of the Remuneration Policy on 19 July 2018. Details of these awards are disclosed in the Annual Report on Remuneration.

Selection of Performance Measures

The performance measures used in Halma's executive incentives have been selected to ensure incentives are challenging and reinforce the Group's strategy and align executive interests closely with those of our shareholders.

In the annual bonus, the use of EVA, in summary, profit less a charge for capital employed (definition is provided on page 98) reinforces the Group's business objective to double every five years through a mix of acquisitions and organic growth. Profit is a function of the extent to which the Company has achieved both its organic growth target and its success in identifying appropriate acquisition targets in current and past years. Ensuring that the cost of funding acquisitions is reflected in the bonus model means that executives share the benefit of an acquisition that outperforms expectations, but equally bear the cost of overpaying for an acquisition. Good or poor management of working capital is also reflected in the calculation of EVA.

In the ESP, EPS provides a disciplined focus on increasing profitability and thereby provides close shareholder alignment through incentivising shareholder value creation, and ROTIC reinforces the focus on capital efficiency and delivery of strong returns, thereby further strengthening the alignment of remuneration with the Group strategy. Performance targets are set to be stretching yet achievable, taking into account the Company's strategic priorities and the economic environment in which it operates. Targets are calibrated taking into account a range of reference points, but are based primarily on the Group's strategic plan.

Opportunity	Performance measures
Maximum opportunity: Up to 200% of salary. In exceptional circumstances, such as to facilitate the recruitment of an external candidate, the Committee may, in its absolute discretion, exceed this maximum annual opportunity, subject to a limit of 250% of salary. Threshold performance will result in the vesting of 25% of the maximum award.	Vesting of performance share awards is subject to continued employment and the Company's performance over a three-year performance period. To the extent performance conditions are not met, awards will lapse.
Participation limits are in line with those set by HMRC from time to time.	Not applicable
Fees are normally reviewed annually in April, but typically only reset triennially. Increases are effective from 1 April. The fee paid to the Chairman is determined by the Committee, and fees to NEDs are determined by the Board. The fees are calculated by reference to market levels and take account of the time commitment and the responsibilities of the NEDs.	Not applicable

External appointments

In the case of appointing a new executive Director, the Committee may make use of any of the existing elements of remuneration, as follows:

Component	Approach
Salary	The base salaries of new appointees will be determined by reference to relevant market data, experience and skills of the individual, internal relativities and the current salary of any incumbent in the same role. Where a new appointee has an initial base salary set below market, the Committee may make phased increases over a period of several years to achieve the desired position, subject to the individual's development and performance in the role.
Benefits	New appointees will be eligible to receive benefits in line with the current Policy, as well as expatriation allowances and any necessary expenses relating to an executive's relocation on appointment.
Pension	New appointees will be eligible to participate in the Company's defined contribution/money purchase arrangements, receive a cash supplement or local equivalent.
Annual bonus	The scheme as described in the Policy Table will apply to new appointees with the relevant maximum being pro-rated to reflect the proportion of the year employed.
ESP	New appointees will be granted performance awards under the ESP on the same terms as other executives, as described in the Policy Table.
SIP	New appointees in the UK will be eligible to participate on identical terms to other employees.

In addition to the elements of remuneration set out in the Policy Table, in exceptional circumstances the Committee may consider it appropriate to grant an incentive award under a different structure in order to facilitate the recruitment of an individual or to replace incentive arrangements forfeited on leaving a previous employer. In making such awards, the Committee will look to replicate the arrangements being forfeited as closely as possible and in doing so consider relevant factors including any performance conditions attached to these awards, the payment mechanism, expected value and the remaining vesting period of these awards.

Internal Appointments

Remuneration for new executive Directors appointed by way of internal promotion will similarly be determined in line with the policy for external appointees, as detailed above. Where an individual has contractual commitments made prior to their promotion to the Board, the Company will continue to honour those commitments. Incentive opportunities for employees below Board level are generally no higher than for executive Directors, and incentive measures vary to ensure they are appropriate.

Share Ownership Guidelines

To ensure alignment between the interests of executive Directors and those of shareholders, the Company requires executive Directors to progressively build up and maintain a beneficial holding of Halma plc shares equivalent to a minimum of 200% of salary. Until such time as this threshold is achieved, executive Directors are required to retain no less than 50% of the net of tax value of any vested performance share award or deferred bonus share award.

Annual Remuneration report

The following section provides details of how Halma's remuneration policy was implemented during the financial year ended 31 March 2019, and how it will be implemented in 2020.

Committee Composition

As at 31 March 2019, and throughout the year, the Committee comprised the following non-executive Directors:

- Tony Rice (Chairman)
- Paul Walker
- Daniela Barone Soares
- Roy Twite
- Carole Cran
- Jo Harlow

All members of the Committee are considered independent within the definition set out in the Code. No member of the Committee has any personal financial interest in Halma (other than as shareholders), conflicts of interests arising from cross directorships or day-to-day involvement in running the business.

During the year the Committee met formally five times. Attendance by individual members of the Committee is disclosed on page 89.

Only members of the Committee have the right to attend Committee meetings. The Group Chief Executive, the Group Talent and Communications Director and the Company Secretary attend Committee meetings by invitation, but are not present when their own remuneration is discussed. The Committee also takes independent professional advice as required.

Principal Role and Responsibilities

The primary responsibilities of the Remuneration Committee are to:

- Make recommendations to the Board on the framework for executive Director and senior executive remuneration based on proposals formulated by the Group Chief Executive.
- Determine and agree with the Board the policy and framework for the remuneration of the Chairman, Group Chief Executive, other executive Directors, the Company Secretary and members of the Executive Board.
- Have oversight of the remuneration arrangements of the management tier below Executive Board level.
- Approve the design of, and determine targets for, any performance-related pay plans operated by the Company and agree the total annual payments made under such plans.
- Review the design of all share incentive plans for approval by the Board and shareholders, and determine, each year, whether awards will be made, and if so, the overall amount of such awards, the individual awards to executive Directors and other senior executives and the performance targets to be set.
- Determine the policy for, and scope of, pension arrangements for each executive Director and other senior executives.

The Committee is appointed by the Board and operates under written terms of reference, which are available at www.halma.com.

External advisers

Mercer Kepler (Mercer) has acted as the independent remuneration adviser to the Committee, having done so since November 2017. At the invitation of the Committee Chair, Halma's advisory Partner attends meetings to provide advice on remuneration for executives, analysis on elements of the remuneration policy and provide regular market and best practice updates. New Bridge Street were advisers to the Committee up until November 2017.

Mercer reports directly to the Committee Chair and is a signatory to the Code of Conduct for Remuneration Consultants of UK-listed companies (which can be found at www.remunerationconsultantsgroup.com). Mercer provides no other services to the Company, and is therefore considered independent. Mercer's fees for the year were £33,410 (2018: £22,500) and NBS's fees for the year were £nil (2018: £6,000).

Shareholder vote at 2018 Annual General Meeting

The following table shows the results of the voting at the 2018 annual general meeting on the Remuneration Policy and the Remuneration Report.

	For	Against	Total	Withheld
Remuneration Policy (2018)				
Number of votes cast	274,561,279	6,136,623	280,697,902	2,510,606
% of votes cast	97.81%	2.19%	100%	
Directors' Remuneration Report (2018)				
Total number of votes	273,854,564	9,239,496	283,094,060	116,154
% of votes cast	96.7%	3.3%	100%	

Single figure of total remuneration for Directors

The tables below set out the single figure of total remuneration received by Directors for the year to 31 March 2019 and the prior year.

	2019						
	Salary £000	Benefits ¹ £000	Annual bonus ² £000	ESP ³ £000	SIP ⁴ £000	Pension ⁵ £000	Total remuneration £000
Executive Directors							
Andrew Williams	653	33	980	1,609	3	170	3,448
Marc Ronchetti ⁶	277	11	530	173	3	52	1,046
Kevin Thompson ⁶	133	5	–	–	–	35	173
Adam Meyers ⁷	401	19	600	629	–	43	1,692
Jennifer Ward	320	22	480	351	3	60	1,236
Non-executive Directors							
Paul Walker	250	–	–	–	–	–	250
Daniela Barone Soares	57	–	–	–	–	–	57
Roy Twite	57	–	–	–	–	–	57
Tony Rice	77	–	–	–	–	–	77
Carole Cran	72	–	–	–	–	–	72
Jo Harlow	57	–	–	–	–	–	57
Total							8,165

	2018						
	Salary £000	Benefits ¹ £000	Annual bonus ² £000	ESP ³ £000	SIP ⁴ £000	Pension ⁵ £000	Total remuneration £000
Executive Directors							
Andrew Williams	625	33	835	2,028	3	163	3,687
Kevin Thompson ⁶	390	15	521	1,106	3	102	2,137
Adam Meyers ⁷	369	13	164	742	–	10	1,298
Jennifer Ward	306	16	341	401	3	30	1,097
Non-executive Directors							
Paul Walker	210	–	–	–	–	–	210
Daniela Barone Soares	52	–	–	–	–	–	52
Roy Twite	52	–	–	–	–	–	52
Tony Rice	68	–	–	–	–	–	68
Carole Cran	62	–	–	–	–	–	62
Jo Harlow	52	–	–	–	–	–	52
Total							8,715

1 Benefits: mainly comprises company car and private medical insurance.

2 Annual bonus: payment for performance during the year; two thirds is payable in cash and one third is payable in shares which vest two years from award. Table shows total bonus including amounts to be deferred.

3 ESP: the value of awards vesting on performance during the years ending 31 March 2019 (estimated three-month average price at year end of 1507p) and 31 March 2018 (actual based on price at vesting of 1407p). Marc Ronchetti's award vests in November 2019 based on the same EPS/ROIC performance conditions measured at 31 March 2019.

4 SIP: value based on the face value of shares at grant.

5 Pension: value based on the Company's pension contribution, or cash supplement in lieu of pension, during the year.

6 Marc Ronchetti was appointed as a Director on 1 July 2018. The amounts in the table for Marc show the pay and benefits received since 1 July 2018, including bonus and ESP for the full year to 31 March 2019. Kevin Thompson resigned as a director on 19 July 2018. The amounts in the table for Kevin show the pay and benefits received up to 19 July 2018.

7 Remunerated in US dollars and translated at the average exchange rate for the year (2019: US\$1.313, 2018: US\$1.327).

Other payments

No payments were made to past Directors, nor were any payments made on cessation during the year under review, except for Kevin Thompson who received salary and benefits for the period from his resignation as a Director on 19 July 2018 and his retirement from the Company on 31 July 2018. His awards granted under the ESP in 2015 vested in 2018 and are shown in the table for 2018 above. In line with other participants, dividend equivalents are paid on vesting. His PSP awards for 2016 and 2017 have been time pro-rated and will vest, subject to performance conditions, respectively in 2019 and 2020. His DSA awards for 2017 and 2018 will vest in full in 2019 and 2020 respectively. No payments were made for loss of office during the year.

Annual Remuneration report

Continued

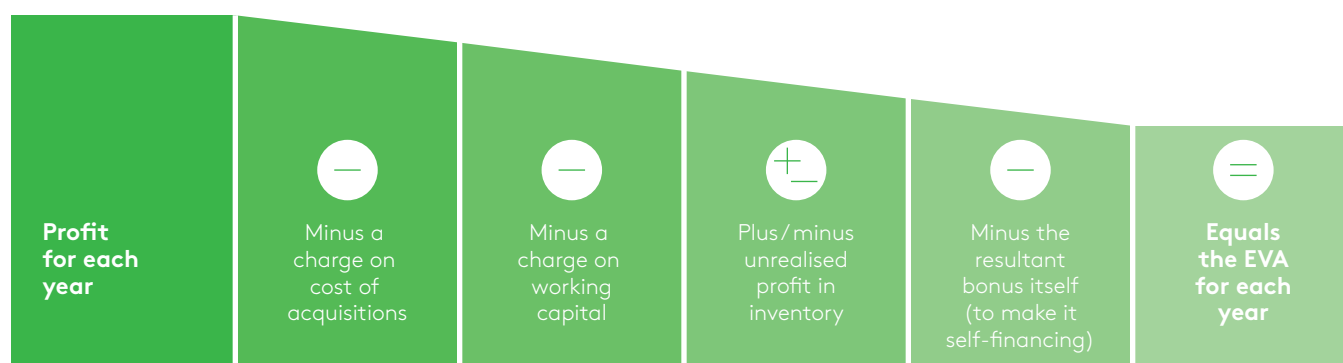
Incentive outcomes for 2019

Annual bonus in respect of 2019

In 2019, the maximum bonus opportunity for executive Directors was 150% of salary, solely linked to performance as measured by an Economic Value Added (EVA) calculation.

Bonuses for the executive Directors (excluding Adam Meyers) are calculated based on Group profit exceeding a target calculated from the profits for the three preceding financial years after charging cost of capital, including the cost of acquisitions. As the EVA for each year is utilised for a further three years in the comparator calculations, executives must consider the medium-term interests of the Group otherwise there is the potential for an adverse impact on their capacity to earn a bonus.

EVA calculation:



In the case of Adam Meyers, as a Sector Chief Executive, a bonus is earned if the profit of their sector exceeds a target calculated from the profits of the three preceding financial years. The profits calculated for this purpose regard each sector as a stand-alone group of companies charging it with the cost of capital it utilises including the cost of acquisitions.

Subsidiary executives participate in bonus arrangements similar to those established for senior executives.

Further details of the bonuses payable (cash and deferred share awards) and performance against targets are provided in the tables below.

Executive Director	EVA threshold 000	EVA actual 000	Overall bonus outcome (% of salary)	EVA maximum 000
Andrew Williams	£203,327	£236,817	150%	£233,253
Marc Ronchetti	£203,327	£236,817	112.5%	£233,253
Adam Meyers	US\$162,062	US\$195,750	150%	US\$189,803
Jennifer Ward	£203,327	£236,817	150%	£233,253

No discretion was applied by the Committee in determining the annual bonus outcome calculation for 2019. The EVA maximum column represents the EVA performance at which the maximum bonus is payable for each individual.

Executive Share Plan (ESP): 2016 Awards (vesting during the year to 31 March 2019)

In July 2016, the executive Directors received awards of performance shares under the ESP. The performance targets for ESP awards granted since 2015 are set out below. The vesting criteria are 50% EPS-related and 50% ROTIC-related.

Performance conditions for all performance awards since July 2015 are as follows:

EPS ¹	ROTIC ² (post-tax)	EPS	ROTIC	Total
				% of award vesting ³
Performance levels				
< 5%	< 11.0%	0.0%	0.0%	0.0%
5%	11.0%	12.5%	12.5%	25%
12% or more	17.0% or more	50%	50%	100%

1 Adjusted earnings per share growth over the three-year performance period.

2 Average ROTIC over the performance period.

3 There is straight line vesting in between threshold and maximum vesting.

The three-year period over which these two independent performance metrics is measured ended on 31 March 2019. ROTIC was 15.5% (the average ROTIC for financial years 2017, 2018 and 2019) and average EPS growth of 15.5% for the same period, results in vesting of 90.83% of the maximum award. The estimated vesting value included in the single figure of Total Remuneration for Directors for 2019 is detailed in the table below:

Executive Director	Interest held	Face value at grant £000	Vesting %	Interest vesting	Three-month average price at year end	Vesting value £000
Andrew Williams	117,527	1,220	90.83%	106,749	1507p	1,609
Adam Meyers	45,918	477		41,707		629
Jennifer Ward	25,665	266		23,311		351
Marc Ronchetti	12,668	126		11,506		173

Vested awards are net settled, with the appropriate reduction in shares made to cover the employee tax and social security liability at vesting. Awards lapse if they do not vest on the third anniversary of their award.

Executive Share Plan: Performance Share Awards (granted during the year to 31 March 2019)

On 2 July 2018, the executive Directors were granted performance share awards under the ESP.

Executive Director	Awards made during the year	Five-day average market price at award date	Face value at award date £000
Andrew Williams	95,121	1369.2p	1,302
Marc Ronchetti	52,786		723
Adam Meyers	43,342		593
Jennifer Ward	34,797		476

UK executive Directors had part of their award delivered by the Share Incentive Plan.

The three-year performance period over which ROTIC and EPS performance will be measured is 1 April 2018 to 31 March 2021. The ROTIC element will be based on the average ROTIC for 2019, 2020 and 2021. The EPS element will be based on EPS growth from 1 April 2018 to 31 March 2021.

The award is eligible to vest in full on the third anniversary of the date of grant (2 July 2021), subject to 50% on ROTIC performance and 50% on EPS performance.

Executive Share Plan: Deferred Share Awards (granted during the year to 31 March 2019)

On 2 July 2018, the executive Directors were granted merit deferred share awards under the ESP in respect of one third of the bonus earned for the financial year ended 31 March 2018.

Executive Director	Awards made during the year	Five-day average market price at award date	Face value at award date £000	Bonus to 31 March 2018 £000	Amount awarded in shares
Andrew Williams	20,339	1369.2p	278	835	33.3%
Adam Meyers	3,997		55	164	33.3%
Jennifer Ward	8,295		114	341	33.3%
Marc Ronchetti	4,796		66	197	33.3%
Kevin Thompson	12,691		174	521	33.3%

Awards are not subject to performance conditions as they are deferred awards relating to bonus earned for the year ended 31 March 2018. Awards vest in full on the second anniversary of the date of grant (2 July 2020).

Annual Remuneration report

Continued

Implementation of remuneration policy for the year to 31 March 2020

Salary

The Committee approved the following salary increases with effect from 1 April 2019. The guidance salary increase for the UK businesses and sector personnel was 3% and the average globally was 3.8%.

Executive Director	Salary from 1 April 2019	Salary from 1 April 2018	% change
Andrew Williams	£669,325	£653,000	2.5%
Kevin Thompson (to 19 July 2018)	–	£398,000	–
Adam Meyers	US\$538,000	US\$525,000	2.5%
Jennifer Ward	£340,000	£320,000	6.2%
Marc Ronchetti (from 1 July 2018)	£425,000	£415,000	2.4%

Pension and benefits

No changes to the current executive Directors' current pension and benefits arrangements is planned for 2020. Pension arrangements for any new executive Directors will take into account the provisions in the 2018 UK Corporate Governance Code.

Annual bonus

The maximum annual bonus opportunity for 2020 will remain at 150% of salary for the executive Directors with one third of the bonus earned being deferred into a share award which vests in full after two years.

Bonuses for 2020 will continue to be based on EVA performance against a weighted average target of EVA for the past three years as described above. Bonus payments will be subject to recovery and withholding provisions during a period of three years from the date of payment.

ESP

Under the ESP, performance share awards and deferred bonus awards will be made in July 2019. The number of shares over which awards will be made is determined by the average share price for the five trading days prior to date of award.

The value of each performance share award, relative to salary has been fixed as follows:

Executive Director	Salary for 2020	Performance share award	Value of award
Andrew Williams	£669,325	200%	£1,338,650
Marc Ronchetti	£425,000	175%	£743,750
Adam Meyers	US\$538,000	150%	US\$807,000
Jennifer Ward	£340,000	150%	£510,000

The performance share awards to be granted in July 2019 will be subject to an earnings per share performance target for 50% of the award and a ROTIC target for 50% of the award measured over the three financial years 2019, 2020 and 2021. The full performance conditions are set out in detail above, in relation to the 2016 awards which vest in 2019.

The deferred bonus awards are derived as one third of the bonus earned for the 2019 year. The number of shares over which awards will be made is determined by the share price for the five trading days prior to the date of award, but the value of each award, relative to the bonus has been fixed as follows:

Executive Director	Bonus for 2019	Cash-settled	Value of 2019 deferred bonus award
Andrew Williams	£979,500	£653,000	£326,500
Marc Ronchetti	£530,319	£353,546	£176,773
Adam Meyers	US\$787,500	US\$525,000	US\$262,500
Jennifer Ward	£480,000	£320,000	£160,000

Chairman and non-executive Director fees

The Chairman's and the NEDs' fees, as detailed below, were last increased by the Board in April 2016. Fees are subject to an annual review each April, but resetting is normally expected to be triennial. The most recent resetting was aligned with the 2018 executive review.

Fees	Fees from 1 April 2019	Fees from 1 April 2018
Chairman	£280,000	£250,000
Base fee	£58,500	£57,000
Senior Independent Director	£10,000	£10,000
Audit Committee Chairman	£15,000	£15,000
Remuneration Committee Chairman	£10,000	£10,000
Committee Member	£nil	£nil

Percentage change in CEO remuneration

The table below shows the percentage change in the CEO's remuneration from the prior year compared to the average percentage change in remuneration for other employees. To provide a meaningful comparison, the analysis includes only salaried management employees and is based on a consistent set of employees.

	2019 CEO £000	2018 CEO £000	CEO % change	Other employees % change
Salary	653	625	4.5%	4.6%
Taxable benefits	33	33	0.0%	–
Annual bonus	980	835	17.4%	26.9%

Relative importance of spend on pay

The table below shows the percentage change in total employee pay expenditure and shareholder distributions (i.e. dividends and share buybacks) from the financial year ended 31 March 2018 to the financial year ended 31 March 2019.

	2019 £m	2018 £m	% change
Distribution to shareholders	60	56	7.1
Employee remuneration (gross)	347	304	14.1
Employee remuneration (pro-rated)	305	287	6.3

The Directors are proposing a final dividend for the year ended 31 March 2019 of 9.60p per share (2018: 8.97p).

Pro-rated employee remuneration represents a restatement of the prior year gross employee remuneration for the current year number of employees.

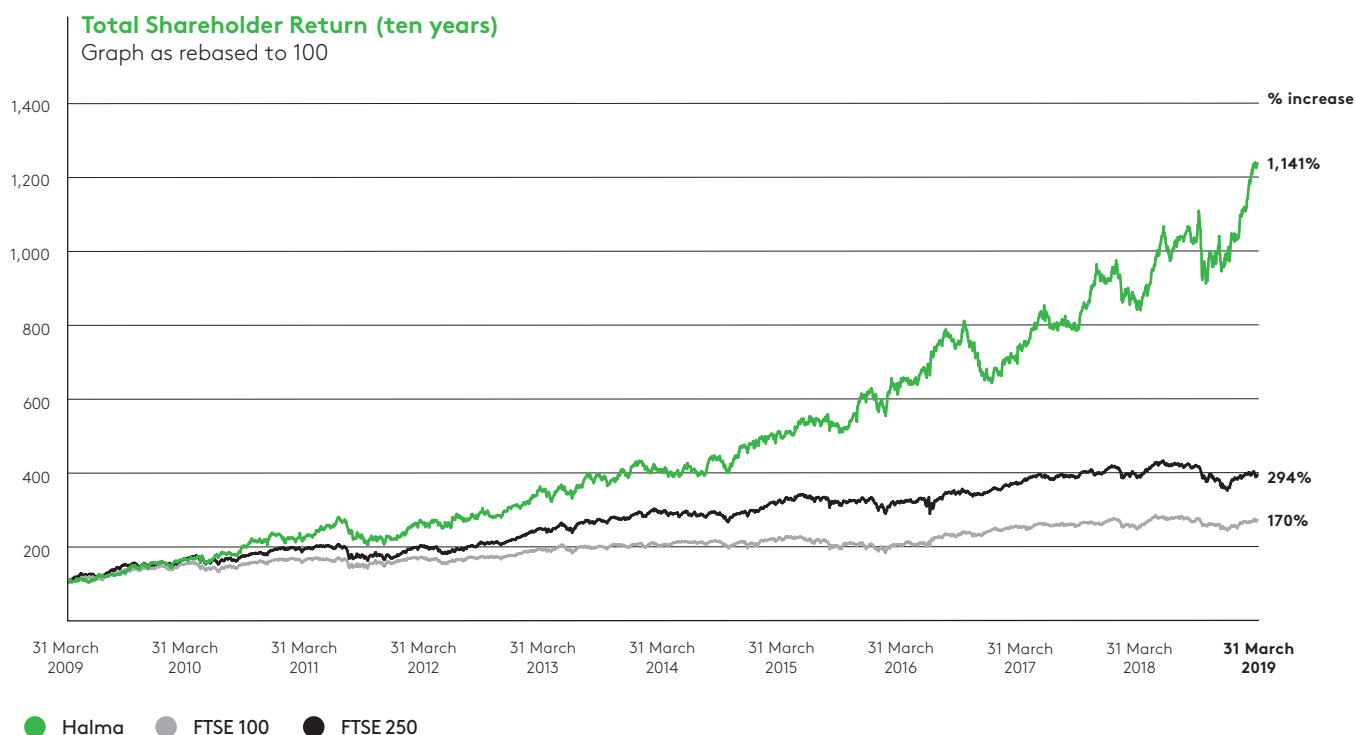
Annual Remuneration report

Continued

Pay-for-performance

The ten-year graph below shows the Company's TSR performance over the ten years to 31 March 2019 as compared to the FTSE 100 and FTSE 250 indices. Over the period indicated, the Company's TSR was 1141% compared to 170% for the FTSE 100 and 294% for the FTSE 250.

The FTSE 100 and FTSE 250 have been selected as broad market comparators, because the Company believes that the constituent companies of this index are the most appropriate for this comparison as they are affected by similar commercial and economic factors to Halma. Halma was a constituent on the FTSE 250 until December 2017 when it became a constituent of the FTSE 100. The table below the chart details the CEO's single figure remuneration and actual variable pay outcomes over the same period.



	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
CEO single figure remuneration (£000)	£1,472	£1,999	£1,715	£1,958	£1,543	£2,006	£2,423	£2,337	£3,429	£3,448
Annual bonus outcome (% of maximum)	19%	100%	40%	48%	37%	53%	53%	34%	89%	100%
PSP vesting outcome (% of maximum)	96%	100%	100%	98%	74%	78%	95%	92%	90%	90%

Directors' interests in Halma shares

The interests of the Directors in office at 31 March 2019 (and their connected family members) in the ordinary shares of the Company at the following dates were as follows:

	31 March 2019	31 March 2018
Paul Walker	30,000	30,000
Andrew Williams	608,885	565,473
Marc Ronchetti	553	314
Kevin Thompson	389,273*	389,273
Adam Meyers	343,480	338,480
Jennifer Ward	23,988	15,058
Daniela Barone Soares	2,473	2,473
Roy Twite	4,000	4,000
Tony Rice	16,939	16,939
Carole Cran	2,000	2,000
Jo Harlow	2,000	2,000

* As at 19 July 2018.

The executive Directors, excluding Jennifer Ward and Marc Ronchetti, each meet the guideline of holding Company shares to the value of at least two times salary. Jennifer and Marc will progressively build up their shareholding through annual share vestings. There are no other non-beneficial interests of Directors. There were no changes in Directors' interests from 1 April 2019 to 11 June 2019.

Details of Directors' interests in shares and options under Halma's long-term incentives are set out in the sections below.

Directors' interests in Halma share plans

Details of Directors' outstanding performance shares and deferred shares under the ESP and free shares under the SIP are outlined in the tables below.

Executive and Performance Share Plans		Date of grant	As at 1 April 2018	Granted/ (vested) in the year	Five-day average share price on grant (p)	As at 31 March 2019
Andrew Williams	PSP	31 July 15	160,547	(144,155)	745.2	–
	PSP	26 July 16	117,527		1038.4	117,527
	DSA	26 July 16	15,422	(15,422)	1038.4	–
	PSP	3 July 17	111,484		1118.0	111,484
	DSA	3 July 17	9,159		1118.0	9,159
	PSP	2 July 18		95,121	1369.2	95,121
	DSA	2 July 18		20,339	1369.2	20,339
Marc Ronchetti	PSP	23 Nov 16	12,668		994.6	12,668
	PSP	3 July 17	11,511		1118.0	11,511
	DSA	3 July 17	2,236		1118.0	2,236
	PSP	23 Nov 17	20,720		1293.4	20,720
	PSP	2 July 18		52,786	1369.2	52,786
	DSA	2 July 18		4,796	1369.2	4,796
Kevin Thompson	PSP	31 July 15	87,580	(77,776)	745.2	–
	PSP	26 July 16	64,200		1038.4	42,389
	DSA	26 July 16	9,870	(9,870)	1038.4	–
	PSP	3 July 17	60,724		1118.0	21,109
	DSA	3 July 17	5,730		1118.0	5,730
	DSA	2 July 18		12,691	1369.2	12,691
Adam Meyers	PSP	31 July 15	58,761	(52,761)	745.2	–
	PSP	26 July 16	45,918		1038.4	45,918
	DSA	26 July 16	10,600	(10,600)	1038.4	–
	PSP	3 July 17	50,300		1118.0	50,300
	DSA	3 July 17	7,135		1118.0	7,135
	PSP	2 July 18		43,342	1369.2	43,342
	DSA	2 July 18		3,997	1369.2	3,997
Jennifer Ward	PSP	31 July 15	31,757	(28,514)	745.2	–
	PSP	26 July 16	25,665		1038.4	25,665
	DSA	26 July 16	4,283	(4,283)	1038.4	–
	PSP	23 Nov 16	18,097		994.6	18,097
	PSP	3 July 17	40,733		1118.0	40,733
	DSA	3 July 17	3,280		1118.0	3,280
	PSP	2 July 18		34,797	1369.2	34,797
	DSA	2 July 18		8,295	1369.2	8,295

The balance of PSP awards that did not vest during the year have lapsed. The performance conditions attached to these awards described earlier in this report.

Annual Remuneration report

Continued

	Date of grant	As at 1 April 2018	Granted/ (withdrawn) in the year	Share price on award (p)	As at 31 March 2019
Share Incentive Plan					
Andrew Williams	>3 years	4,098		459.46	4,098
	1 Oct 16	343		1049.00	343
	1 Oct 17	322		1115.81	322
	1 Oct 18		239	1504.00	239
Marc Ronchetti	>3 years				–
	1 Oct 17	314		1115.81	314
	1 Oct 18		239	1504.00	239
Kevin Thompson	>3 years	4,151		458.00	4,151
	1 Oct 16	343		1049.00	343
	1 Oct 17		322	1115.81	322
Jennifer Ward	>3 years	1,041		656.57	1,041
	1 Oct 16	317		1049.00	317
	1 Oct 17	318		1115.81	318
	1 Oct 18		239	1504.00	239

The SIP shares are held in trust and become the employee's, subject to the rules of the plan, after three years. There are tax benefits for retaining the shares in the trust for at least five years from award date. Adam Meyers does not participate in the SIP as he is not UK-based.

There have been no variations to the terms and conditions for share awards during the financial year.

Directors' pensions

Andrew Williams is the only UK executive Director who is an in-service deferred member of the Halma Group Pension Plan (Plan). Kevin Thompson was also a deferred member of the Plan. This benefit is a funded final salary occupational pension plan registered with HMRC, providing a maximum pension of two thirds of final pensionable salary after 25 or more years' service at normal pension age (60). Up to 5 April 2006, final pensionable salary was the greatest salary of the last three complete tax years immediately before retirement or leaving service. From 6 April 2011, final pensionable salary was capped at £139,185 and is increased annually thereafter by CPI (£161,795 for 2019).

Bonuses and other fluctuating emoluments and benefits-in-kind are not pensionable nor subject to any pension supplement. The Plan also provides pensions in the event of early retirement through ill-health and dependants' pensions of one-half of the member's prospective pension. Where an executive has a form of pension protection, life cover is provided by a separate trust.

Early retirement pensions, currently possible from age 55 with the consent of the Company and the trustees of the Plan, are subject to actuarial reduction. Pensions in payment increase by 3% per annum for service up to 5 April 1997, by price inflation (subject to a maximum of 5%) through to 31 March 2007 and 3% thereafter.

The Company closed the Defined Benefit section to future accrual with effect from 1 December 2014 and, following a period of consultation, members were offered compensating benefits above those available to Defined Contribution members who had not been in the Defined Benefit section. In April 2014, Andrew Williams chose to cease future service accrual in the Plan in return for a pension supplement on his base salary. This supplement is equivalent to a 20% employer contribution plus an additional 6% compensatory payment, in line with the offer made to other members in that Defined Benefit section. Marc Ronchetti and Jennifer Ward were not members of the Defined Benefit section but are entitled to join the Defined Contribution section of the plan. Due to annual allowance and lifetime allowance restrictions, both Jennifer and Marc have opted to receive a pension supplement of 18.7% of salary, in lieu of the 20% employer contribution that the Company would otherwise pay into their pension.

Two Directors accrued benefits under the Company's defined benefit pension plan during the year as follows.

	Age at 31 March 2019	Years of pensionable service at 31 March 2019	Increase in accrued benefits £000	Increase in accrued benefits net of inflation £000	Accrued benefits at 31 March 2019 £000
Executive Director					
Andrew Williams	51	20	2	–	65
Kevin Thompson	59	18	2	–	134

Executive Director service contracts and exit payment policies

It is the Company's policy that executive Directors should have contracts with an indefinite term providing for a maximum of one year's notice. The details of the Directors' contracts are summarised in the table below. Contracts will be available for inspection at the AGM and throughout the year at the Company's registered office.

Executive Director	Date of service contract	Notice period
Andrew Williams	April 2003	One year
Marc Ronchetti	July 2018	One year
Kevin Thompson	April 2003	One year*
Adam Meyers	July 2008	One year
Jennifer Ward	January 2014	One year

* Kevin Thompson resigned as a Director with effect from 19 July 2018, and retired from the Company on 31 July 2018.

The Company's policy is to limit payments on cessation to pre-established contractual arrangements. In the event that the employment of an executive Director is terminated, any amount payable will be determined in accordance with the terms of the service contract between the Company and the employee, as well as the rules of any incentive plans. No predetermined amount is provided for in the Directors' contracts. The UK executive Director contracts enable the Company to pay up to one year's salary in lieu of notice, with no contractual entitlement to any other benefits, and, under the rules, the Remuneration Committee may determine the individual's leaving status for share plan vesting purposes.

If the financial year end has passed, any bonus earned is payable to the individual. Adam Meyers' service contract permits him to remain an employee for the entire period of notice enjoying any benefits related to employment. The share plan and bonus provisions are identical to the UK. Both contracts contain appropriate non-compete restrictions for a suitable period post-employment.

When considering termination payments under incentive schemes, the Committee reviews all potential incentive outcomes to ensure they are fair to both shareholders and participants. The table below summarises how the awards under the annual bonus and share plans are treated in specific circumstances under the rules of the relevant plan and the extent to which the Committee has discretion:

	Reason for leaving	Timing of payment/vesting	Calculation of payment/vesting
Annual bonus	Death, injury or disability, redundancy, retirement, or any other reasons the Committee may determine	After the end of the financial year, although the Committee has discretion to accelerate (e.g. in relation to death)	Performance against targets will be assessed at the end of the year in the normal way and any resulting bonus normally will be pro-rated for time served during the year
	All other reasons	No bonus is payable	–
Deferred bonus	Death, injury or disability, redundancy, retirement, or any other reasons the Committee may determine	On the second anniversary of the award	Awards vest in full
	All other reasons	On the second anniversary of the award (unless the Remuneration Committee determines otherwise)	Awards vest in full
Share Plans	Injury or disability, redundancy, or any other reason the Committee may, at its discretion, determine	On the third anniversary of the award	Awards will normally be pro-rated for time to the date of cessation of employment and performance metrics assessed as at the third anniversary
	Death	Immediately (unless otherwise determined by the Committee at its discretion)	Any outstanding awards normally will be pro-rated for time and performance up to the point of death
	All other reasons	Awards lapse	–

Annual Remuneration report

Continued

Pay-for-performance

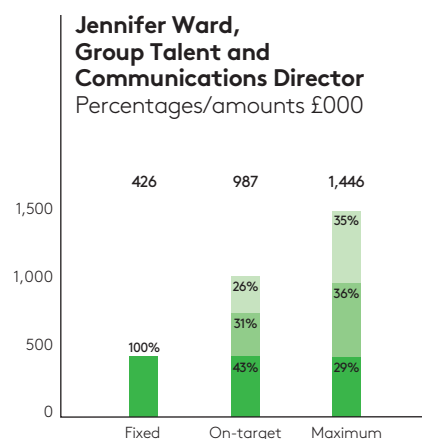
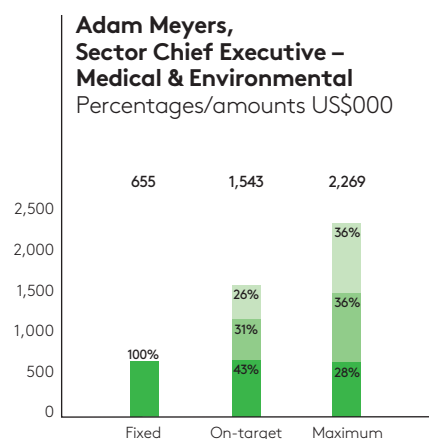
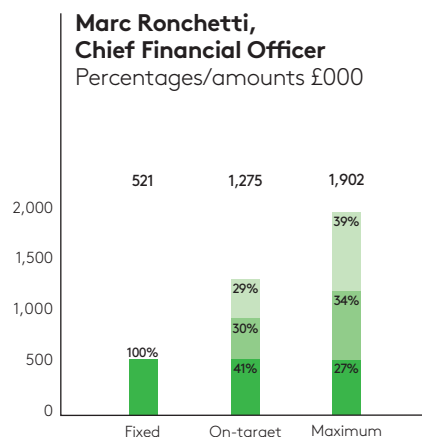
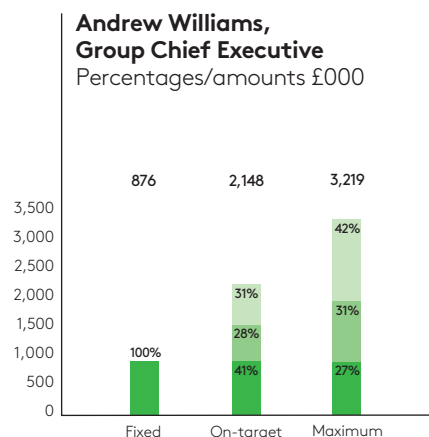
The following charts provide an estimate of the potential future rewards for executive Directors, and the potential split between different elements of pay, under three different performance scenarios: 'Fixed', 'On-target' and 'Maximum'.

Potential reward opportunities are based on Halma's remuneration policy, applied to salaries as at 1 April 2019. The projected values exclude the impact of any share price movements and dividend equivalents.

The 'Fixed' scenario shows base salary, pension and benefits only.

The 'On-target' scenario shows fixed remuneration as above, plus a target level of 60% of the maximum under the annual bonus and vesting of 50% of a single year's award under the ESP.

The 'Maximum' scenario reflects fixed remuneration, plus maximum level of annual bonus and ESP awards.



● Salary, pension and benefits ● Bonus ● Long term incentive

Non-executive Directors

Unless otherwise indicated, all NEDs have a specific three-year term of engagement, subject to annual re-election at the AGM, which may be renewed for up to two further three-year terms if both the Director and the Board agree. The remuneration of the Chairman and the NEDs is determined by the Committee and the Board respectively, in accordance with the remuneration policy approved by shareholders.

The contract in respect of the Chairman's services provides for termination, by either party, by giving not less than six months' notice.

The non-executive Directors have contracts in respect of their services, which can be terminated without compensation, by either party, by giving not less than three months' notice. Contracts are available for inspection at the AGM and throughout the year at the Company's registered office. Summary details of terms and notice periods for NEDs are included below.

Non-executive Director	Date of appointment	Notice period
Paul Walker	April 2013	6 months
Daniela Barone Soares	November 2011	3 months
Roy Twite	July 2014	3 months
Tony Rice	August 2014	3 months
Carole Cran	January 2016	3 months
Jo Harlow	October 2016	3 months

NEDs do not receive benefits from the Company and they are not eligible to join the Company's pension plan or participate in any incentive schemes. Any reasonable expenses that they incur in performing their duties are reimbursed by the Company.

Paul Walker's personal assistant is an employee of the Company.

Details of the policy on NED fees are set out in the table on pages 94 and 95.

NED recruitment

In recruiting a new Chairman or NED, the Committee will use the policy as set out in the table on pages 94 and 95.

Consideration of conditions elsewhere in the Group

The Committee considers the remuneration and employment conditions elsewhere in the Group when determining remuneration for executive Directors. However, the Committee does not currently consult specifically with employees on the executive remuneration policy.

Consideration of shareholder views

When determining remuneration, the Committee takes into account the views of our shareholders and 'best practice' guidelines set by shareholder representative bodies. As part of their consideration of the revised remuneration policy in 2018, the Committee consulted widely with the Company's major institutional shareholders and their representative bodies. The Committee always welcomes feedback from shareholders on the Company's remuneration policy. Detail on the votes received on the Remuneration Policy and Remuneration Report at the 2018 annual general meeting is provided on page 96.

External directorships

The Committee acknowledges that executive Directors may be invited to become independent non-executive Directors of other listed companies which have no business relationship with the Company and that these roles can broaden their experience and knowledge to Halma's benefit.

Executive Directors are permitted to accept one such appointment with the prior approval of the Chairman. Approval will only be given where the appointment does not present a conflict of interest with the Group's activities and the wider exposure gained will be beneficial to the development of the individual. Where fees are payable in respect of such appointments, these are retained by the executive Director.

Andrew Williams is a non-executive Director of Capita plc. Fees paid to him during the year to 31 March 2019 were £64,500 (2018: £64,500). Kevin Thompson is a non-executive Director of RPC Group. Fees paid to him during the year prior to his resignation as a Director of Halma on 19 July 2018 were £15,000 (2018: £32,000).

Directors' report

The Directors present their report on the affairs of the Company, together with the audited financial statements and Independent Auditors' Report, for the year ended 31 March 2019.

Activities

The Company's principal activity is to act as a holding company. The Company is incorporated and domiciled in England and Wales. A list of its subsidiary companies is set out on pages 188 to 192. Subsidiaries of the Company have established branches in a number of different countries in which they operate. The information set out below, which forms part of this Directors' Report and is incorporated by reference, can be located in the Strategic Report on pages 2 to 67:

- Future developments in the Group's business.
- Activities of the Group in the field of research and development.
- Environmental matters, including greenhouse gas emissions (included in the Sustainability review on pages 48 to 53).

Dividends

The Directors recommend a final dividend of 9.60p per share and, if approved, this dividend will be paid on 14 August 2019 to ordinary shareholders on the register at the close of business on 12 July 2019. Together with the interim dividend of 6.11p per share already paid, this will make a total dividend of 15.71p (2018: 14.68p) per share for the financial year.

Political donations

The Group did not make any political donations or incur any political expenditure during the year.

Directors and directors' interests

The directors of the Company as at the date of this report, together with their biographical details, are shown on pages 70 and 71. During the year, Kevin Thompson retired as a Director on 19 July 2018.

The Remuneration Report on pages 89 to 107 provides details of the interests of each director in the shares of the Company.

Indemnities

The Company has agreed to indemnify, to the extent permitted by law, each of the Company's Directors against any liability incurred in respect of acts or omissions arising in the course of their office.

Financial risk management objectives and policies

Disclosures relating to financial risk management objectives and policies are set out in note 27 to the financial statements and along with exposures relating to price risk, credit risk, liquidity risk and cash flow risk.

Share capital and capital structure

Details of the share capital, together with details of the movements in the share capital during the year, are shown in note 23 to the accounts. The Company has one class of ordinary shares which carry no right to fixed income. Each share carries the right to one vote at general meetings of the Company.

There are no other classes of share capital. There are no specific restrictions on the size of a holding nor on the transfer of shares, with both governed by the general provisions of the Company's Articles of Association and prevailing legislation. No person has any special rights of control over the Company's share capital and all issued shares are fully paid.

Rights and obligations of ordinary shares

Holders of ordinary shares are entitled to attend and speak at general meetings of the Company and to appoint one or more proxies or, if the holder of shares is a corporation, one or more corporate representatives. On a show of hands, each holder of ordinary shares who (being an individual) is present in person or (being a corporation) is present by a duly appointed corporate representative, not themselves being a member, shall have one vote, as shall proxies (unless they are appointed by more than one holder, in which case they may vote both for and against the resolution in accordance with the holders' instructions). On a poll, every holder of ordinary shares present in person or by proxy shall have one vote for every share of which they are the holder. Electronic and paper proxy appointments and voting instructions must be received not later than 48 hours before the meeting. A holder of ordinary shares can lose the entitlement to vote at general meetings where that holder has been

served with a disclosure notice and has failed to provide the Company with information concerning interests held in those shares. Except as set out above and as permitted under applicable statutes, there are no limitations on voting rights of holders of a given percentage, number of votes or deadlines for exercising voting rights.

The Company has established an Employee Benefit Trust and the trustee has waived its right to vote and its right to all dividends.

Restrictions on transfer of shares

The Directors may refuse to register a transfer of a certificated share that is not fully paid, provided that the refusal does not prevent dealings in shares in the Company from taking place on an open and proper basis or, where the Company has a lien over that share. The Directors may also refuse to register a transfer of a certificated share unless the instrument of transfer is: (i) lodged, duly stamped (if necessary), at the registered office of the Company or any other place as the Board may decide accompanied by the certificate for the share(s) to be transferred and/or such other evidence as the Directors may reasonably require to show the right of the transferor to make the transfer; (ii) in respect of only one class of shares; (iii) in favour of a person who is not a minor, infant, bankrupt or a person of unsound mind; or (iv) in favour of not more than four persons jointly.

Transfers of uncertificated shares must be carried out using CREST and the Directors can refuse to register a transfer of an uncertificated share in accordance with the regulations governing the operation of CREST.

There are no other restrictions on the transfer of ordinary shares in the Company except certain restrictions which may from time to time be imposed by laws and regulations (for example insider trading laws); or where a shareholder with at least a 0.25% interest in the Company's certificated shares has been served with a disclosure notice and has failed to provide the Company with information concerning interests in those shares. The Directors are not aware of any agreements between holders of the Company's shares that may result in restrictions on the transfer of securities or on voting rights.

Employees

Details of employee involvement and engagement are included on pages 44 and 45. Aligning the interests of employees in the Company's performance is achieved through a variety of share and bonus schemes.

The Company gives full and fair consideration to applications of employment from disabled people. Training, career development and promotion opportunities are equally applied for all our employees, regardless of disability. In the event of an existing employee becoming disabled, every effort will be made to ensure that their employment with the Group continues and that appropriate support is provided.

Appointment and replacement of directors

With regard to the appointment and replacement of Directors, the Company is governed by its Articles of Association, the UK Corporate Governance Code, the Companies Act and related legislation. Directors can be appointed by the Company by ordinary resolution at a general meeting or by the Board. If a Director is appointed by the Board, such a Director will hold office until the next Annual General Meeting (AGM) and shall then be eligible for election at that meeting. In accordance with the UK Corporate Governance Code each of the Directors, being eligible, will offer themselves for election or re-election at this year's AGM. The Company can remove a Director from office, including by passing a special resolution or by notice being given by all the other Directors. The Articles themselves may be amended by special resolution of the shareholders.

Powers of Directors

The powers of Directors are set out in the Articles of Association and a description of the matters reserved for decision by the Board is summarised in the Corporate Governance Report on page 76.

Contracts of significance and change of control

There are a number of agreements that take effect, alter or terminate upon a change of control of the Company, principally bank loan agreements, private placement debt and employee share plans.

There are two significant agreements, in terms of the likely impact on the business of the Group as a whole, containing such provisions:

- The £550m syndicated Revolving Credit Facility which, if within 10 days of a change of control notice to the loan agent, can result in 30 days' notice being given to the Company by any Lender, for all amounts outstanding to that Lender, to be immediately due and payable, at which time the commitment of that Lender will be cancelled. If all of the Lenders give this notice the whole facility would be cancelled.
- The US\$250m US Private Placement Note Purchase Agreement under which, in the event of a change of control, the Company is required to make an offer to the holders of the US Private Placement notes to prepay the principal amount of the notes together with interest accrued.

The Group has contractual arrangements with a wide range of suppliers. The Group is not unduly dependent upon contractual arrangements with any particular customer. Whilst the loss or disruption to certain of these arrangements could temporarily affect the Group's business, none is considered to be essential.

The Company's share plans contain provisions as a result of which awards may vest and become exercisable on a change of control of the Company in accordance with the rules of the plans.

The Directors are not aware of any agreements between the Company, its Directors or employees that provide for compensation for loss of office or employment that occurs because of a takeover bid.

Allotment authority

Under the Companies Act 2006 the Directors may only allot shares if authorised by shareholders to do so. At the AGM an ordinary resolution will be proposed which, if passed, will authorise the Directors to allot and issue shares up to an aggregate nominal value of £9,400,000 (up to 94,000,000 ordinary shares of 10p each), being just less than one quarter of the issued share capital of the Company (excluding treasury shares) as at 11 June 2019 (the latest practicable date prior to the publication of the Notice of Meeting).

In accordance with the Directors' stated intention to seek annual renewal, the authority will expire at the earlier of the conclusion of the AGM of the Company in 2020 and 31 August 2020. Passing this

resolution will give the Directors flexibility to act in the best interests of shareholders, when opportunities arise, by issuing new shares.

As at 11 June 2019, the Company had 379,645,332 ordinary shares of 10p each in issue.

The Companies Act 2006 also requires that, if the Company issues new shares for cash or sells any treasury shares, it must first offer them to existing shareholders in proportion to their current holdings. At the AGM a special resolution will be proposed which, if passed, will authorise the Directors to issue a limited number of shares for cash and/or sell treasury shares without offering them to shareholders first.

The authority is for an aggregate nominal amount of up to 10% of the aggregate nominal value of the issued share capital of the Company as at 11 June 2019 of £3,780,000. The resolution will also modify statutory pre-emption rights to deal with legal, regulatory or practical problems that may arise on a rights issue or other pre-emptive offer or issue. The authority will expire at the same time as the resolution conferring authority on the Directors to allot shares. The Directors consider this authority necessary in order to give them flexibility to deal with opportunities as they arise, subject to the restrictions contained in the resolution. There are no present plans to issue shares, other than the release of treasury shares under share plans previously approved at general meeting.

Purchase of the Company's own shares

The Company was authorised at the 2018 AGM to purchase up to 37,900,000 of its own 10p ordinary shares in the market. This authority expires at the conclusion of the 2019 AGM. The Company did not purchase any of its own shares under this authority during the year. In accordance with the Directors' stated intention to seek annual renewal a special resolution will be proposed at the AGM to renew this authority until the earlier of the end of the Company's 2020 AGM and 31 August 2020, in respect of up to 37,900,000 ordinary shares, which is approximately 10% of the Company's issued share capital (excluding treasury shares) as at 11 June 2019.

Annual General Meeting

The Company's AGM will be held on 25 July 2019. The Notice of Meeting, together with an explanation of the proposed resolutions, is enclosed with this Annual Report and Accounts and is also available on the Company's website at www.halma.com.

Directors' report

Continued

Substantial shareholdings

As at 31 March 2019, the Company had been notified, in accordance with DTR 5 of the Disclosure Guidance and Transparency Rules, of the following interests in voting rights in its shares.

	31 March 2019		
	No. of ordinary shares	Percentage of voting rights and issued share capital	Nature of holdings
The Capital Group Companies, Inc.	39,990,757	10.27	Indirect
Massachusetts Financial Services Company	37,848,103	9.98	Indirect
Sprucegrove Investment Management Ltd	18,776,510	4.96	Indirect
Mawer Investment Management Ltd	18,462,298	4.86	Indirect
BlackRock, Inc.	14,646,007	3.87	Indirect

During the period between 31 March 2019 and 11 June 2019 (the latest practicable date prior to the publication of the Notice of Meeting) the Company received the following notifications under DTR 5 of the Disclosure Guidance and Transparency Rules.

	No. of ordinary shares	Percentage of voting rights and issued share capital	Nature of holdings
The Capital Group Companies, Inc	41,981,754	11.06	Indirect
BlackRock, Inc.	23,932,882	6.30	Indirect

Independent auditors

Each of the persons who is a Director at the date of approval of this Annual Report and Accounts confirms that:

- So far as the Director is aware, there is no relevant audit information of which the Company's Auditor is unaware.
- The Director has taken all the steps that he/she ought to have taken as a director in order to make himself/herself aware of any relevant audit information and to establish that the Company's Auditor is aware of that information.

This confirmation is given and should be interpreted in accordance with the provisions of Section 418 of the Companies Act 2006.

PricewaterhouseCoopers LLP (PwC) has expressed its willingness to continue in office as Independent Auditor and a resolution to appoint PwC will be proposed at the forthcoming AGM.

Disclosure required under the Listing Rules and the Disclosure Guidance and Transparency Rules

For the purposes of compliance with DTR 4.1.5 R(2), the required content of the management report can be found in this Directors' Report and the Strategic Report, including the sections of the Annual Report and Accounts incorporated by reference.

Disclosures required by LR 9.8.4 R can be located as follows:

	Page
Details of long-term incentives	161 to 162
Contracts of significance	109
Shareholder waiver of dividends	108
Shareholder waiver of future dividends	108

Corporate Governance Statement

The Company's statement on corporate governance can be found in the Corporate Governance Report on page 68. The Corporate Governance Report forms part of this Directors' Report and is incorporated into it by cross-reference.

On behalf of the Board

Mark Jenkins

Company Secretary

11 June 2019

Directors' responsibilities

The Directors are responsible for preparing the Annual Report and the financial statements in accordance with applicable law and regulation.

Company law requires the Directors to prepare financial statements for each financial year. Under that law the Directors have prepared the Group financial statements in accordance with International Financial Reporting Standards (IFRSs) as adopted by the European Union and company financial statements in accordance with United Kingdom Generally Accepted Accounting Practice (United Kingdom Accounting Standards, comprising FRS 101 "Reduced Disclosure Framework" and applicable law). Under company law the Directors must not approve the financial statements unless they are satisfied that they give a true and fair view of the state of affairs of the Group and Company and of the profit or loss of the Group and Company for that period. In preparing the financial statements, the Directors are required to:

- Select suitable accounting policies and then apply them consistently.
- State whether applicable IFRSs as adopted by the European Union have been followed for the Group financial statements and United Kingdom Accounting Standards, comprising FRS 101 have been followed for the Company financial statements, subject to any material departures disclosed and explained in the financial statements.
- Make judgements and accounting estimates that are reasonable and prudent.
- Prepare the financial statements on the going concern basis unless it is inappropriate to presume that the Group and Company will continue in business.

The Directors are also responsible for safeguarding the assets of the Group and Company and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

The Directors are responsible for keeping adequate accounting records that are sufficient to show and explain the Group and Company's transactions and disclose with reasonable accuracy at any time the financial position of the Group and Company and enable them to ensure that the financial statements and the Directors' Remuneration Report comply with the Companies Act 2006 and, as regards the Group financial statements, Article 4 of the IAS Regulation.

The Directors are responsible for the maintenance and integrity of the Company's website. Legislation in the United Kingdom governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

Directors' confirmations

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

Each of the Directors, whose names and functions are listed on pages 70 and 71 confirm that, to the best of their knowledge:

- The Company financial statements, which have been prepared in accordance with United Kingdom Generally Accepted Accounting Practice (United Kingdom Accounting Standards, comprising FRS 101 "Reduced Disclosure Framework" and applicable law), give a true and fair view of the assets, liabilities, financial position and profit of the Company.
- The Group financial statements, which have been prepared in accordance with IFRSs as adopted by the European Union, give a true and fair view of the assets, liabilities, financial position and profit of the Group.
- The Directors' Report includes a fair review of the development and performance of the business and the position of the Group and Company, together with a description of the principal risks and uncertainties that it faces.

In the case of each Director in office at the date the Directors' Report is approved:

- So far as the Director is aware, there is no relevant audit information of which the Group and Company's auditors are unaware.
- They have taken all the steps that they ought to have taken as a Director in order to make themselves aware of any relevant audit information and to establish that the Group and Company's auditors are aware of that information.

On behalf of the Board

Andrew Williams

Group Chief Executive

Marc Ronchetti

Chief Financial Officer

11 June 2019

Independent auditors' report to the members of Halma plc

Report on the audit of the financial statements

Opinion

In our opinion:

- Halma plc's Group financial statements and Company financial statements (the "financial statements") give a true and fair view of the state of the Group's and of the Company's affairs as at 31 March 2019 and of the Group's profit and cash flows for the year then ended;
- the Group financial statements have been properly prepared in accordance with International Financial Reporting Standards (IFRSs) as adopted by the European Union;
- the Company financial statements have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice (United Kingdom Accounting Standards, comprising FRS 101 "Reduced Disclosure Framework", and applicable law); and
- the financial statements have been prepared in accordance with the requirements of the Companies Act 2006 and, as regards the Group financial statements, Article 4 of the IAS Regulation.

We have audited the financial statements, included within the Annual Report and Accounts (the "Annual Report"), which comprise: the consolidated and company balance sheets as at 31 March 2019; the consolidated income statement and consolidated statement of comprehensive income and expenditure, the consolidated cash flow statement, and the consolidated and Company statements of changes in equity for the 12 month period then ended; the Statement of accounting policies and the notes to the financial statements.

Our opinion is consistent with our reporting to the Audit Committee.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) ("ISAs (UK)") and applicable law. Our responsibilities under ISAs (UK) are further described in the Auditors' responsibilities for the audit of the financial statements section of our report. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Independence

We remained independent of the Group in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, which includes the FRC's Ethical Standard, as applicable to listed public interest entities, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

To the best of our knowledge and belief, we declare that non-audit services prohibited by the FRC's Ethical Standard were not provided to the Group or the Company.

Other than those disclosed in note 6 to the financial statements, we have provided no non-audit services to the Group or the Company in the period from 1 April 2018 to 31 March 2019.

Our audit approach

Overview



- Overall Group materiality: £12.3 million (2018: £10.6 million), based on 5% of profit before tax before adjustments.
 - Overall Company materiality: £9.3 million (2018: £9.5 million), based on 1% of total assets.
-
- There were no significant components within the Group.
 - We performed audit procedures over 50 reporting components in the Group.
 - This provided coverage of 69% revenue, 73% profit before tax, and 87% net assets.
-
- Impairment of goodwill and other intangibles (Group).
 - Acquisition accounting (Group and Company).
 - Accounting for the liabilities associated with defined benefit pension schemes (Group and Company).

The scope of our audit

As part of designing our audit, we determined materiality and assessed the risks of material misstatement in the financial statements.

Capability of the audit in detecting irregularities, including fraud

Based on our understanding of the Group and industry, we identified that the principal risks of non-compliance with laws and regulations related to The Listing Rules and UK and US tax legislation, pensions legislation, employment regulation, health and safety regulation and equivalent local laws and regulations applicable to reporting component teams, and we considered the extent to which non-compliance might have a material effect on the financial statements. We also considered those laws and regulations that have a direct impact on the preparation of the financial statements such as the Companies Act 2006. We evaluated management's incentives and opportunities for fraudulent manipulation of the financial statements (including the risk of override of controls), and determined that the principal risks were related to posting inappropriate journal entries to increase revenue or reduce expenditure, and management bias in accounting estimates. The Group engagement team shared this risk assessment with the component auditors so that they could include appropriate audit procedures in response to such risks in their work. Audit procedures performed by the Group engagement team and/or component auditors included:

- Discussions with management, internal audit and the Group's legal advisors, including consideration of known or suspected instances of non-compliance with laws and regulation and fraud;
- Review of reporting component auditors' work;
- Reading key correspondence from the Financial Reporting Council;
- Challenging assumptions and judgements made by management in their significant accounting estimates that involved making assumptions and considering future events that are inherently uncertain. In particular, in relation to impairment of intangible fixed assets, the valuation of defined benefit pension scheme liabilities and the valuation of acquisition intangibles and contingent consideration (see related key audit matters below);
- Identifying and testing journal entries, in particular any journal entries posted with unusual account combinations and crediting the Income Statement or those posted by unexpected users; and
- Testing all material consolidation adjustments to ensure these were appropriate in nature and magnitude.

There are inherent limitations in the audit procedures described above and the further removed non-compliance with laws and regulations is from the events and transactions reflected in the financial statements, the less likely we would become aware of it. Also, the risk of not detecting a material misstatement due to fraud is higher than the risk of not detecting one resulting from error, as fraud may involve deliberate concealment by, for example, forgery or intentional misrepresentations, or through collusion.

Key audit matters

Key audit matters are those matters that, in the auditors' professional judgement, were of most significance in the audit of the financial statements of the current period and include the most significant assessed risks of material misstatement (whether or not due to fraud) identified by the auditors, including those which had the greatest effect on: the overall audit strategy; the allocation of resources in the audit; and directing the efforts of the engagement team. These matters, and any comments we make on the results of our procedures thereon, were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters. This is not a complete list of all risks identified by our audit.

Independent auditors' report to the members of Halma plc

Continued

Key audit matter	How our audit addressed the key audit matter
Impairment of goodwill and other intangibles (Group) The Group holds significant goodwill and other intangible assets balances of £694.0m (2018: £632.1m) and £245.2m (2018: £234.6m) respectively as at 31 March 2019. The valuation of these assets is judgmental and there is a risk they may be impaired. The increase in value during the year is primarily a result of four new acquisitions. Under IAS 36 'Impairment of Assets', goodwill must be tested for impairment at least annually. Management have performed an annual impairment review for each of the 11 CGU groups, which is the lowest level at which goodwill is monitored by the Group. The impairment reviews performed by management contain a number of significant judgements and estimates including the allocation of new acquisitions to existing or new CGU groupings, revenue growth rates and discount rates. A change in these assumptions could result in a material change in the valuation of the assets, and as a result there is a risk that goodwill and other intangible assets balances are no longer deemed to be recoverable and hence should be impaired. The assumptions used are more sensitive for the Sensor Technology CGU group which consists of one principal operating entity (CenTrak) where recoverability is more reliant on higher short-term growth rates as disclosed in note 11 to the accounts. Refer to Accounting Policies note and note 11 for management's disclosures of the relevant judgements and estimates involved in assessing these assets for impairment.	— We have assessed the methodology and approach applied by management in performing their impairment reviews, including the identification of CGU groups and the allocation of CGUs into the relevant groups, and ensured this is consistent with the requirements of IAS 36 'Impairment of Assets'. — We have obtained management's annual impairment assessment for all 11 CGU groups and ensured the calculations were mathematically accurate and the methodology used was in line with the requirements of IAS 36 'Impairment of Assets'. — We have evaluated the year 1 cash flows and assessed the short- and long-term growth rates applied to them to determine value in use. In doing this, we compared the cash flow forecasts to the latest Board approved budgets and compared prior year budget to actual data, in order to assess the quality of the forecasting process. We have tested the growth rate assumptions by comparing them to management's strategic plans, previous sector growth rates, and to available third party published economic data. — We have tested the discount rate applied by management by reviewing management's methodology and by testing the data inputs and the rates used in management's calculation back to source data. For the Sensor Technology CGU group which is more sensitive to the discount rates used, we have also independently recalculated the WACC rate. — We have recalculated management's own sensitivity analysis of key assumptions and applied our own independent sensitivities by replacing key assumptions with alternative scenarios to ascertain the extent of change in those assumptions that, either individually or collectively, would be required for the assets to be impaired. Our sensitivity testing also included the application of reasonable alternative scenarios in order to assess for any potential material impairment under such conditions. — In respect of the Sensor Technology CGU group, we have performed a number of sensitivity assessments based on alternative, reasonably possible scenarios. These include reducing the budgeted revenues, reducing the growth rates, adjusting the discount rate and applying the terminal growth rate after year three rather than year five. Some of these changes would cause the CGU group's carrying amount to exceed its recoverable amount. Accordingly, additional disclosure has been provided in note 11. — We have reviewed the adequacy of disclosures made in the financial statements and assessed compliance with IAS 36. Based on our work summarised above, we have concluded that goodwill and other intangible assets balances are not impaired at 31 March 2019 and that appropriate disclosures have been made in the financial statements, including additional disclosures on the Sensor Technology CGU group to reflect that a reasonably possible change in a key assumption could lead to an impairment.

Key audit matter

Acquisition accounting (Group)

During the year ended 31 March 2019, the Group completed four business acquisitions with a combined total consideration of £71.7m net of cash acquired (including contingent consideration of £8.3m). There is a risk of material misstatement to the financial statements from the application of IFRS 3 'Business combinations', and the related valuation of the assets acquired, the liabilities assumed and the consideration paid, including contingent consideration.

Management engaged third party valuation experts to assist them in the valuation of acquired intangible assets. There is a risk the separate intangible assets acquired are not appropriately valued by management as a result of the methodology and assumptions used.

There is further potential for material misstatement in the calculation of the fair value of contingent consideration on new and historical acquisitions. Judgement has been applied by management in establishing their best estimate of the liability in respect of each of these new and historical acquisitions based on risk weighted assessments of the forecast performance of each business.

Refer to Accounting Policies note and notes 20, 25 and 27 for management's disclosures of the relevant judgements and estimates.

How our audit addressed the key audit matter

- We have obtained and read key documentation and agreements relating to the four business acquisitions in the period together with obtaining the acquisition models and the final purchase price allocations performed by management's experts and agree with the identification of trade names, customer relationships and technology as separately identified intangible assets.
- We performed detailed testing of the opening balance sheet and related fair value adjustments for each acquisition based on materiality.
- With respect to the audit of the acquired intangible assets, we utilised our internal valuation experts to evaluate the methodology and assumptions used by management's experts, including assessing discount rates, royalty rates and attrition rates. We challenged the key assumptions used in these areas and performed sensitivity analysis where rates differ from those we might typically use, noting no material differences. We also assessed the useful lives which have been assigned to the acquired intangible assets and consider these to be reasonable based on the nature of the assets and the period over which benefits are expected to flow to the Group.
- Regarding contingent consideration on new acquisitions, we agreed the contract terms used in the deferred contingent consideration calculation for new acquisitions to the signed sale and purchase agreements. We assessed the methodology used by management to determine the estimate of future deferred contingent consideration and considered the underlying data used in each of these calculations, assessing this against post-acquisition results. These estimates can be materially impacted by the profit out-turn for the entities and the sensitivity of these estimates increases where significant profit multiples are agreed as part of the contingent consideration agreement. Management uses a methodology with weightings applied to different scenarios to estimate the potential consideration payable. Consequently, we performed sensitivity analysis to run additional weighting scenarios to conclude whether the contingent consideration recorded by management for each acquisition is materially appropriate in light of what are considered to be the most likely scenarios.
- In relation to historical acquisitions with outstanding contingent consideration, we have reviewed management's forecasts and the weightings applied to each scenario. We have also reviewed actual trading in the post-acquisition period and considered other relevant facts such as disputes with vendors. Given the sensitivity of these contingent consideration estimates to changes in assumptions we concur with the decision to include additional disclosures surrounding and the range of possible outcomes.
- We have reviewed the disclosures included in note 25 of the Annual Report and agree that these are consistent with our audit work performed and the disclosure requirements of IFRS 3.

Based on the work done, as summarised above, we have concluded the Group's acquisition accounting is materially appropriate and the relevant judgements and estimates have been appropriately disclosed in the financial statements.

Independent auditors' report to the members of Halma plc

Continued

Key audit matter	How our audit addressed the key audit matter
Accounting for the liabilities associated with defined benefit pension schemes (Group and Company) A defined benefit pension liability of £39.2m (2018: £53.9m) has been recorded on the balance sheet at 31 March 2019 in respect of Group schemes. As a result of the quantum of this liability and the level of judgement involved in calculating the closing liability, there is an increased risk of material misstatement. Whilst management utilises the service of third party actuarial advisors to determine their key assumptions, there is a risk that the discount rate, rate of inflation and mortality assumptions used in the calculation are inappropriate. Refer to Accounting Policies note and note 29 for management's disclosures of the relevant judgements and estimates.	— We obtained the IAS 19 actuarial valuations for each material pension scheme as prepared by management's experts and agreed the project unit methodology used to be appropriate. — We used our internal actuarial experts to assess the appropriateness of the significant assumptions used in determining the defined benefit pension liabilities including the discount rate, RPI and CPI inflation assumptions and mortality assumptions. Specifically, we ensured these fell within an acceptable range on benchmarking these against our internally accepted actuarial assumptions and noted no outliers. — We assessed the appropriateness and adequacy of the disclosures in respect of the defined benefit pension liability in note 29 of the Annual Report and agree these to be satisfactory and aligned to the requirements of IAS 19. Based on the work done, as summarised above, we have concluded the Group's defined benefit pension liability accounting is appropriate and the relevant judgements and estimates have been disclosed in the financial statements.

How we tailored the audit scope

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

The Group is split into four sectors being Process Safety, Infrastructure Safety, Environmental & Analysis and Medical. Each sector consists of a number of businesses spread globally across more than 20 countries. The businesses are further disaggregated into 203 reporting components within the consolidation.

We did not identify any individually significant components within the Group, with no single component providing more than 10% of the Group's external revenue or profit before taxation before adjustments. We determined the most effective approach to scoping was to perform full scope procedures over 34 reporting components where statutory audits are also required in UK, France, Germany, Belgium, Switzerland, China, Singapore, Spain and Italy, together with a further two reporting components in China and one in Spain. In addition, specified audit procedures were performed over all material balances for a further 11 components in the United States and one entity in Belgium. Additional audit procedures were performed in relation to the component relating to consolidation adjustments. This approach ensured that appropriate audit coverage has been obtained over all financial statement line items.

Where work was performed by component auditors, we determined the appropriate level of involvement we needed to have in that audit work to ensure we could conclude that sufficient appropriate audit evidence had been obtained for the Group financial statements as a whole. We issued written instructions to all component auditors and had regular communications with them throughout the audit cycle. This included a meeting with each component team and review of all significant matters reported.

In addition, the Group engagement partner has visited a number of sites in China, the US and UK, including meeting with local audit teams and local management as part of these visits.

Based on the detailed audit work performed across the Group, we have gained coverage of 69% of total revenue, 73% of profit before tax, and 87% of net assets.

Materiality

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

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

	Group financial statements	Company financial statements
Overall materiality	£12.3 million (2018: £10.6 million).	£9.3 million (2018: £9.5 million).
How we determined it	5% of profit before tax before adjustments.	1% of total assets.
Rationale for benchmark applied	Based on the benchmarks used in the annual report, profit before tax before adjustments is the primary measure used by the shareholders in assessing the underlying performance of the Group. This benchmark will exclude the impact of adjustments in respect of amortisation and impairment of acquired intangible assets, acquisition items, significant restructuring costs, profit or loss on disposal of operations and the effect of equalisation of pension benefits for men and women in the defined benefit plans.	We believe that a total asset benchmark is appropriate given that the Company does not generate revenues of its own.

For each component in the scope of our Group audit, we allocated a materiality that is less than our overall Group materiality. The range of materiality allocated across components was between £0.1 million and £2.6 million. Certain components were audited to a local statutory audit materiality that was also less than our overall Group materiality.

We agreed with the Audit Committee that we would report to them misstatements identified during our audit above £610,000 (Group audit) (2018: £500,000) and £610,000 (Company audit) (2018: £500,000) as well as misstatements below those amounts that, in our view, warranted reporting for qualitative reasons.

Going concern

In accordance with ISAs (UK) we report as follows:

Reporting obligation	Outcome
We are required to report if we have anything material to add or draw attention to in respect of the Directors' statement in the financial statements about whether the Directors considered it appropriate to adopt the going concern basis of accounting in preparing the financial statements and the Directors' identification of any material uncertainties to the Group's and the Company's ability to continue as a going concern over a period of at least 12 months from the date of approval of the financial statements.	We have nothing material to add or to draw attention to. However, because not all future events or conditions can be predicted, this statement is not a guarantee as to the Group's and Company's ability to continue as a going concern. For example, the terms on which the United Kingdom may withdraw from the European Union are not clear, and it is difficult to evaluate all of the potential implications on the Group's trade, customers, suppliers and the wider economy.
We are required to report if the Directors' statement relating to Going Concern in accordance with Listing Rule 9.8.6R(3) is materially inconsistent with our knowledge obtained in the audit.	We have nothing to report.

Reporting on other information

The other information comprises all of the information in the Annual Report other than the financial statements and our auditors' report thereon. The Directors are responsible for the other information. Our opinion on the financial statements does not cover the other information and, accordingly, we do not express an audit opinion or, except to the extent otherwise explicitly stated in this report, any form of assurance thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. If we identify an apparent material inconsistency or material misstatement, we are required to perform procedures to conclude whether there is a material misstatement of the financial statements or a material misstatement of the other information. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report based on these responsibilities.

With respect to the Strategic Report and Directors' Report, we also considered whether the disclosures required by the UK Companies Act 2006 have been included.

Based on the responsibilities described above and our work undertaken in the course of the audit, the Companies Act 2006 (CA06), ISAs (UK) and the Listing Rules of the Financial Conduct Authority (FCA) require us also to report certain opinions and matters as described below (required by ISAs (UK) unless otherwise stated).

Independent auditors' report to the members of Halma plc continued

Continued

Strategic Report and Directors' Report

In our opinion, based on the work undertaken in the course of the audit, the information given in the Strategic Report and Directors' Report for the year ended 31 March 2019 is consistent with the financial statements and has been prepared in accordance with applicable legal requirements. (CA06)

In light of the knowledge and understanding of the Group and Company and their environment obtained in the course of the audit, we did not identify any material misstatements in the Strategic Report and Directors' Report. (CA06)

The Directors' assessment of the prospects of the Group and of the principal risks that would threaten the solvency or liquidity of the Group

We have nothing material to add or draw attention to regarding:

- The Directors' confirmation on page 83 of the Annual Report that they have carried out a robust assessment of the principal risks facing the Group, including those that would threaten its business model, future performance, solvency or liquidity.
- The disclosures in the Annual Report that describe those risks and explain how they are being managed or mitigated.
- The Directors' explanation on page 83 of the Annual Report as to how they have assessed the prospects of the Group, over what period they have done so and why they consider that period to be appropriate, and their statement as to whether they have a reasonable expectation that the Group will be able to continue in operation and meet its liabilities as they fall due over the period of their assessment, including any related disclosures drawing attention to any necessary qualifications or assumptions.

We have nothing to report having performed a review of the Directors' statement that they have carried out a robust assessment of the principal risks facing the Group and statement in relation to the longer-term viability of the Group. Our review was substantially less in scope than an audit and only consisted of making inquiries and considering the Directors' process supporting their statements; checking that the statements are in alignment with the relevant provisions of the UK Corporate Governance Code (the "Code"); and considering whether the statements are consistent with the knowledge and understanding of the Group and Company and their environment obtained in the course of the audit. (Listing Rules)

Other Code Provisions

We have nothing to report in respect of our responsibility to report when:

- The statement given by the Directors, on page 111, that they consider the Annual Report taken as a whole to be fair, balanced and understandable, and provides the information necessary for the members to assess the Group's and Company's position and performance, business model and strategy is materially inconsistent with our knowledge of the Group and Company obtained in the course of performing our audit.
- The section of the Annual Report on pages 84 to 88 describing the work of the Audit Committee does not appropriately address matters communicated by us to the Audit Committee.
- The Directors' statement relating to the Company's compliance with the Code does not properly disclose a departure from a relevant provision of the Code specified, under the Listing Rules, for review by the auditors.

Directors' Remuneration

In our opinion, the part of the Directors' Remuneration Report to be audited has been properly prepared in accordance with the Companies Act 2006. (CA06)

Responsibilities for the financial statements and the audit

Responsibilities of the Directors for the financial statements

As explained more fully in the Directors' Responsibilities Statement set out on page 111, the Directors are responsible for the preparation of the financial statements in accordance with the applicable framework and for being satisfied that they give a true and fair view. The Directors are also responsible for such internal control as they determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Directors are responsible for assessing the Group's and the Company's ability to continue as a going concern, disclosing as applicable, matters related to going concern and using the going concern basis of accounting unless the Directors either intend to liquidate the Group or the Company or to cease operations, or have no realistic alternative but to do so.

Auditors' responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

A further description of our responsibilities for the audit of the financial statements is located on the FRC's website at: www.frc.org.uk/auditorsresponsibilities. This description forms part of our auditors' report.

Use of this report

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

Other required reporting

Companies Act 2006 exception reporting

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

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

We have no exceptions to report arising from this responsibility.

Appointment

Following the recommendation of the Audit Committee, we were appointed by the members on 20 July 2017 to audit the financial statements for the year ended 31 March 2018 and subsequent financial periods. The period of total uninterrupted engagement is two years, covering the years ended 31 March 2018 and 31 March 2019.

Owen Mackney (Senior Statutory Auditor)

for and on behalf of PricewaterhouseCoopers LLP
Chartered Accountants and Statutory Auditors
St Albans

11 June 2019

Consolidated Income Statement

	Notes	Year ended 31 March 2019			Year ended 31 March 2018		
		Before adjustments* £m	Adjustments* (note 1) £m	Total £m	Before adjustments* £m	Adjustments* (note 1) £m	Total £m
Continuing operations							
Revenue	1	1,210.9	–	1,210.9	1,076.2	–	1,076.2
Operating profit		255.8	(38.0)	217.8	223.6	(42.4)	181.2
Share of results of associate	14	(0.1)	–	(0.1)	(0.2)	–	(0.2)
(Loss)/profit on disposal of operations	30	–	(1.0)	(1.0)	–	0.6	0.6
Finance income	4	0.5	–	0.5	0.3	–	0.3
Finance expense	5	(10.5)	–	(10.5)	(10.0)	–	(10.0)
Profit before taxation	6	245.7	(39.0)	206.7	213.7	(41.8)	171.9
Taxation	9	(45.7)	8.8	(36.9)	(42.1)	24.4	(17.7)
Profit for the year attributable to equity shareholders	1	200.0	(30.2)	169.8	171.6	(17.4)	154.2
Earnings per share	2						
From continuing operations							
Basic and diluted		52.74p		44.78p	45.26p		40.69p
Dividends in respect of the year	10						
Paid and proposed (£m)				59.6			55.7
Paid and proposed per share				15.71p			14.68p

* Adjustments include the amortisation of acquired intangible assets; acquisition items; significant restructuring costs; profit or loss on disposal of operations; the effect of equalisation of pension benefits for men and women in the defined benefit plans; and the associated taxation thereon. Note 3 provides more information on alternative performance measures.

Consolidated Statement of Comprehensive Income and Expenditure

	Notes	Year ended 31 March 2019 £m	Year ended 31 March 2018 £m
Profit for the year		169.8	154.2
Items that will not be reclassified subsequently to the Consolidated Income Statement:			
Actuarial gains on defined benefit pension plans	29	6.5	11.8
Tax relating to components of other comprehensive income that will not be reclassified	9	(1.6)	(2.4)
Items that may be reclassified subsequently to the Consolidated Income Statement:			
Effective portion of changes in fair value of cash flow hedges	27	–	(0.1)
Exchange gains /(losses) on translation of foreign operations and net investment hedge		32.5	(62.9)
Exchange gain on translation of foreign operations recycled on disposal		(0.3)	–
Other comprehensive income /(expense) for the year		37.1	(53.6)
Total comprehensive income for the year attributable to equity shareholders		206.9	100.6

The exchange gain of £32.5m (2018: loss of £62.9m) includes losses of £7.9m (2018: gains of £13.3m) which relate to net investment hedges as described in note 27.

Consolidated Balance Sheet

	Notes	31 March 2019 £m	31 March 2018 £m
Non-current assets			
Goodwill	11	694.0	632.1
Other intangible assets	12	245.2	234.6
Property, plant and equipment	13	112.4	103.7
Interest in associate	14	3.9	4.0
Deferred tax asset	22	42.1	37.0
		1,097.6	1,011.4
Current assets			
Inventories	15	144.3	128.0
Trade and other receivables	16	259.6	235.2
Tax receivable		0.2	0.8
Cash and bank balances		81.2	70.7
Derivative financial instruments	27	0.9	0.7
		486.2	435.4
Total assets		1,583.8	1,446.8
Current liabilities			
Trade and other payables	17	164.8	149.6
Borrowings	19	9.2	1.1
Provisions	20	25.4	8.8
Tax liabilities		13.4	12.2
Derivative financial instruments	27	0.3	0.2
		213.1	171.9
Net current assets		273.1	263.5
Non-current liabilities			
Borrowings	19	253.7	289.9
Retirement benefit obligations	29	39.2	53.9
Trade and other payables	21	11.6	12.6
Provisions	20	10.9	23.1
Deferred tax liabilities	22	73.9	67.0
		389.3	446.5
Total liabilities		602.4	618.4
Net assets		981.4	828.4
Equity			
Share capital	23	38.0	38.0
Share premium account		23.6	23.6
Own shares		(4.7)	(6.3)
Capital redemption reserve		0.2	0.2
Hedging reserve		0.3	0.3
Translation reserve		119.5	87.3
Other reserves		(5.6)	(5.9)
Retained earnings		810.1	691.2
Total equity		981.4	828.4

The financial statements of Halma plc, company number 00040932, were approved by the Board of Directors on 11 June 2019.

Andrew Williams
Director

Marc Ronchetti
Director

Consolidated Statement of Changes in Equity

	Share capital £m	Share premium account £m	Own shares £m	Capital redemption reserve £m	Hedging reserve £m	Translation reserve £m	Other reserves £m	Retained earnings £m	Total £m
At 1 April 2018	38.0	23.6	(6.3)	0.2	0.3	87.3	(5.9)	691.2	828.4
Impact of changes in Accounting policies:									
IFRS 9	-	-	-	-	-	-	-	0.1	0.1
IFRS 15	-	-	-	-	-	-	-	(0.2)	(0.2)
Restated balance at 1 April 2018	38.0	23.6	(6.3)	0.2	0.3	87.3	(5.9)	691.1	828.3
Profit for the year	-	-	-	-	-	-	-	169.8	169.8
Other comprehensive income and expense:									
Exchange differences on translation of foreign operations	-	-	-	-	-	32.5	-	-	32.5
Exchange gains on translation of foreign operations recycled on disposal	-	-	-	-	-	(0.3)	-	-	(0.3)
Actuarial gains on defined benefit pension plans	-	-	-	-	-	-	-	6.5	6.5
Effective portion of changes in fair value of cash flow hedges	-	-	-	-	-	-	-	-	-
Tax relating to components of other comprehensive income	-	-	-	-	-	-	-	(1.6)	(1.6)
Total other comprehensive income and expense	-	-	-	-	-	32.2	-	4.9	37.1
Dividends paid	-	-	-	-	-	-	-	(57.2)	(57.2)
Share-based payment charge	-	-	-	-	-	-	9.7	-	9.7
Deferred tax on share-based payment transactions	-	-	-	-	-	-	0.9	-	0.9
Excess tax deductions related to share-based payments on exercised awards	-	-	-	-	-	-	-	1.5	1.5
Purchase of Own shares	-	-	(3.8)	-	-	-	-	-	(3.8)
Performance share plan awards vested	-	-	5.4	-	-	-	(10.3)	-	(4.9)
At 31 March 2019	38.0	23.6	(4.7)	0.2	0.3	119.5	(5.6)	810.1	981.4

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 31 March 2019 the number of treasury shares held was nil (2018: 3,990) and the number of shares held by the Employee Benefit Trust was 370,354 (2018: 631,991). The market value of Own shares was £6.2m (2018: £7.5m).

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.

Consolidated Statement of Changes in Equity

Continued

	Share capital £m	Share premium account £m	Own shares £m	Capital redemption reserve £m	Hedging reserve £m	Translation reserve £m	Other reserves £m	Retained earnings £m	Total £m
At 2 April 2017	38.0	23.6	(7.3)	0.2	0.4	150.2	(6.4)	579.9	778.6
Profit for the year	–	–	–	–	–	–	–	154.2	154.2
Other comprehensive income and expense:									
Exchange differences on translation of foreign operations	–	–	–	–	–	(62.9)	–	–	(62.9)
Actuarial gains on defined benefit pension plans	–	–	–	–	–	–	–	11.8	11.8
Effective portion of changes in fair value of cash flow hedges	–	–	–	–	(0.1)	–	–	–	(0.1)
Tax relating to components of other comprehensive income	–	–	–	–	–	–	–	(2.4)	(2.4)
Total other comprehensive income and expense	–	–	–	–	(0.1)	(62.9)	–	9.4	(53.6)
Dividends paid	–	–	–	–	–	–	–	(53.4)	(53.4)
Share-based payment charge	–	–	–	–	–	–	7.9	–	7.9
Deferred tax on share-based payment transactions	–	–	–	–	–	–	(0.5)	–	(0.5)
Excess tax deductions related to share-based payments on exercised awards	–	–	–	–	–	–	–	1.1	1.1
Purchase of Own shares	–	–	(2.6)	–	–	–	–	–	(2.6)
Performance share plan awards vested	–	–	3.6	–	–	–	(6.9)	–	(3.3)
At 31 March 2018	38.0	23.6	(6.3)	0.2	0.3	87.3	(5.9)	691.2	828.4

Consolidated Cash Flow Statement

	Notes	Year ended 31 March 2019 £m	Year ended 31 March 2018 £m
Net cash inflow from operating activities	26	219.0	173.3
Cash flows from investing activities			
Purchase of property, plant and equipment	13	(26.4)	(20.2)
Purchase of computer software	12	(2.4)	(1.9)
Purchase of other intangibles	12	(2.5)	(0.1)
Proceeds from sale of property, plant and equipment and capitalised development costs		1.6	1.7
Development costs capitalised	12	(10.8)	(9.4)
Interest received		0.4	0.2
Acquisition of businesses, net of cash acquired	25	(67.0)	(111.7)
Disposal of business	30	3.1	–
Net cash used in investing activities		(104.0)	(141.4)
Cash flows from financing activities			
Dividends paid		(57.2)	(53.4)
Purchase of Own shares		(3.8)	(2.6)
Interest paid		(8.2)	(7.2)
Loan arrangement fee paid		(0.5)	(0.4)
Proceeds from bank borrowings	26	66.4	119.2
Repayment of bank borrowings	26	(110.3)	(81.4)
Net cash used in financing activities		(113.6)	(25.8)
Increase in cash and cash equivalents	26	1.4	6.1
Cash and cash equivalents brought forward		69.7	65.6
Exchange adjustments		1.0	(2.0)
Cash and cash equivalents carried forward		72.1	69.7
	Notes	Year ended 31 March 2019 £m	Year ended 31 March 2018 £m
Reconciliation of net cash flow to movement in net debt			
Increase in cash and cash equivalents		1.4	6.1
Net cash outflow/(inflow) from repayment/(drawdown) of bank borrowings	26	43.9	(37.8)
Net debt acquired	26	–	(3.1)
Loan notes repaid in respect of acquisitions	26	0.1	0.2
Exchange adjustments		(6.8)	10.7
		38.6	(23.9)
Net debt brought forward		(220.3)	(196.4)
Net debt carried forward		(181.7)	(220.3)

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Accounting Policies

Basis of accounting

The financial statements have been 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 IFRS Interpretations Committee (IFRS IC) interpretations issued and effective at the time of preparing these accounts.

The principal Group accounting policies are explained below and have been applied consistently throughout the years ended 31 March 2019 and 31 March 2018, other than those noted below.

The Group accounts have been prepared under the historical cost convention, except as described below under the heading 'Derivative financial instruments and hedge accounting' and under the heading 'Business combinations and goodwill'.

New Standards and Interpretations applied for the first time in the year ended 31 March 2019

The following Standards and Interpretations applied for the first time, with effect from 1 April 2018, and have been adopted in the preparation of these Group Accounts.

- IFRS 9 'Financial Instruments: Classification and Measurement'.
- IFRS 15 'Revenue from Contracts with Customers'.
- Amendments to IFRS 2: Classification and Measurement of Share-based Payment Transactions.
- Annual Improvements 2014–2016 Cycle.
- IFRIC Interpretation 22 Foreign Currency Transactions and Advance Consideration.

Of the above mentioned new Standards and Interpretations, only the adoption of IFRS 9 and IFRS 15 have affected the Group's results, although not materially. Further information on the impact of the adoption of IFRS 9 and IFRS 15 is given below.

IFRS 9 'Financial Instruments'

For the Group, transition to IFRS 9 was effective from 1 April 2018. IFRS 9 provides a new expected losses impairment model for financial assets, including trade receivables, and includes amendments to classification and measurement of financial instruments. An accounting policy choice is available with regards to applying the new hedge accounting requirements or retaining IAS 39. The Group has elected to retain IAS 39.

The Group completed a transition exercise which was described in the Annual Report and Accounts for 2018.

The Group's use of financial instruments is limited to short-term trading balances such as receivables and payables, borrowings and derivatives used for hedging foreign exchange risks. Therefore, the standard impacts the Group's classification of financial instruments and the measurement of impairment of short-term financial assets.

The Group has applied the new standard in accordance with the transition rules. As the impact on the Group's results is not material, totalling £0.1m, the Group has elected to apply the limited exemption in IFRS 9 paragraph 7.2.15, relating to transition for classification, measurement and impairment. As a result, the comparatives for the year ended 31 March 2018 have not been restated. The impact of transition has been reflected in the restatement of opening retained earnings as at 1 April 2018, as shown in the Consolidated Statement of Changes in Equity.

(i) Classification

From 1 April 2018, the Group classifies its financial assets in the following measurement categories:

- those that are measured subsequently at fair value (either through other comprehensive income or through profit or loss); and
- those that are measured at amortised cost.

The classification depends on the entity's business model for managing the financial assets and the contractual terms of the cash flows.

New Standards and Interpretations applied for the first time in the year ended 31 March 2019 continued

IFRS 9 'Financial Instruments' continued

(i) Classification continued

	Original classification under IAS 39	New classification under IFRS 9	Original carrying amount under IAS 39 £m	New carrying amount under IFRS 9 £m
Financial assets				
Cash and bank balances	Loans & receivables	Amortised cost	70.7	70.7
Trade and other receivables	Loans & receivables	Amortised cost	235.2	235.3
Foreign forward exchange contracts	Fair value – hedging instrument	Fair value – hedging instrument	0.7	0.7
Total financial assets			306.6	306.7
Financial liabilities				
Trade and other payables	Other financial liabilities	Other financial liabilities	162.2	162.2
Contingent purchase consideration	Fair value through profit or loss	Fair value through profit or loss	25.0	25.0
Other provisions	Other financial liabilities	Other financial liabilities	6.9	6.9
Bank overdrafts	Other financial liabilities	Other financial liabilities	1.0	1.0
Banks loans	Other financial liabilities	Other financial liabilities	289.9	289.9
Loan notes	Other financial liabilities	Other financial liabilities	0.1	0.1
Foreign forward exchange contracts	Fair value – hedging instrument	Fair value – hedging instrument	0.2	0.2
Total financial liabilities			485.3	485.3

In respect of financial hedges, on initial application of IFRS 9, an entity may choose, as its accounting policy, to continue to apply the hedge accounting requirements of IAS 39 instead of the hedge accounting requirements of IFRS 9. The Group has elected to apply the IAS 39 hedge accounting requirements, and therefore hedging instruments are not considered under IFRS 9.

(ii) Impairment

From 1 April 2018, the Group assesses on a forward-looking basis the expected credit losses associated with its trade and other receivables carried at amortised cost. The impairment methodology applied depends on whether there has been a significant increase in credit risk.

The Group applies the simplified approach permitted by IFRS 9, which requires expected lifetime losses to be recognised from initial recognition of the receivables. In order to estimate expected lifetime losses, the Group categorises its customers into groups with similar risk profiles and determines the historic rates of impairment for each of those categories of customer. The Group then adjusts the risk profile for each group of customers by using forward looking information, such as the government risk of default for the country in which those customers are located, and determines an overall probability of impairment for the total trade and other receivables at the balance sheet date.

IFRS 15 'Revenue from Contracts with Customers'

IFRS 15 sets out the requirements for recognising revenue from contracts with customers. The standard requires entities to apportion revenue earned from contracts to individual promises, or performance obligations, on a stand-alone selling price basis, based on a five-step model.

The Group completed a transition exercise which was described in the Annual Report and Accounts 2018. Based on the work undertaken, most of the Group's companies are unaffected, but have implemented process changes to comply with IFRS 15 now and in the future. A small number of the Group's companies have individually material adjustments to their balance sheets through acceleration or deferral of revenue on the opening balance sheet. In Environmental & Analysis, revenue was deferred in one company relating to warranties that were service in nature and in another company, where revenues related to data hosting services is now recognised over time based on a straight-line method. Revenue was accelerated in one company due to unbundling of distinct performance obligations and the recognition of revenue on one of those performance obligations earlier than under previous IFRS. In Process Safety, revenue was deferred in one company relating to warranties that were service in nature. These are not material to the Group as a whole as at 1 April 2018, resulting in a net credit of £0.2m to net assets, with a corresponding debit to retained earnings as analysed below.

All figures in £m

1 April 2018

Retained earnings	
Warranties of a service nature	(0.3)
Deferral of data hosting revenues	(0.3)
Separation of performance obligations	0.5
Corporation tax	(0.1)
Total impact at 1 April 2018	(0.2)
Current assets	
Inventory	(2.7)
Trade and other receivables	2.6
Current liabilities	
Trade and other payables – contract liabilities	(0.2)
Corporation tax	0.1
Total impact at 1 April 2018	(0.2)

Accounting Policies

Continued

IFRS 15 'Revenue from Contracts with Customers' continued

As stated in the Annual Report and Accounts 2018, the Group originally intended to apply a fully retrospective approach to transition. However, as the net impact of transition to the opening balance sheet was not material, the adjustment on transition has been reflected in the restatement of opening retained earnings, as at 1 April 2018, as shown in the Consolidated Statement of Changes in Equity. The net movement in the Consolidated Income Statement for the year ended 31 March 2018 was £0.1m and also immaterial.

As the modified retrospective approach has been taken on transition, as described above, the comparatives for the year ended 31 March 2018 have not been restated.

Given the impact of implementing the new accounting policy under IFRS 15 is not materially different to the financial performance and position under the IFRS that previously applied, there has been no presentation of the current year financial statements under the previous IFRS. There is also no significant impact on any earnings per share measures disclosed.

The Group's revenue recognition policy under IFRS 15 is set out on page 133.

New Standards and Interpretations not yet applied

At the date of authorisation of these financial statements, the following Standards and Interpretations that are potentially relevant to the Group, and which have not been applied in these financial statements, were in issue but not yet effective (and in some cases had not yet been adopted by the EU):

- IFRS 16 'Leases' – effective for accounting periods beginning on or after 1 January 2019.
- IFRIC Interpretation 23 Uncertainty over income tax treatments – effective for accounting periods beginning on or after 1 January 2019.
- Amendments to IAS 19: Employee Benefits – effective for accounting periods beginning on or after 1 January 2019.
- Amendments to IAS 28: Long-term Interests in Associates and Joint Ventures – effective for accounting periods beginning on or after 1 January 2019.
- Annual improvements 2015 – 2017 Cycle.

The Directors anticipate that the adoption of these Standards and Interpretations in future periods will have no material impact on the financial statements of the Group except for IFRS 16 'Leases'.

IFRS 16 'Leases'

IFRS 16 is applicable for annual reporting periods commencing 1 January 2019, so for the Group, transition to IFRS 16 has taken effect from 1 April 2019. The half year results for the period ending 30 September 2019 will be IFRS 16 compliant with the first Annual Report published in accordance with IFRS 16 being for the year ending 31 March 2020.

IFRS 16 replaces existing lease guidance including:

- IAS 17 Leases
- IFRIC 4 Determining whether an arrangement contains a lease
- SIC 15 Operating leases – Incentives
- SIC 27 Evaluating the substance of transactions involving the legal form of a lease

IFRS 16 provides a single on-balance sheet accounting model for lessees which recognises a right-of-use asset, representing its right to use the underlying asset, and lease liability, representing its obligations to make payment in respect of the use of the underlying asset. The distinction between finance and operating leases for lessees is removed. Lessor accounting remains similar to the existing standard with no significant impact expected.

During the year, the Group carried out an exercise to model the impact of adopting IFRS 16 on a representative sample of leases. From this exercise we have elected to adopt the modified retrospective approach (revalued assets) which has been applied upon transition.

The Group will apply the exemptions available in respect of leases which are less than 12 months long and those which have been classified as leases of low-value items. In addition, the Group will also apply the following practical expedients:

- allowing IFRS 16 to be applied to all contracts previously assessed as containing a lease under IAS 17 and IFRIC 4 without reassessing whether such contracts meet the definition of a lease under IFRS 16;
- to use hindsight in determining judgements for leases previously treated as operating leases, for example, such as the term of the lease where there is a termination clause; and
- to exclude direct costs from the right-of-use asset at the date of initial application.

Having carried out an exercise to identify all leases across the Group, including assessing whether there are any embedded leases, we have identified approximately 300 leases, of which c.80% are for land and buildings and the rest for vehicles and office equipment. The Group has used an interim solution to estimate the value of leases that will come on balance sheet and we're currently implementing a permanent leased asset solution that will be used to account for leases in future. Based on the results of the interim solution it is estimated that the adoption of IFRS 16 has increased the carrying value of property, plant and equipment at 1 April 2019 by approximately £45m, liabilities by approximately £49m and retained earnings has decreased by approximately £4m. In addition, existing lease accruals and prepayments at 31 March 2019 under the current accounting have been released to retained earnings.

New Standards and Interpretations not yet applied continued

IFRS 16 'Leases' continued

Under the new standard, the existing operating lease expense previously recorded in operating costs will be replaced by a depreciation charge, which for 2019/20 is expected to be lower than the previous operating expense by approximately £2m, and a separate financing expense of approximately £2m, which will be recorded in interest expense. Consequently, Operating profit and EBITDA is estimated to increase for FY19/20 by £2m and £14m respectively.

There will be no net cash flow impact arising from the new standard; however, the profile of expenses related to leasing arrangements will change. Operating lease expenses will be replaced by the recognition of depreciation of the right-of-use asset and interest charges on lease liabilities. Whilst this will impact individual companies depending on where they are in the life of their lease, the portfolio effect of the Group's leases means that the net impact of this is minimal for 2019/20.

As the operating lease expense and depreciation and interest charges broadly offset, the impact on EPS and ROTIC is minimal. The impact of the net lease liability has a positive impact on ROTIC through improving Total equity, but this is not large enough to significantly move the metric. ROCE, which is a before interest measure, at 31 March 2019 is impacted positively by approximately one percentage point.

Net debt to EBITDA is expected to increase by approximately 0.1 times compared to the previous accounting standard.

Use of Alternative performance measures (APMs)

In the reporting of the financial information, the Group uses certain measures that are not required under IFRS, the Generally Accepted Accounting Principles (GAAP) under which the Group reports. The Directors believe that Return on Total Invested Capital (ROTIC), Return on Capital Employed (ROCE), Organic growth at constant currency, adjusted profit and earnings per share measures and adjusted operating cash flow provide additional and more consistent measures of underlying performance to shareholders by removing non-trading items that are not closely related to the Group's trading or operating cash flows. These and other alternative performance measures are used by the Directors for internal performance analysis and incentive compensation arrangements for employees. The terms ROTIC, ROCE, organic growth at constant currency and 'Adjusted' are not defined terms under IFRS and may therefore not be comparable with similarly titled measures reported by other companies. They are not intended to be a substitute for, or superior to, GAAP measures.

The principal items which are included in adjusting items are set out below in the Group's accounting policy and in note 1. The term 'adjusted' refers to the relevant measure being reported for continuing operations excluding adjusting items.

Definitions of the Group's material alternative performance measures along with reconciliation to their IFRS equivalent measure are included in note 3.

Key accounting policies

Below we set out our key accounting policies, with a list of all other accounting policies thereafter.

Going concern

The Directors believe, at the time of approving the financial statements, that the Group is well placed to manage its business risks successfully. The Group's forecasts and projections, taking account of reasonably possible changes in trading performance, show that the Group should be able to operate within the level of its current committed facilities, which includes a £550m Revolving Credit Facility running until November 2023 of which £475.6m remains undrawn at the date of this report. With this in mind, the Directors have a reasonable expectation that the Company and Group have adequate resources to continue in operational existence for the foreseeable future. Thus, they continue to adopt the going concern basis in preparing these financial statements.

Further detail is contained on page 82.

Pensions

The Group makes contributions to various pension plans.

For defined benefit plans, the asset or liability recorded in the Consolidated Balance Sheet is the difference between the fair value of the plan's assets and the present value of the defined obligation at that date. The defined benefit obligation is calculated separately for each plan on an annual basis by independent actuaries using the projected unit credit method.

Actuarial gains and losses are recognised in full in the period in which they occur and are taken to other comprehensive income.

Current and past service costs, along with the impact of any settlements or curtailments, are charged to the Consolidated Income Statement. The net interest expense on pension plans' liabilities and the expected return on the plans' assets is recognised within finance expense in the Consolidated Income Statement.

Contributions to defined contribution plans are charged to the Consolidated Income Statement when they fall due.

Accounting Policies

Continued

Business combinations and goodwill

Business combinations are accounted for using the acquisition method as at the acquisition date, which is the date on which control is transferred to the Group. The Group measures goodwill at the acquisition date as:

- the fair value of the consideration transferred; plus
- the recognised amount of any non-controlling interests in the acquiree; plus
- the fair value of the existing equity interest in the acquiree; less
- the net recognised amount (generally fair value) of the identifiable assets acquired and liabilities assumed.

Costs related to the acquisition, other than those associated with the issue of debt or equity securities, are expensed as incurred. Any contingent consideration payable may be accounted for as either:

- a) Consideration transferred, which is recognised at fair value at the acquisition date. If the contingent purchase consideration is classified as equity, it is not remeasured and settlement is accounted for within equity. Otherwise, subsequent changes to the fair value of the contingent purchase consideration are recognised in the Consolidated Income Statement; or
- b) Remuneration, which is expensed in the Income Statement over the associated period of service. An indicator of such treatment includes when payments to employees of the acquired company are contingent on a post-acquisition event, but may be automatically forfeited on termination of employment.

For acquisitions between 4 April 2004 (the date from which the financial statements were reported under IFRS) and 2 April 2010, goodwill represents the difference between the cost of the acquisition, including acquisition costs and the fair value of the net identifiable assets acquired. Goodwill is not amortised, but is tested annually for impairment.

Goodwill is recognised as an intangible asset in the Consolidated Balance Sheet. Goodwill therefore includes non-identified intangible assets including business processes, buyer-specific synergies, know-how and workforce-related industry-specific knowledge and technical skills. Negative goodwill arising on acquisitions would be recognised directly in the Consolidated Income Statement. On closure or disposal of an acquired business, goodwill would be taken into account in determining the profit or loss on closure or disposal.

As permitted by IFRS 1, the Group elected not to apply IFRS 3 'Business Combinations' to acquisitions prior to 4 April 2004 in its consolidated accounts. As a result, the net book value of goodwill recognised as an intangible asset under UK GAAP at 3 April 2004 was brought forward unadjusted as the cost of goodwill recognised under IFRS at 4 April 2004 subject to impairment testing on that date; and goodwill that was written off to reserves prior to 28 March 1998 under UK GAAP will not be taken into account in determining the profit or loss on disposal or closure of previously acquired businesses from 4 April 2004 onwards.

Intangible assets

(a) Acquired intangible assets

An intangible resource acquired with a subsidiary undertaking is recognised as an intangible asset if it is separable from the acquired business or arises from contractual or legal rights, is expected to generate future economic benefits and its fair value can be measured reliably. Acquired intangible assets, comprising trademarks, technology and know-how and customer relationships, are amortised through the Consolidated Income Statement on a straight-line basis over their estimated economic lives of between three and twenty years.

(b) Product development costs

Research expenditure is written off in the financial year in which it is incurred.

Development expenditure is written off in the financial year in which it is incurred, unless it relates to the development of a new or substantially improved product, is incurred after the technical feasibility and economic viability of the product has been proven and the decision to complete the development has been taken, and can be measured reliably. Such expenditure is capitalised as an intangible asset in the Consolidated Balance Sheet at cost and is amortised through the Consolidated Income Statement on a straight-line basis over its estimated economic life of three years.

Critical accounting judgements and key sources of estimation uncertainty

The preparation of Group accounts in conformity with IFRS requires the Directors to make judgements, estimates and assumptions that affect the application of policies and reported amounts of assets and liabilities, income and expenses. The estimates and associated assumptions are based on historical experiences and various other factors that are believed to be reasonable under the circumstances, the results of which form the basis of making judgements about carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates.

The following four areas of critical accounting judgement and key estimation uncertainty have been identified as having significant risk of causing a material adjustment to the carrying amounts of assets and liabilities in the next financial year:

Critical accounting judgements

Goodwill impairment

Determining whether goodwill is impaired requires an estimation of the value in use of cash generating unit (CGU) groups to which goodwill has been allocated. Management allocates a new acquisition to a CGU group based on which one is expected to benefit most from that business combination. The allocation of goodwill to existing CGUs is generally straightforward and factual, but in some cases, acquisitions do not fit into one of the existing CGU groups and a new group is created. This was the case in the purchase of CenTrak and the creation of the Sensor Technologies grouping.

The value in use calculation involves an estimation of the present value of future cash flows of CGUs. The future cash flows are based on annual budgets, as approved by the Board, to which the management's expectation of market-share and long-term growth rates are applied. The present value is then calculated based on management's estimate of future discount rates. The Board reviews these key assumptions (market-share, long-term growth rates, and discount rates) and the sensitivity analysis around these assumptions. Further details are provided in note 11.

Intangible assets

IFRS 3 (revised) 'Business Combinations' requires that goodwill arising on the acquisition of subsidiaries is capitalised and included in intangible assets. IFRS 3 (revised) also requires the identification and valuation of other separable intangible assets at acquisition. The assumptions involved in valuing these intangible assets require the use of estimates and judgements.

IAS 38 'Intangible Assets' requires that development costs, arising from the application of research findings or other technical knowledge to a plan or design of a new or substantially improved product, are capitalised, subject to certain criteria being met. Determining the technical feasibility and estimating the future cash flows generated by the products in development requires judgements which may differ from the actual outcome.

The estimates and judgements made in relation to both acquired intangible assets and capitalised development costs, cover identification of relevant assets, future growth rates, expected inflation rates and the discount rate used. Management also make judgements on the useful economic lives of the intangible assets.

Defined benefit pension plan liabilities

Determining the value of the future defined benefit obligation requires judgement in respect of the assumptions used to calculate present values. These include future mortality, discount rate and inflation. Management makes these judgements in consultation with an independent actuary. Details of the judgements made in calculating the defined benefit obligation are disclosed in note 29.

Key sources of estimation uncertainty

Contingent consideration

Determining the value of contingent consideration recognised as part of the acquisition of subsidiaries requires assumptions to determine the expected performance of the acquired business and the amount of contingent consideration that will therefore become payable. Initial estimates of expected performance are made by the Directors responsible for completing the acquisition and form a key component of the financial due diligence that takes place prior to completion. Subsequent measurement of contingent consideration is based on the Directors' appraisal of the acquired business's performance in the post-acquisition period and the agreement of final payments, with any required adjustments to the amount payable recognised in the Consolidated Income Statement as required under IFRS 3. Further details are provided in notes 20 and 25.

Accounting Policies

Continued

Other accounting policies

Basis of consolidation

The Group accounts include the accounts of Halma plc and all of its subsidiary companies made up to 31 March 2019, adjusted to eliminate intra-Group transactions, balances, income and expenses. The results of subsidiary companies acquired or discontinued are included from the month of their acquisition or to the month of their discontinuation.

Investments in associates

An associate is an entity over which the Group is in a position to exercise significant influence, but not control or joint control, through participation in the financial and operating policy decisions of the investee. Significant influence is the power to participate in the financial and operating policy decisions of the investee but without control or joint control over those policies.

The results and assets and liabilities of associates are incorporated in these financial statements using the equity method of accounting. Investments in associates are carried in the Consolidated Balance Sheet at cost as adjusted by post-acquisition changes in the Group's share of the net assets of the associate, less any impairment in the value of individual investments. Losses of an associate in excess of the Group's interest in that associate (which includes any long-term interests that, in substance, form part of the Group's net investment in the associate) are recognised only to the extent that the Group has incurred legal or constructive obligations or made payments on behalf of the associate.

Any excess of the cost of acquisition over the Group's share of the fair values of the identifiable net assets of the associate at the date of acquisition is recognised as goodwill. The goodwill is included within the carrying amount of the investment and is assessed for impairment as part of that investment. Any deficiency of the cost of acquisition below the Group's share of the fair values of the identifiable net assets of the associate at the date of acquisition (i.e. discount on acquisition) is credited in profit or loss in the year of acquisition.

Where a Group company transacts with an associate of the Group, profits and losses are eliminated to the extent of the Group's interest in the relevant associate. Losses may provide evidence of an impairment of the asset transferred in which case appropriate provision is made for impairment.

Other intangible assets

(a) Computer software

Computer software that is not integral to an item of property, plant or equipment is recognised separately as an intangible asset, and is amortised through the Consolidated Income Statement on a straight-line basis over its estimated economic life of between three and five years.

(b) Other intangibles

Other intangibles are amortised through the Consolidated Income Statement on a straight-line basis over their estimated economic lives of between three and five years.

Impairment of non-current assets

All non-current assets are tested for impairment whenever events or circumstances indicate that their carrying value may be impaired. Additionally, goodwill and capitalised development expenditure relating to a product that is not yet in full production are subject to an annual impairment test.

An impairment loss is recognised in the Consolidated Income Statement to the extent that an asset's carrying value exceeds its recoverable amount, which represents the higher of the asset's fair value less costs to dispose and its value in use. An asset's value in use represents the present value of the future cash flows expected to be derived from the asset or from the cash generating unit to which it relates. The present value is calculated using a pre-tax discount rate that reflects the current market assessment of the time value of money and the risks specific to the asset concerned.

Impairment losses recognised in previous periods for an asset other than goodwill are reversed if there has been a change in the estimates used to determine the asset's recoverable amount, but only to the extent that the carrying amount of the asset does not exceed its carrying amount had no impairment loss been recognised in previous periods. Impairment losses in respect of goodwill are not reversed.

Segmental reporting

An operating segment is a distinguishable component of the Group that is engaged in business activities from which it may earn revenues and incur expenses, and whose operating results are reviewed regularly by the Chief Operating Decision Maker (the Group Chief Executive) to make decisions about resources to be allocated to the segment and assess its performance, and for which discrete financial information is available.

Reportable segments are operating segments that either meet the thresholds and conditions set out in IFRS 8 or are considered by the Board to be appropriately designated as reportable segments. Segment result represents operating profits and includes an allocation of Head Office expenses. Segment result excludes tax and financing items. Segment assets comprise goodwill, other intangible assets, property, plant and equipment (excluding land and buildings), inventories, trade and other receivables. Segment liabilities comprise trade and other payables, provisions and other payables. Unallocated items represent land and buildings, corporate and deferred taxation balances, defined benefit plan liabilities, contingent purchase consideration, all components of net cash/borrowings and derivative financial instruments.

Other accounting policies continued

Inventories

Inventories and work in progress are included at the lower of cost and net realisable value. Cost is calculated either on a 'first in, first out' or an average cost basis and includes direct materials and the appropriate proportion of production and other overheads considered by the Directors to be attributable to bringing the inventories to their location and condition at the year end. Net realisable value represents the estimated selling price less all estimated costs to complete and costs to be incurred in marketing, selling and distribution.

Revenue

The Group's revenue streams are the sale of goods and services in the specialist safety, environmental technologies and health markets. The revenue streams are disaggregated into four sectors, that serve like markets. Those sectors are Process Safety, Infrastructure Safety, Environmental & Analysis and Medical.

Revenue is recognised to depict the transfer of control over promised goods or services to customers in an amount that reflects the amount of consideration specified in a contract with a customer, to which the Group expects to be entitled in exchange for those goods or services.

It is the Group's judgement that in the majority of sales there is no contract until such time as the Company performs, at which point the contract becomes the supplier's purchase order governed by the Company's terms and conditions. Where there are Master Supply Arrangements, these are typically framework agreements and do not contain clauses that would result in a contract forming under IFRS 15 until a Purchase Order is issued by the customer.

Revenue represents sales, net of estimates for variable consideration, including rights to returns, and discounts, and excluding value added tax and other sales related taxes. The amount of variable consideration is not considered to be material to the Group as a whole.

Performance obligations are unbundled in each contractual arrangement if they are distinct from one another. There is judgement in identifying distinct performance obligations where the product could be determined to be a system, or where a combination of products and services are provided together. For the majority of the Group's activities the performance obligation is judged to be the component product or service rather than the system or combined products and services. The contract price is allocated to the distinct performance obligations based on the relative standalone selling prices of the goods or services.

The way in which the Group satisfies its performance obligations varies by business and may be on shipment, delivery, as services are rendered or on completion of services depending on the nature of product and service and terms of the contract which govern how control passes to the customer. Revenue is recognised at a point in time or over time as appropriate.

Where the Group offers warranties that are of a service nature, revenue is recognised in relation to these performance obligations over time as the services are rendered. In our judgement we believe the associated performance obligations accrue evenly across the contractual term and therefore revenue is recognised on a pro-rated basis over the length of the service period.

In a small number of instances across the Group, products have been determined to be bespoke in nature, with no alternative use. Where there is also an enforceable right to payment for work completed, the criteria for recognising revenue over time have been deemed to have been met. Revenue is recognised on an input basis. This is not a material part of the Group's business as for the most part, where goods are bespoke in nature, it is the Group's judgement that the product can be broken down to standard component parts with little additional cost and therefore has an alternate use, or there is no enforceable right to payment for work performed. In these cases, the judgement is made that the requirements for recognising revenue over time are not met and revenue is recognised when control of the finished product passes to the customer.

Contract assets and liabilities

A contract asset is recognised when the Group's right to consideration is conditional on something other than the passage of time, for example the completion of future performance obligations under the terms of the contract with the customer.

In some instances, the Group receives payments from customers based on a billing schedule, as established in the contract, which may not match with the pattern of performance under the contract. In this instance, a contract asset or contract liability is recognised depending on the phasing of payment in relation to performance.

Contract assets are recognised within Trade and other receivables and are assessed for impairment on a forward-looking basis using the expected lifetime losses approach, as required by IFRS 9 ('Financial Instruments').

The Group has applied IFRS 15 using the modified retrospective approach and therefore the comparative information has not been restated and continues to be reported under IAS 18 and IAS 11. The accounting policy under IAS 18 and IAS 11 is as disclosed in the Annual Report and Accounts 2018. A description of the changes impacting the Group as well as the qualitative impact analysis has been disclosed above under New standards and interpretations applied for the first time.

Accounting Policies

Continued

Other accounting policies continued

Adjusting items

When items of income or expense are material and they are relevant to an understanding of the entity's financial performance, they are disclosed separately within the financial statements. Such adjusting items include material costs or reversals arising from acquisitions or disposals of businesses, including acquisition costs, creation or reversals of provisions related to changes in estimates for contingent consideration on acquisition, amortisation of acquired intangible assets, and other significant one-off items that may arise.

Taxation

Taxation comprises current and deferred tax. Tax is recognised in the Consolidated Income Statement except to the extent that it relates to items recognised directly in Total equity, in which case it too is recognised in Total equity. Current tax is the expected tax payable on the taxable income for the year, using tax rates enacted or substantively enacted at the balance sheet date, along with any adjustment to tax payable in respect of previous years. Taxable profit differs from net profit as reported in the Consolidated Income Statement because it excludes items that are never taxable or deductible.

Deferred tax is provided on temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes and is accounted for using the balance sheet liability method, apart from the following differences which are not provided for: goodwill not deductible for tax purposes; the initial recognition of assets or liabilities that affect neither accounting nor taxable profit; and differences relating to investments in subsidiaries to the extent they will probably not reverse in the foreseeable future. The amount of deferred tax provided is based on the expected manner of realisation or settlement of the carrying amounts of assets and liabilities, using tax rates and laws, which are expected to apply in the year when the liability is settled, or the asset is realised. Deferred tax assets are only recognised to the extent that recovery is probable.

Foreign currencies

The Group presents its accounts in Sterling. Transactions in foreign currencies are recorded at the rate of exchange at the date of the transaction. Monetary assets and liabilities denominated in foreign currencies at the balance sheet date are reported at the rates prevailing at that date. Any gain or loss arising from subsequent exchange rate movements is included as an exchange gain or loss in the Consolidated Income Statement.

Net assets of overseas subsidiary companies are expressed in Sterling at the rates of exchange ruling at the end of the financial year, and trading results and cash flows at the average rates of exchange for the financial year. Goodwill arising on the acquisition of a foreign business is treated as an asset of the foreign entity and is translated at the rate of exchange ruling at the end of the financial year. Exchange gains or losses arising on these translations are taken to the Translation reserve within Total equity.

In the event that an overseas subsidiary is disposed of or closed, the profit or loss on disposal or closure will be determined after taking into account the cumulative translation difference held within the Translation reserve attributable to that subsidiary. As permitted by IFRS 1, the Group has elected to deem the translation to be £nil at 4 April 2004. Accordingly, the profit or loss on disposal or closure of foreign subsidiaries will not include any currency translation differences which arose before 4 April 2004.

Derivative financial instruments and hedge accounting

The Group enters into derivative financial instruments to manage its exposure to foreign exchange rate risk using forward exchange contracts. Further details of derivative financial instruments are disclosed in note 27.

Derivative financial instruments are classified as fair value through profit and loss (held for trading) unless they are in a designated hedge relationship.

Derivatives are initially recognised at fair value at the date a derivative contract is entered into and are subsequently remeasured to their fair value at each balance sheet date. The resulting gain or loss is recognised in the Consolidated Income Statement, unless the derivative is designated and effective as a hedging instrument, in which event the timing of the recognition in the Consolidated Income Statement depends on the nature of the hedge relationship. The Group designates certain derivatives as hedges of highly probable forecast transactions or hedges of foreign currency risk of firm commitments (cash flow hedges), or hedges of net investments in foreign operations.

A derivative with a positive fair value is recognised as a financial asset whereas a derivative with a negative fair value is recognised as a financial liability. A derivative is presented as a non-current asset or a non-current liability if the remaining maturity of the instrument is more than 12 months and it is not expected to be realised or settled within 12 months. Other derivatives are presented as current assets or current liabilities.

Other accounting policies continued

Cash flow hedge accounting

The Group designates certain hedging instruments as cash flow hedges.

At the inception of the hedge relationship, the entity documents the relationship between the hedging instrument and the hedged item, along with its risk management objectives and its strategy for undertaking various hedge transactions. Furthermore, at the inception of the hedge and on an ongoing basis, the Group documents whether the hedging instrument has been or is expected to be highly effective in offsetting changes in fair values or cash flows of the hedged item.

Note 27 sets out details of the fair values of the derivative instruments used for hedging purposes and the movements in the Hedging reserve in equity.

The effective portion of changes in the fair value of derivatives that are designated and qualify as cash flow hedges is recognised in other comprehensive income. The gain or loss relating to the ineffective portion as a result of being over hedged is recognised immediately in the Consolidated Income Statement.

Amounts previously recognised in other comprehensive income and accumulated in equity are reclassified to the Consolidated Income Statement in the periods when the hedged item is recognised in the Consolidated Income Statement. However, when the forecast transaction that is hedged results in the recognition of a non-financial asset or a non-financial liability, the gains and losses previously accumulated in equity are transferred from equity and included in the initial measurement of the cost of the non-financial asset or non-financial liability.

Hedge accounting is discontinued when the Group revokes the hedging relationship, the hedging instrument expires or is sold, terminated or exercised, or no longer qualifies for hedge accounting. Any gain or loss recognised in other comprehensive income at that time is accumulated in equity and is recognised, when the forecast transaction is ultimately recognised, in the Consolidated Income Statement. When a forecast transaction is no longer expected to occur, the gain or loss accumulated in equity is recognised immediately in the Consolidated Income Statement.

Net investment hedge accounting

The Group uses foreign currency denominated borrowings as a hedge against the translation exposure on the Group's net investment in overseas companies. Where the hedge is fully effective at hedging, the variability in the net assets of such companies caused by changes in exchange rates and the changes in value of the borrowings are recognised in the Consolidated Statement of Comprehensive Income and accumulated in the Translation reserve. The ineffective part of any change in value caused by changes in exchange rates is recognised in the Consolidated Income Statement.

Employee share plans

Share-based incentives are provided to employees under the Group's share incentive plan, the performance share plan and the executive share plan.

(a) Share incentive plan

Awards of shares under the share incentive plan are made to qualifying employees depending on salary and service criteria. The shares awarded under this plan are purchased in the market by the plan's trustees at the time of the award, and are then held in trust for a minimum of three years. The costs of this plan are recognised in the Consolidated Income Statement over the three-year vesting period of the awards.

(b) Performance share plan

Awards under this plan are partly equity-settled and partly cash-settled. Grants were subject to both market-based and non-market-based vesting criteria. No further grants are made under this plan.

The fair value of the equity-settled portion at the date of grant is established by using an appropriate simulation method to reflect the likelihood of market-based performance conditions being met. The fair value is charged to the Consolidated Income Statement on a straight-line basis over the three-year vesting period, with appropriate adjustments being made during this period to reflect expected and actual forfeitures arising from the non-market-based performance conditions only. The corresponding credit is to other reserves within Total equity.

(c) Executive share plan

During the year ended 2 April 2016, Halma plc introduced the Executive Share Plan, in which executive Directors and certain senior employees participate. Grants under this Plan are in the form of Performance Awards or Deferred Share Awards.

Performance Awards are subject to non-market-based vesting criteria, and Deferred Share Awards are subject only to continuing service of the employee. Share awards are equity-settled. The fair value of the awards at the date of grant, which is estimated to be equal to the market value, is charged to the Consolidated Income Statement on a straight-line basis over the vesting period, with appropriate adjustments being made during this period to reflect expected and actual forfeitures. The corresponding credit is to other reserves within Total equity.

(d) Cash settled

For cash-settled awards, a liability equal to the portion of the services received is recognised at the current fair value determined at each balance sheet date.

Accounting Policies

Continued

Other accounting policies continued

Provisions and contingent liabilities

Provisions are recognised when the Group has a present obligation (legal or constructive) as a result of a past event, it is probable that the Group will be required to settle that obligation and a reliable estimate can be made of the amount of the obligation.

The amount recognised as a provision is the best estimate of the consideration required to settle the present obligation at the balance sheet date, taking into account the risks and uncertainties surrounding the obligation. Where a provision is measured using the cash flows estimated to settle the present obligation, its carrying amount is the present value of the cash flows.

When some or all of the economic benefits required to settle a provision are expected to be recovered from a third party, a receivable is recognised as an asset if it is virtually certain that reimbursement will be received, and the amount of the receivable can be measured reliably.

Contingent liabilities are disclosed where a possible obligation dependent on uncertain future events exists as at the end of the reporting period or a present obligation for which payment either cannot be measured or is not considered to be probable is noted. Contingent liabilities are not accrued for and no contingent liability is disclosed where the possibility of payment is considered to be remote.

Deferred government grant income

Government grant income that is linked to capital expenditure is deferred to the Consolidated Balance Sheet and credited to the Consolidated Income Statement over the life of the related asset. In addition, the Group claims research and development expenditure credits arising on qualifying expenditure in its UK-based subsidiaries and shows these 'above the line' in Operating profit. Where the credits arise on expenditure that is capitalised as part of internally generated capitalised development costs, the income is deferred to the Consolidated Balance Sheet and credited to the Consolidated Income Statement over the life of the related asset in line with the policy stated above.

Operating profit

Operating profit is presented net of direct production costs, production overheads, selling costs, distribution costs and administrative expenditure (see note 6). Operating profit is stated after charging restructuring costs but before the share of results of associates, profit or loss on disposal of operations, finance income and finance costs.

Cash and cash equivalents

Cash and cash equivalents comprise cash balances, deposits with an initial maturity of less than three months, and bank overdrafts that are repayable on demand.

Dividends

Dividends payable to the Company's shareholders are recognised as a liability in the period in which the distribution is approved by the Company's shareholders.

Property, plant and equipment

Property, plant and equipment is stated at historical cost less provisions for impairment and depreciation which, with the exception of freehold land which is not depreciated, is provided on a straight-line basis over each asset's estimated economic life. The principal annual rates used for this purpose are:

Freehold property	2%
Leasehold properties:	
Long leases (more than 50 years unexpired)	2%
Short leases (less than 50 years unexpired)	Period of lease
Plant, equipment and vehicles	8% to 33.3%

Leases

Leases that confer rights and obligations similar to those that attach to owned assets are classified as finance leases, of which the Group has none. All other leases are classified as operating leases. Operating lease rentals, and any incentives receivable, are charged to the Consolidated Income Statement on a straight-line basis over the lease term.

Finance income and expenses

The Group recognises Interest income or expense using the effective interest rate method. Finance income and finance costs include:

- Interest payable on loans and borrowings
- Net interest charge on pension plan liabilities
- Amortisation of finance costs
- Interest receivable in respect of cash and cash equivalents
- Unwinding of the discount on provisions
- Fair value movements on derivative financial instruments

1 Segmental analysis and revenue from contracts with customers

Sector analysis and disaggregation of revenue

The Group has four reportable segments (Process Safety, Infrastructure Safety, Environmental & Analysis and Medical), 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 reviewed each month by the Group Chief Executive.

Nature of goods and services

The following is a description of the principal activities – separated by reportable segments, which are defined by markets rather than product type – from which the Group generates its revenue.

Further disaggregation of sector revenue by geography and by the pattern of revenue recognition depicts how economic factors affect the timing and uncertainty of the Group's revenues.

Process Safety sector generates revenue from providing products that protect assets and people at work. Products include: specialised interlocks that control critical processes safely; instruments that detect flammable and hazardous gases; and explosion protection and corrosion monitoring systems. Products are generally sold separately, with contracts less than one year. Warranties are typically of an assurance nature. Revenue is typically recognised as control passes on delivery or despatch.

Payment is typically due within 60 days of invoice, except where a retention is held for documentation.

Infrastructure Safety sector generates revenue from providing products that save lives, protect infrastructure and enable safe movement. Products include: fire detection systems, specialist fire suppression systems and people and vehicle flow technologies. Products are generally sold separately, with contracts less than one year. Warranties are typically of an assurance nature. Revenue is recognised as control passes on delivery or despatch.

Payment is typically due within 60 days of invoice.

Environmental & Analysis generates revenue providing products and technologies for analysis in environmental safety and life sciences markets. Products include: market-leading opto-electronic technology and sensors, flow gap measurement instruments and gas conditioning products, and solutions for environmental data recording, water quality testing, water distribution network monitoring, and UV water treatment. Products and services are generally sold separately. Warranties are typically of an assurance nature, but some companies offer extended warranties. Depending on the nature of the performance obligation, revenue is recognised as control passes on delivery, despatch or as the service is delivered. Contracts are typically less than one year in length, but some companies have contracts where certain service related performance obligations are delivered over a number of years, this can result in contract liabilities where those performance obligations are invoiced ahead of performance.

Payment is typically due within 60 days of invoice.

Medical sector generates revenue from providing products and services that enhance the quality of life for patients and improve quality of care delivered by providers. Products include: devices that assess eye health, assist with eye surgery and primary care applications, critical fluidic components used by medical diagnostics and OEMs and laboratories and sensor technologies used in hospitals to track assets and support patient and staff safety. Products are generally sold separately, and warranties are typically of an assurance nature. Depending on the nature of the performance obligation, revenue is recognised as control passes on delivery or despatch or as the service is delivered. Contracts are typically less than one year in length, but a limited number of companies have contracts where certain service related performance obligations are delivered over a number of years, this can result in contract liabilities where those performance obligations are invoiced ahead of performance.

Payment is typically due within 60 days of invoice.

Notes to the Accounts

Continued

1 Segmental analysis and revenue from contracts with customers continued

Segment revenue disaggregation (by location of external customer)

	Year ended 31 March 2019						
	Revenue by sector and destination (all continuing operations)						
	United States of America £m	Mainland Europe £m	United Kingdom £m	Asia Pacific £m	Africa, Near and Middle East £m	Other countries £m	Total £m
Process Safety	61.3	42.1	32.6	29.6	23.2	8.7	197.5
Infrastructure Safety	87.8	131.2	101.4	48.6	28.4	11.2	408.6
Environmental & Analysis	135.2	38.0	53.6	59.7	6.0	6.6	299.1
Medical	159.2	55.0	13.4	46.1	13.2	19.2	306.1
Inter-segmental sales	(0.3)	–	(0.1)	–	–	–	(0.4)
Revenue for the year	443.2	266.3	200.9	184.0	70.8	45.7	1,210.9

	Year ended 31 March 2018						
	Revenue by sector and destination (all continuing operations)						
	United States of America £m	Mainland Europe £m	United Kingdom £m	Asia Pacific £m	Africa, Near and Middle East £m	Other countries £m	Total £m
Process Safety	52.1	40.6	29.5	28.1	24.8	9.4	184.5
Infrastructure Safety	66.4	112.2	87.8	46.1	23.9	12.4	348.8
Environmental & Analysis	110.4	33.6	43.1	58.0	7.8	6.5	259.4
Medical	145.3	51.3	13.0	42.7	13.2	18.3	283.8
Inter-segmental sales	(0.2)	–	(0.1)	–	–	–	(0.3)
Revenue for the year	374.0	237.7	173.3	174.9	69.7	46.6	1,076.2

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 £69.8m (2018: £49.6m). All revenue was otherwise derived from the sale of products.

	Year ended 31 March 2019		
	Revenue recognised over time £m	Revenue recognised at a point in time £m	Total Revenue £m
Process Safety	–	197.5	197.5
Infrastructure Safety	0.9	407.7	408.6
Environmental & Analysis	38.5	260.6	299.1
Medical	6.3	299.8	306.1
Inter-segmental sales	–	(0.4)	(0.4)
Revenue for the year	45.7	1,165.2	1,210.9

1 Segmental analysis and revenue from contracts with customers continued

Segment revenue disaggregation continued

Year ended 31 March 2019

	Revenue from performance obligations entered into and satisfied in the period £m	Revenue previously included as contract liabilities £m	Revenue from performance obligations satisfied in previous periods £m	Total Revenue £m
Process Safety	196.7	0.8	–	197.5
Infrastructure Safety	406.2	2.4	–	408.6
Environmental & Analysis	292.1	6.8	0.2	299.1
Medical	296.0	9.8	0.3	306.1
Inter-segmental sales	(0.4)	–	–	(0.4)
Revenue for the year	1,190.6	19.8	0.5	1,210.9

The Group has unsatisfied (or partially satisfied) performance obligations at the balance sheet date with an aggregate amount of transaction price as follows.

Aggregate transaction price allocated to unsatisfied performance obligations

	31 March 2019 £m	2020 £m	2021 £m	2022 and beyond £m
Process Safety	0.1	0.1	–	–
Infrastructure Safety	4.7	4.3	0.3	0.1
Environmental & Analysis	16.9	10.1	1.6	5.2
Medical	5.5	3.5	0.9	1.1
Inter-segmental sales	–	–	–	–
Total	27.2	18.0	2.8	6.4

The remaining transaction price comprises deferred income which is currently recognised as contract liabilities and committed sales. Time bands represented above present the expected timing of when the remaining transaction price will be recognised as revenue.

Segment results

Profit (all continuing operations)

	Year ended 31 March 2019 £m	Year ended 31 March 2018 £m
Segment profit before allocation of adjustments*		
Process Safety	45.5	43.3
Infrastructure Safety	88.9	73.3
Environmental & Analysis	66.4	55.0
Medical	76.9	67.1
	277.7	238.7
Segment profit after allocation of adjustments*		
Process Safety	41.5	39.4
Infrastructure Safety	79.1	65.1
Environmental & Analysis	60.1	47.7
Medical	60.1	44.7
Segment profit	240.8	196.9
Central administration costs	(24.1)	(15.3)
Net finance expense	(10.0)	(9.7)
Group profit before taxation	206.7	171.9
Taxation	(36.9)	(17.7)
Profit for the year	169.8	154.2

* Adjustments include the amortisation of acquired intangible assets; acquisition items; significant restructuring costs; profit or loss on disposal of operations and the effect of equalisation of pension benefits for men and women in the defined benefit plans. Note 3 provides more information on alternative performance measures.

Notes to the Accounts

Continued

1 Segmental analysis and revenue from contracts with customers continued

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 Group Chief Executive for the purpose of allocation of resources and assessment of segment performance. These adjustments are analysed as follows:

Year ended 31 March 2019

	Acquisition items							Total £m
	Amortisation of acquired intangible assets £m	Transaction costs £m	Adjustments to contingent consideration £m	Release of fair value adjustments to inventory £m	Total amortisation charge and acquisition items £m	Defined benefit pension charge £m	Disposal of operations and restructuring (note 30) £m	
Process Safety	(4.0)	–	–	–	(4.0)	–	–	(4.0)
Infrastructure Safety	(6.8)	(0.4)	–	(2.6)	(9.8)	–	–	(9.8)
Environmental & Analysis	(9.1)	(0.1)	3.0	(0.1)	(6.3)	–	–	(6.3)
Medical	(15.7)	(0.6)	0.5	–	(15.8)	–	(1.0)	(16.8)
Total Segment	(35.6)	(1.1)	3.5	(2.7)	(35.9)	–	(1.0)	(36.9)
Unallocated	–	–	–	–	–	(2.1)	–	(2.1)
Total Segment & Group	(35.6)	(1.1)	3.5	(2.7)	(35.9)	(2.1)	(1.0)	(39.0)

The transaction costs arose mainly on the acquisitions during the year. In Infrastructure Safety, they mainly related to LAN Control Systems Limited (£0.1m), Limotec (£0.1m), Navtech (£0.4m) and Business Marketers Group (trading as Rath Communications) (£0.1m) and a credit from a previous acquisition. In Environmental & Analysis, they related to the acquisition of FluxData in a previous year (£0.1m). In Medical, they mainly related to the acquisition of Visiometrics in a previous year (£0.5m).

The £3.5m adjustment to contingent consideration comprised: a credit of £3.0m in Environmental & Analysis arising from decreases in estimates of the payable for FluxData (£2.7m) and Mini-Cam (£0.3m); and a credit of £0.5m in Medical arising from an increase in estimate of the payable for CasMed NIBP (£0.1m) offset by a credit of £0.6m arising from exchange differences on the payable for Visiometrics which is denominated in Euros.

The £2.7m release of fair value adjustments to inventory relates to Firetrace (£1.4m), Limotec (£0.3m), Navtech (£0.6m) and Rath (£0.3m) in Infrastructure and Safety; and Mini-Cam (£0.1m) within Environmental & Analysis. All amounts have now been released in relation to Firetrace, Limotec, Rath and Mini-Cam.

The £2.1m defined benefit pension charge relates to the estimate of Guaranteed Minimum Pension equalisation for men and women. See note 29.

Year ended 31 March 2018

	Acquisition items							Total £m
	Amortisation of acquired intangible assets £m	Transaction costs £m	Adjustments to contingent consideration £m	Release of fair value adjustments to inventory £m	Total amortisation charge and acquisition items £m	Defined Benefit Pension charge £m	Disposal of operations and restructuring (note 30) £m	
Process Safety	(3.9)	–	–	–	(3.9)	–	–	(3.9)
Infrastructure Safety	(5.2)	(0.8)	–	(2.1)	(8.1)	–	–	(8.1)
Environmental & Analysis	(7.1)	(0.8)	1.5	(1.0)	(7.4)	–	–	(7.4)
Medical	(18.5)	(1.0)	(3.2)	(0.3)	(23.0)	–	0.6	(22.4)
Total Segment & Group	(34.7)	(2.6)	(1.7)	(3.4)	(42.4)	–	0.6	(41.8)

In the prior year, the transaction costs arose mainly on the acquisitions during the prior year of Setco, S.A. (Setco) (£0.1m) and Argus Security S.r.l. and Sterling Safety Systems Limited (together 'Argus') (£0.7m) within Infrastructure Safety, Cas Medical Systems Inc's Non-Invasive Blood Pressure Monitoring product line (CasMed NIBP) (£0.5m) and Cardios (£0.5m) within Medical, and Mini-Cam (£0.8m) within Environmental & Analysis.

The £1.7m adjustment to contingent consideration comprised: a debit of £2.5m in Medical arising from a change in estimate of the payable for CasMed NIBP (£0.7m) and Visiometrics (£1.8m), offset by a credit of £1.5m in Environmental & Analysis arising from a change in estimate of the payable for FluxData. Exchange differences on the payable for Visiometrics which is denominated in Euros, and for Cardios which is denominated in Brazilian Reals, contributed a further debit of £0.7m in Medical.

The £3.4m release of fair value adjustments to inventory relates to Firetrace (£1.4m), Argus (£0.6m) and Setco (£0.1m) within Infrastructure Safety, Mini-Cam (£0.8m) and FluxData (£0.2m) within Environmental & Analysis and Cardios (£0.3m) within Medical. All amounts have been released in relation to Argus, Setco, Cardios and FluxData.

1 Segmental analysis and revenue from contracts with customers continued

Segment assets and liabilities

Before goodwill, interest in associate and acquired intangible assets are allocated to specific segment assets/liabilities	Assets		Liabilities	
	31 March 2019 £m	31 March 2018 £m	31 March 2019 £m	31 March 2018 £m
Process Safety	79.4	79.7	21.0	22.1
Infrastructure Safety	172.2	144.7	65.0	53.6
Environmental & Analysis	122.1	107.7	36.7	37.3
Medical	124.2	115.6	39.0	39.6
Total segment assets/liabilities excluding goodwill, interest in associate and acquired intangible assets	497.9	447.7	161.7	152.6
Goodwill	694.0	632.2	–	–
Interest in associate	3.9	4.0	–	–
Acquired intangible assets	203.5	199.0	–	–
Total segment assets/liabilities including goodwill, interest in associate and acquired intangible assets	1,399.3	1,282.9	161.7	152.6

After goodwill, interest in associate and acquired intangible assets are allocated to specific segment assets/liabilities	Assets		Liabilities	
	31 March 2019 £m	31 March 2018 £m	31 March 2019 £m	31 March 2018 £m
Process Safety	165.0	163.2	21.0	22.1
Infrastructure Safety	429.4	337.0	65.0	53.6
Environmental & Analysis	322.5	309.0	39.0	37.3
Medical	482.4	473.7	36.7	39.6
Total segment assets/liabilities including goodwill, interest in associate and acquired intangible assets	1,399.3	1,282.9	161.7	152.6
Cash and bank balances/borrowings	81.2	70.7	262.9	291.0
Derivative financial instruments	0.9	0.7	0.3	0.2
Other unallocated assets/liabilities	102.4	92.5	177.5	174.6
Total Group	1,583.8	1,446.8	602.4	618.4

Segment assets and liabilities, excluding the allocation of goodwill, interest in associate and acquired intangible assets, have been disclosed separately above as this is the measure reported to the Group Chief Executive for the purpose of monitoring segment performance and allocating resources between segments. Other unallocated assets include land and buildings, deferred tax assets and other central assets. Unallocated liabilities include contingent purchase consideration, retirement benefit obligations, deferred tax liabilities and other central liabilities.

Other segment information

	Additions to non-current assets		Depreciation, amortisation and impairment	
	Year ended 31 March 2019 £m	Year ended 31 March 2018 £m	Year ended 31 March 2019 £m	Year ended 31 March 2018 £m
Process Safety	6.0	4.3	9.3	8.7
Infrastructure Safety	83.9	49.0	17.4	14.6
Environmental & Analysis	9.4	82.5	16.3	13.7
Medical	10.3	24.0	23.2	25.4
Total segment additions/depreciation, amortisation and impairment	109.6	159.8	66.2	62.4
Unallocated	3.1	0.7	0.7	0.6
Total Group	112.7	160.5	66.9	63.0

Non-current asset additions comprise acquired and purchased goodwill, other intangible assets and property, plant and equipment.

During the year an impairment loss on intangible assets of £0.7m was recognised in Infrastructure Safety (2018: £0.7m in Infrastructure Safety).

Notes to the Accounts

Continued

1 Segmental analysis and revenue from contracts with customers continued

Geographic information

The Group's non-current assets by geographic location are detailed below:

	Non-current assets	
	31 March 2019 £m	31 March 2018 £m
United States of America	610.5	557.6
Mainland Europe	253.5	251.9
United Kingdom	147.8	120.0
Asia Pacific	32.4	32.6
Other countries	11.3	12.3
	1,055.5	974.4

Non-current assets comprise goodwill, intangible assets, interest in associate and property, plant and equipment.

Information about major customers

No single customer accounts for more than 3% (2018: 2%) of the Group's revenue.

2 Earnings per ordinary share

Basic and diluted earnings per ordinary share are calculated using the weighted average of 379,159,755 shares in issue during the year (net of shares purchased by the Company and held as Own shares) (2018: 378,987,354). There are no dilutive or potentially dilutive ordinary shares.

Adjusted earnings are calculated as earnings from continuing operations excluding the amortisation of acquired intangible assets; acquisition items; restructuring costs; profit or loss on disposal of operations; the effect of equalisation of defined pension benefits for men and women; the associated taxation thereon; and, in the prior year, the effect of the US tax reform measures. The Directors consider that adjusted earnings, which constitute an alternative performance measure, represent a more consistent measure of underlying performance as it excludes amounts not directly linked with trading. A reconciliation of earnings and the effect on basic and diluted earnings per share figures is as follows:

			Per ordinary share	
	Year ended 31 March 2019 £m	Year ended 31 March 2018 £m	Year ended 31 March 2019 pence	Year ended 31 March 2018 pence
Earnings from continuing operations	169.8	154.2	44.78	40.69
Amortisation of acquired intangible assets (after tax)	27.5	26.0	7.25	6.85
Acquisition transaction costs (after tax)	1.0	2.4	0.27	0.65
Adjustments to contingent consideration (after tax)	(2.9)	1.9	(0.75)	0.51
Release of fair value adjustments to inventory (after tax)	2.1	2.6	0.55	0.69
Defined benefit pension charge (after tax)	1.7	–	0.44	–
Disposal of operations and restructuring (after tax)	0.8	(0.6)	0.20	(0.19)
Impact of US tax reform measures	–	(14.9)	–	(3.94)
Adjusted earnings	200.0	171.6	52.74	45.26

3 Alternative performance measures

The Board uses certain alternative performance measures to help it effectively monitor the performance of the Group. The Directors consider that these represent a more consistent measure of underlying performance by removing non-trading items that are not closely related to the Group's trading or operating cash flows. These measures include Return on Total Invested Capital (ROTIC), Return on Capital Employed (ROCE), organic growth at constant currency, Adjusted operating profit and Adjusted operating cash flow.

Note 1 provides further analysis of the adjusting items in reaching adjusted profit measures.

Return on Total Invested Capital

	31 March 2019 £m	31 March 2018 £m
Profit after tax	169.8	154.2
Adjustments ¹	30.2	17.4
Adjusted profit after tax ¹	200.0	171.6
Total equity	981.4	828.4
Add back retirement benefit obligations	39.2	53.9
Less associated deferred tax assets	(7.0)	(9.8)
Cumulative amortisation of acquired intangible assets	235.2	191.0
Historical adjustments to goodwill ²	89.5	89.5
Total Invested Capital	1,338.3	1,153.0
Average Total Invested Capital³	1,245.7	1,125.1
Return on Total Invested Capital (ROTIC)⁴	16.1%	15.2%

Return on Capital Employed

	31 March 2019 £m	31 March 2018 £m
Profit before tax	206.7	171.9
Adjustments ¹	39.0	41.8
Net finance costs	10.0	9.7
Adjusted operating profit¹ after share of results of associates	255.7	223.4
Computer software costs within intangible assets	5.5	4.7
Capitalised development costs within intangible assets	33.1	29.9
Other intangibles within intangible assets	3.1	0.9
Property, plant and equipment	112.4	103.7
Inventories	144.3	128.0
Trade and other receivables	259.6	235.2
Trade and other payables	(164.8)	(149.6)
Current provisions	(25.4)	(8.8)
Net tax liabilities	(13.2)	(11.4)
Non-current trade and other payables	(11.6)	(12.6)
Non-current provisions	(10.9)	(23.1)
Add back contingent purchase consideration	26.8	25.0
Capital Employed	358.9	321.9
Average Capital Employed³	340.4	312.1
Return on Capital Employed (ROCE)⁴	75.1%	71.6%

1 Adjustments include the amortisation of acquired intangible assets; acquisition items; significant restructuring costs; profit or loss on disposal of operations and the effect of equalisation of defined pension benefits for men and women. Where after-tax measures, these also include the associated taxation on adjusting items and, in the prior year, the effect of the US tax reform measures. Note 1 provides more information on these items.

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

3 The ROTIC and ROCE measures are expressed as a percentage of the average of the current and prior year's Total Invested Capital and Capital Employed respectively. Using an average as the denominator is considered to be more representative. The 1 April 2017 Total Invested Capital and Capital Employed balances were £1,097.1m and £302.2m respectively.

4 The ROTIC and ROCE measures are calculated as Adjusted profit after tax divided by Average Total Invested Capital and Adjusted operating profit after share of results of associates divided by Average Capital Employed respectively.

Notes to the Accounts

Continued

3 Alternative performance measures continued

Organic growth at constant currency

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

- removing from the year of acquisition their entire revenue and profit before taxation; and
- 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 results of disposals are removed from the prior period reported revenue and profit before taxation.

Constant currency measures the change in revenue and profit excluding the effects of currency movements. The measure restates the current year's revenue and profit at last year's exchange rates.

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

Group

	Revenue		Adjusted profit* before taxation	
	Year ended 31 March 2019 £m	Year ended 31 March 2018 £m	Year ended 31 March 2019 £m	Year ended 31 March 2018 £m
			% growth	% growth
Continuing operations	1,210.9	1,076.2	12.5%	245.7
Acquired and disposed revenue/profit	(32.0)	(8.5)	(6.9)	213.7
Organic growth	1,178.9	1,067.7	10.4%	238.8
Constant currency adjustment	(4.2)	–	(0.7)	214.3
Organic growth at constant currency	1,174.7	1,067.7	10.0%	238.1

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	
	Year ended 31 March 2019 £m	Year ended 31 March 2018 £m	Year ended 31 March 2019 £m	Year ended 31 March 2018 £m
			% growth	% growth
Continuing operations	197.5	184.5	7.0%	45.5
Acquisition and currency adjustments	(0.5)	–	(0.2)	43.3
Organic growth at constant currency	197.0	184.5	6.8%	45.3

Infrastructure Safety

	Revenue		Adjusted* segment profit	
	Year ended 31 March 2019 £m	Year ended 31 March 2018 £m	Year ended 31 March 2019 £m	Year ended 31 March 2018 £m
			% growth	% growth
Continuing operations	408.6	348.8	17.2%	88.9
Acquisition and currency adjustments	(21.8)	–	(4.2)	73.3
Organic growth at constant currency	386.8	348.8	10.9%	84.7

3 Alternative performance measures continued

Sector Organic growth at constant currency continued

Environmental & Analysis

	Revenue			Adjusted* segment profit		
	Year ended 31 March 2019 £m	Year ended 31 March 2018 £m	% growth	Year ended 31 March 2019 £m	Year ended 31 March 2018 £m	% growth
Continuing operations	299.1	259.4	15.3%	66.4	55.0	20.7%
Acquisition and currency adjustments	(10.3)	–		(4.3)	–	
Organic growth at constant currency	288.8	259.4	11.3%	62.1	55.0	12.9%

Medical

	Revenue			Adjusted* segment profit		
	Year ended 31 March 2019 £m	Year ended 31 March 2018 £m	% growth	Year ended 31 March 2019 £m	Year ended 31 March 2018 £m	% growth
Continuing operations	306.1	283.8	7.9%	76.9	67.1	14.8%
Acquisition and disposal and currency adjustments	(3.6)	(8.5)		(0.5)	0.6	
Organic growth at constant currency	302.5	275.3	9.9%	76.4	67.7	12.9%

* Adjustments include the amortisation of acquired intangible assets; acquisition items; significant restructuring costs; profit or loss on disposal of operations; and the effect of equalisation of pension benefits for men and women in the defined benefit plans.

Adjusted operating profit

	Year ended 31 March 2019 £m	Year ended 31 March 2018 £m
Operating profit	217.8	181.2
Add back:		
Acquisition items (note 1)	0.3	7.7
Defined benefit pension charge	2.1	–
Amortisation of acquired intangible assets	35.6	34.7
Adjusted operating profit	255.8	223.6

Adjusted operating cash flow

	Year ended 31 March 2019 £m	Year ended 31 March 2018 £m
Net cash from operating activities (note 26)	219.0	173.3
Add back:		
Net acquisition costs	1.2	2.6
Taxes paid	40.6	41.1
Proceeds from sale of property, plant and equipment	1.6	1.7
Share awards vested not settled by Own shares*	4.9	3.3
Less:		
Purchase of property, plant and equipment	(26.4)	(20.2)
Purchase of computer software and other intangibles	(4.9)	(2.0)
Development costs capitalised	(10.8)	(9.4)
Adjusted operating cash flow	225.2	190.4
Cash conversion % (adjusted operating cash flow/adjusted operating profit)	88%	85%

* See Consolidated Statement of Changes in Equity.

Notes to the Accounts

Continued

4 Finance income

	Year ended 31 March 2019 £m	Year ended 31 March 2018 £m
Interest receivable	0.4	0.2
Fair value movement on derivative financial instruments	0.1	0.1
	0.5	0.3

5 Finance expense

	Year ended 31 March 2019 £m	Year ended 31 March 2018 £m
Interest payable on borrowings	7.6	7.0
Amortisation of finance costs	0.9	1.0
Net interest charge on pension plan liabilities	1.2	1.7
Other interest payable	0.5	0.2
	10.2	9.9
Fair value movement on derivative financial instruments	0.2	–
Unwinding of discount on provisions	0.1	0.1
	10.5	10.0

6 Profit before taxation

Profit before taxation comprises:

	Year ended 31 March 2019 £m	Year ended 31 March 2018 £m
Revenue	1,210.9	1,076.2
Direct materials/direct labour	(443.4)	(392.9)
Production overhead	(130.5)	(116.6)
Selling costs	(151.3)	(140.2)
Distribution costs	(25.5)	(22.7)
Administrative expenses	(242.4)	(222.6)
Operating profit	217.8	181.2
Share of results of associate	(0.1)	(0.2)
(Loss)/profit on disposal of operations	(1.0)	0.6
Net finance expense	(10.0)	(9.7)
Profit before taxation	206.7	171.9

Included within administrative expenses are the amortisation of acquired intangible assets, transaction costs, adjustments to contingent consideration and, in the current year, the charge for equalisation of the pension benefits for men and women in the Group's defined benefit pension schemes. Included within direct materials/direct labour is the release of fair value adjustments to inventory.

6 Profit before taxation

		Year ended 31 March 2019 £m	Year ended 31 March 2018 £m
Profit before taxation is stated after charging/(crediting):			
Depreciation		20.0	18.9
Amortisation		46.2	43.4
Impairment of intangible assets		0.7	0.7
Restructuring costs		1.5	–
Research and development*		51.9	47.1
Foreign exchange (gain)/loss		(1.4)	2.7
Loss /(profit) on disposal of operations (note 30)		1.0	(0.6)
Profit on sale of property, plant and equipment and computer software		(0.6)	(0.5)
Cost of inventories recognised as an expense		609.3	515.0
Staff costs (note 7)		347.0	304.1
Auditors' remuneration			
	Audit services to the Company	0.3	0.3
	Audit of the Company's subsidiaries	1.0	0.9
	Total audit fees	1.3	1.2
	Interim review	0.1	0.1
	Tax compliance services	–	0.1
	Total non-audit fees	0.1	0.2
	Audit of Group pension plans	–	–
	Total fees	1.4	1.4
Operating lease rentals:			
	Property	13.9	13.4
	Other	0.8	0.7

* A further £10.8m (2018: £9.4m) of development costs has been capitalised in the year. See note 12.

7 Employee information

The average number of persons employed by the Group (including Directors) by entity location was:

	Year ended 31 March 2019 Number	Year ended 31 March 2018 Number
United States of America	2,016	1,940
Mainland Europe	1,032	933
United Kingdom	2,293	2,151
Asia Pacific	1,074	1,014
Other countries	93	75
	6,508	6,113

The monthly average number of persons employed by the Group (including Directors) by employee location was:

	Year ended 31 March 2019 Number	Year ended 31 March 2018 Number
United States of America	2,115	2,038
Mainland Europe	1,035	909
United Kingdom	2,111	2,041
Asia Pacific	1,082	1,038
Other countries	165	87
	6,508	6,113

Notes to the Accounts

Continued

7 Employee information continued

Group employee costs comprise:

	Year ended 31 March 2019 £m	Year ended 31 March 2018 £m
Wages and salaries	283.4	249.6
Social security costs	39.5	35.1
Pension costs (note 29)	13.3	10.6
Share-based payment charge (note 24)	10.8	8.8
	347.0	304.1

8 Directors' remuneration

The remuneration of the Directors is set out on pages 96 to 107 within the Annual Remuneration Report described as being audited and forms part of these financial statements.

Directors' remuneration comprises:

	Year ended 31 March 2019 £m	Year ended 31 March 2018 £m
Wages, salaries and fees	5.2	3.8
Pension costs	0.1	–
Share-based payment charge	2.8	2.6
	8.1	6.4

9 Taxation

	Year ended 31 March 2019 £m	Year ended 31 March 2018 £m
Current tax		
UK corporation tax at 19% (2018: 19%)	10.9	9.8
Overseas taxation	33.6	29.1
Adjustments in respect of prior years	0.2	(0.3)
Total current tax charge	44.7	38.6
Deferred tax		
Origination and reversal of timing differences	(7.4)	(6.2)
Changes in tax rate – US tax reform measures	–	(15.0)
Adjustments in respect of prior years	(0.4)	0.3
Total deferred tax credit	(7.8)	(20.9)
Total tax charge recognised in the Consolidated Income Statement	36.9	17.7
Reconciliation of the effective tax rate:		
Profit before tax	206.7	171.9
Tax at the UK corporation tax rate of 19% (2018: 19%)	39.3	32.7
Overseas tax rate differences	9.4	12.8
Effect of US tax reform measures	–	(15.0)
Effect of intra-group financing	(8.7)	(7.9)
Tax incentives, exemptions and credits (including patent box, R&D and High-Tech status)	(3.9)	(4.6)
Permanent differences	1.0	(0.3)
Adjustments in respect of prior years	(0.2)	–
	36.9	17.7
Effective tax rate	17.9%	10.3%

	Year ended 31 March 2019 £m	Year ended 31 March 2018 £m
Adjusted* profit before tax	245.7	213.7
Total tax charge on adjusted* profit	45.7	42.1
Effective tax rate	18.6%	19.7%

* Adjustments include the amortisation of acquired intangible assets; acquisition items; significant restructuring costs; and profit or loss on disposal of operations and the effect of equalisation of pension benefits for men and women in the defined benefit plans. Note 3 provides more information on alternative performance measures.

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.

In addition to the amount charged to the Consolidated Income Statement, the following amounts relating to tax have been recognised directly in the Consolidated Statement of Comprehensive Income and Expenditure:

	Year ended 31 March 2019 £m	Year ended 31 March 2018 £m
Deferred tax (note 22)		
Retirement benefit obligations	1.6	2.4
Short-term timing differences	–	–
	1.6	2.4

In addition to the amounts charged to the Consolidated Income Statement and the Consolidated Statement of Comprehensive Income and Expenditure, the following amounts relating to tax have been recognised directly in equity:

	Year ended 31 March 2019 £m	Year ended 31 March 2018 £m
Current tax		
Excess tax deductions related to share-based payments on exercised awards	(1.5)	(1.1)
Deferred tax (note 22)		
Change in estimated excess tax deductions related to share-based payments	(0.9)	0.5
	(2.4)	(0.6)

Notes to the Accounts

Continued

10 Dividends

	Per ordinary share		
	Year ended 31 March 2019 pence	Year ended 31 March 2018 pence	Year ended 31 March 2019 £m
Amounts recognised as distributions to shareholders in the year			
Final dividend for the year ended 31 March 2018 (52 weeks to 1 April 2017)	8.97	8.38	34.0
Interim dividend for the year ended 31 March 2019 (31 March 2018)	6.11	5.71	23.2
	15.08	14.09	57.2
Dividends declared in respect of the year			
Interim dividend for the year ended 31 March 2019 (31 March 2018)	6.11	5.71	23.2
Proposed final dividend for the year ended 31 March 2019 (31 March 2018)	9.60	8.97	36.4
	15.71	14.68	59.6

The proposed final dividend is subject to approval by shareholders at the Annual General Meeting on 25 July 2019 and has not been included as a liability in these financial statements.

11 Goodwill

	31 March 2019 £m	31 March 2018 £m
Cost		
At beginning of year	632.1	603.5
Additions (note 25)	37.7	72.7
Adjustments to prior years (note 25)	(0.4)	–
Disposals (note 30)	(0.8)	–
Exchange adjustments	25.4	(44.1)
At end of year	694.0	632.1
Provision for impairment		
At beginning and end of year	–	–
Carrying amounts	694.0	632.1

The Group identifies cash generating units (CGUs) at the operating company level as this represents the lowest level at which cash inflows are largely independent of other cash inflows. Goodwill acquired in a business combination is allocated, at acquisition, to the groups of CGUs that are expected to benefit from that business combination.

Before recognition of any impairment losses, the carrying amount of goodwill has been allocated to CGU groups as follows:

	31 March 2019 £m	31 March 2018 £m
Process Safety		
Gas Detection	–	–
Bursting Discs	8.9	8.2
Safety Interlocks and Corrosion Monitoring	58.8	55.0
	67.7	63.2
Infrastructure Safety		
Fire	69.3	63.3
Doors, Security and Elevators	113.8	80.4
	183.1	143.7
Environmental & Analysis		
Water	72.1	71.3
Photonics	71.6	66.6
Environmental Monitoring	14.3	13.2
	158.0	151.1
Medical		
Health Optics	175.2	170.3
Fluid Technology	39.1	38.1
Sensor Technologies	70.9	65.7
	285.2	274.1
Total Group	694.0	632.1

Goodwill values have been tested for impairment by comparing them against the 'value in use' in perpetuity of the relevant CGU group. The value in use calculations were based on projected cash flows, derived from the latest budget approved by the Board, discounted at CGU specific, risk adjusted, discount rates to calculate their net present value. Further details are overleaf.

11 Goodwill continued

Key assumptions used in 'value in use' calculations

The calculation of 'value in use' is most sensitive to the following assumptions:

- CGU specific operating assumptions that are reflected in the budget period for the financial year to March 2020;
- Discount rates; and
- Growth rates used to extrapolate risk adjusted cash flows beyond the budget period.

CGU specific operating assumptions are applicable to the budgeted cash flows for the year to March 2020 and relate to revenue forecasts, expected project outcomes and forecast operating margins in each of the operating companies. The relative value ascribed to each assumption will vary between CGUs as the budgets are built up from the underlying operating companies within each CGU group. A short-term growth rate is applied to the March 2020 budget to derive the cash flows arising in the years to March 2021 and March 2022. A long-term rate is applied to these values for the year to March 2023 and onwards.

Short-term growth rates for years 2021 and 2022 for all CGU groups, with the exception of Sensor Technologies, are based on sector strategic plans. Long-term growth rates are capped at the weighted average GDP growth rates of the markets into which that CGU group sells.

Short-term growth rates for Sensor Technologies are applied out to 2024, based on CGU specific revenue growth rates and margins which reflect the acquisition case updated for latest expectations of performance. These CGU specific growth rates reflect the rapid growth potential of this early stage life-cycle, technology-based business through further penetration into the USA, internationally and, in the longer term, through new applications in other sectors. Using cash flows out to 2024 reflects the rapid growth potential of the business and more accurately reflects the basis on which the original acquisition was assessed. Long-term growth rates thereafter are capped at the weighted average GDP growth rates of the markets into which that CGU sells.

Discount rates are based on estimations of the assumptions that market participants operating in similar sectors to Halma would make, using the Group's economic profile as a starting point and adjusting appropriately. The Directors do not currently expect any significant change in the present base discount rate of 9.43% (2018: 9.42%). The base discount rate, which is pre-tax and is based on short-term variables, may differ from the Weighted Average Cost of Capital (WACC). Discount rates are adjusted for economic risks that are not already captured in the specific operating assumptions for each CGU group. This results in the impairment testing using discount rates ranging from 8.33% to 13.38% (2018: 8.32% to 12.04%) across the CGU groups.

CGU groups to which 10% or more of the total goodwill balance is allocated are deemed to be significant. The assumptions used to determine 'value in use' for these CGU groups are:

Significant CGU groups

	Risk adjusted discount rate		Short-term growth rates		Long-term growth rates	
	31 March 2019	31 March 2018	31 March 2019	31 March 2018	31 March 2019	31 March 2018
Doors, Security and Elevators	11.10%	12.04%	11.60%	8.10%	1.93%	1.95%
Health Optics	13.38%	11.63%	10.20%	7.50%	2.05%	2.29%
Sensor Technologies	12.61%	10.65%	20.00%	20.00%	2.05%	2.00%
Photonics	10.52%	9.55%	10.30%	7.50%	1.77%	1.77%
Water	8.33%	8.32%	10.30%	7.50%	1.77%	1.77%
Fire	12.02%	12.01%	11.60%	8.10%	1.93%	1.95%

Sensitivity to changes in assumptions

In Sensor Technologies, if future growth was not as currently forecast this could result in the value in use of goodwill falling below its carrying value. For this to happen, forecast revenue growth to 2024 would have to fall to 13% and to 2% thereafter. For all other CGU groups, management believes that no reasonably possible change in any of the above key assumptions would cause the carrying value of any unit to exceed its recoverable amount.

Notes to the Accounts

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12 Other intangible assets

	Acquired intangible assets				Internally generated capitalised development costs ⁴	Computer software	Other intangibles ⁵	Total
	Customer and supplier relationship ¹	Technical know-how ²	Trademarks, brands and patents ³	Total				
	£m	£m	£m	£m	£m	£m	£m	£m
Cost								
At 2 April 2017	249.3	62.4	56.4	368.1	70.9	17.9	2.1	459.0
Assets of businesses acquired	28.6	18.4	6.0	53.0	0.5	0.1	–	53.6
Additions at cost	–	–	–	–	9.4	1.9	0.1	11.4
Disposals and retirements	–	–	–	–	(0.1)	(0.4)	–	(0.5)
Exchange adjustments	(20.6)	(6.0)	(4.5)	(31.1)	(2.2)	(0.8)	(0.2)	(34.3)
At 31 March 2018	257.3	74.8	57.9	390.0	78.5	18.7	2.0	489.2
Transfer between category	–	–	–	–	0.1	0.1	–	0.2
Assets of businesses acquired (note 25)	14.6	10.1	5.7	30.4	0.8	–	–	31.2
Additions at cost	–	–	–	–	10.8	2.4	2.5	15.7
Disposals and retirements	–	–	–	–	(0.5)	(1.0)	–	(1.5)
Exchange adjustments	12.3	3.7	2.3	18.3	1.4	0.5	0.1	20.3
At 31 March 2019	284.2	88.6	65.9	438.7	91.1	20.7	4.6	555.1
Accumulated amortisation & impairment								
At 2 April 2017	118.1	19.1	30.8	168.0	42.1	13.4	1.0	224.5
Charge for the year	22.6	7.8	4.3	34.7	6.9	1.6	0.2	43.4
Impairment	–	–	–	–	0.7	–	–	0.7
Disposals and retirements	–	–	–	–	–	(0.4)	–	(0.4)
Exchange adjustments	(8.6)	(1.4)	(1.7)	(11.7)	(1.2)	(0.6)	(0.1)	(13.6)
At 31 March 2018	132.1	25.5	33.4	191.0	48.5	14.0	1.1	254.6
Charge for the year	23.5	7.6	4.5	35.6	8.5	1.8	0.3	46.2
Impairment	–	–	–	–	0.7	–	–	0.7
Disposals and retirements	–	–	–	–	(0.5)	(1.0)	–	(1.5)
Exchange adjustments	5.9	1.5	1.2	8.6	0.8	0.4	0.1	9.9
At 31 March 2019	161.5	34.6	39.1	235.2	58.0	15.2	1.5	309.9
Carrying amounts								
At 31 March 2019	122.7	54.0	26.8	203.5	33.1	5.5	3.1	245.2
At 31 March 2018	125.2	49.3	24.5	199.0	30.0	4.7	0.9	234.6

1 Customer and supplier relationship assets are amortised over their useful economic lives estimated to be between three and twenty years. Within this balance individually material balances relate to:

RCS: £9.6m (2018: £10.6m);

Firetrace: £11.6m (2018: £11.9m) and £10.9m (2018: £11.9m);

CenTrak: £17.1m (2018: £17.2m); and

Mini-Cam: £14.3m (2018: £16.0m).

The remaining amortisation periods for these assets are six years, ten years, six years, twelve years, and nine years respectively.

2 Technical know-how assets are amortised over their useful economic lives, estimated to be between three and fifteen years. Within this balance the only individually material item relates to CenTrak £13.2m (2018: £14.0m). The remaining amortisation period for this asset is seven years.

3 Trademarks, brands and patents (which include protected intellectual property) are amortised over their useful economic lives estimated to be between eight and twenty years. There are no individually material items within this balance.

4 Internally generated capitalised development costs are amortised over their useful economic lives estimated to be three years. There are no individually material items within this balance, which comprises capitalised costs arising from the development phase of the R&D projects undertaken by the Group.

5 Other intangibles comprise licence and product registration costs, and customer lists, amortised over their useful economic lives, estimated to be between three and five years.

13 Property, plant and equipment

	Land and buildings			Plant, equipment and vehicles	Total
	Freehold £m	Long leases £m	Short leases £m	£m	£m
Cost					
At 2 April 2017	50.0	6.1	12.0	172.6	240.7
Transfer between category	–	0.9	–	(0.9)	–
Assets of businesses acquired	1.0	–	0.1	1.5	2.6
Additions at cost	0.4	0.9	0.7	18.2	20.2
Disposals and retirements	(0.4)	–	(0.1)	(9.3)	(9.8)
Exchange adjustments	(1.8)	(0.6)	(0.6)	(7.8)	(10.8)
At 31 March 2018	49.2	7.3	12.1	174.3	242.9
Transfer between category	–	–	–	(0.4)	(0.4)
Assets of businesses acquired (note 25)	1.2	–	–	0.5	1.7
Assets of business disposed (note 30)	–	–	–	(4.6)	(4.6)
Additions at cost	2.6	0.4	1.7	21.7	26.4
Disposals and retirements	–	(0.1)	(0.2)	(8.1)	(8.4)
Exchange adjustments	0.9	0.4	0.4	5.3	7.0
At 31 March 2019	53.9	8.0	14.0	188.7	264.6
Accumulated depreciation					
At 2 April 2017	12.6	3.0	6.2	112.9	134.7
Transfer between category	–	0.6	–	(0.7)	(0.1)
Charge for the year	1.0	0.8	1.4	15.7	18.9
Disposals and retirements	(0.2)	–	(0.1)	(8.3)	(8.6)
Exchange adjustments	(0.4)	(0.3)	(0.3)	(4.7)	(5.7)
At 31 March 2018	13.0	4.1	7.2	114.9	139.2
Transfer between category	–	–	–	(0.2)	(0.2)
Charge for the year	1.0	0.8	1.1	17.1	20.0
Assets of business disposed (note 30)	–	–	–	(3.4)	(3.4)
Disposals and retirements	–	(0.1)	(0.2)	(7.3)	(7.6)
Exchange adjustments	0.3	0.2	0.2	3.5	4.2
At 31 March 2019	14.3	5.0	8.3	124.6	152.2
Carrying amounts					
At 31 March 2019	39.6	3.0	5.7	64.1	112.4
At 31 March 2018	36.2	3.2	4.9	59.4	103.7

Notes to the Accounts

Continued

14 Interest in associate

	31 March 2019 £m	31 March 2018 £m
Interest in associate		
At beginning of the year	4.0	3.6
Gain on deemed disposal (note 30)	–	0.6
Group's share of loss of associate before Group eliminations	(0.1)	(0.2)
Exchange adjustments	–	–
At end of year	3.9	4.0

	31 March 2019 £m	31 March 2018 £m
Aggregated amounts relating to associate		
Non-current assets	11.4	3.2
Current assets	5.6	5.2
Total assets	17.0	8.4
Non-current liabilities	(8.3)	(4.4)
Current liabilities	(2.9)	(2.2)
Total liabilities	(11.2)	(6.6)
Net assets	5.8	1.8
Group's share of net assets of associate	1.3	0.4
Total revenue	11.2	6.1
Loss	(0.6)	(1.0)
Loss after Group eliminations*	(0.5)	(1.2)
Group's share of loss of associate	(0.2)	(0.3)
Group's share of loss of associate after Group eliminations*	(0.1)	(0.2)

* Group eliminations relate to profit on inventory held by the Group sold by Optomed.

Optomed has a 31 December year end. However, results coterminous with the Group's year end have been included based on the Group's share of the associate.

Details of the Group's associate held at 31 March 2019 are as follows:

Name of associate	Country of incorporation	Proportion of ownership interest	Principal activity
Optomed Oy	Finland	23.3%	Design, manufacture and selling

The Group owns 95,034 (2018: 95,034) Class A shares in Optomed out of a total of 407,385 (2018: 407,385) shares in issue (Class A and B shares). Each A and B share entitles the holder to one vote.

15 Inventories

	31 March 2019 £m	31 March 2018 £m
Raw materials and consumables	82.3	71.8
Work in progress	14.2	15.8
Finished goods and goods for resale	47.8	40.4
	144.3	128.0

The above is stated net of provision for slow-moving and obsolete stock, movements of which are shown below:

	31 March 2019 £m	31 March 2018 £m
At beginning of the year	19.8	17.4
Write downs of inventories recognised as an expense	1.4	3.3
Recognition of provisions for businesses acquired	0.6	1.2
De-recognition of provisions for businesses disposed	(0.1)	–
Amounts reversed against inventories previously impaired and utilisation	(0.9)	(1.0)
Exchange adjustments	0.7	(1.1)
At end of the year	21.5	19.8

Previous write-downs against inventory have been reversed as a result of increased sales in certain markets or where previously written down inventories have been disposed.

There is no material difference between the balance sheet value of inventories and their cost of replacement. None of the inventory has been pledged as security.

16 Trade and other receivables

	31 March 2019 £m	31 March 2018 £m
Trade receivables	226.7	213.6
Allowance for doubtful debts	(5.0)	(4.6)
	221.7	209.0
Other receivables	10.2	9.0
Prepayments	18.6	16.7
Contract assets (note 18)	9.1	–
Accrued income	–	0.5
	259.6	235.2

Other receivables comprise various balances across the Group including acquisition consideration receivables (note 25), disposal consideration still to be received (note 30), sales tax receivables and other non-trade balances.

Notes to the Accounts

Continued

16 Trade and other receivables continued

The movement in the allowance for doubtful debts in respect of trade receivables during the year was as follows:

	31 March 2019 £m	31 March 2018 £m
At beginning of the year	4.6	5.1
Restatement for adoption of IFRS 9	(0.1)	–
Transfer to trade and other payables following adoption of IFRS 15	(0.1)	–
Net impairment loss recognised	1.4	0.6
Amounts recovered against trade receivables previously written down/amounts utilised	(0.9)	(1.2)
Recognition of provisions for businesses acquired	–	0.3
Exchange adjustments	0.1	(0.2)
At end of the year	5.0	4.6

As noted in the Accounting Policies on page 126, from 1 April 2018 impairment charges have been recorded against trade receivables in accordance with IFRS 9, whereby the Group assesses on a forward-looking basis the expected credit losses associated with its trade and other receivables carried at amortised cost.

As a result of adopting IFRS 9, the allowance for doubtful debts reduced by £0.1m, reflected in a credit in retained earnings as at 1 April 2018; and a further £0.1m, in respect of returns provisions, transferred to trade and other payables.

During the prior year, one large, previously provided for, debtor of £0.7m was written off.

The fair value of trade and other receivables approximates to book value due to the short-term maturities associated with these items. There is no impairment risk identified with regards to prepayments and contract assets or other receivables where no amounts are past due.

The ageing of trade receivables was as follows:

	Gross trade receivables		Trade receivables net of doubtful debts	
	31 March 2019 £m	31 March 2018 £m	31 March 2019 £m	31 March 2018 £m
Not yet due	172.2	158.3	171.7	157.8
Up to one month overdue	28.5	30.3	28.5	30.1
Between one and two months overdue	8.8	8.0	8.8	7.9
Between two and three months overdue	5.0	5.1	5.0	4.8
Over three months overdue	12.2	11.9	7.7	8.4
	226.7	213.6	221.7	209.0

17 Trade and other payables: falling due within one year

	31 March 2019 £m	31 March 2018 £m
Trade payables	82.1	77.5
Other taxation and social security	7.0	7.4
Other payables	5.8	3.9
Accruals	58.5	51.6
Contract liabilities (note 18)	10.4	–
Deferred income	–	9.2
Deferred government grant income	1.0	–
	164.8	149.6

Other payables comprise various balances across the Group including share-based payments related amounts, deferred R&D expenditure tax credits and other non-trade payables.

18 Contract balances

	31 March 2019 £m
Contract assets (note 16)	9.1
Contract liabilities current (note 17)	10.4
Contract liabilities non-current (note 21)	8.2
Total contract liabilities	18.6

	31 March 2019	
	Contract assets £m	Contract Liabilities £m
Amounts included in contract balances at the beginning of the period	–	–
Impact of adoption of IFRS 15	2.6	(0.2)
Reclassification of balances on adoption of IFRS 15	0.5	(17.2)
Transfers to receivables which were included in the contract asset balance as at the beginning of the period	(2.6)	
Performance obligations arising in the current reporting period		
Increases as a result of billing ahead of performance		(19.3)
Decreases as a result of revenue recognised in the period		19.8
Increases as a result of performance in advance of billing	7.8	
Amounts arising through business combinations	0.7	(1.1)
Foreign exchange movements	0.1	(0.6)
Amounts included in contract balances at the end of the period	9.1	(18.6)

In some cases, the Group receives payments from customers based on a billing schedule, as established in our contracts. The contract asset relates to revenue recognised for performance in advance of scheduled billing. The contract liability relates to payments received in advance of performance under contract. Changes in the contract asset and liability are due to performance under the contract.

19 Borrowings

	31 March 2019 £m	31 March 2018 £m
Loan notes falling due within one year	0.1	0.1
Overdrafts	9.1	1.0
Total borrowings falling due within one year	9.2	1.1
Unsecured loan notes falling due after more than one year	179.3	176.6
Unsecured bank loans falling due after more than one year	74.4	113.3
Total borrowings falling due after more than one year	253.7	289.9
	262.9	291.0

The loan notes falling due within one year at 31 March 2018, which relate to the previous acquisition of Advanced Electronics Limited ("Advanced"), were converted at par to cash on 19 May 2018. The remaining Advanced loan notes outstanding at the balance sheet date, totalling £0.1m, were converted at par to cash in May 2019.

The remainder of the loan notes falling due after more than one year relate to the United States Private Placement completed in November 2015.

Information concerning the security, currency, interest rates and maturity of the Group's borrowings is given in note 27.

Notes to the Accounts

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20 Provisions

Provisions are presented as:

	31 March 2019 £m	31 March 2018 £m
Current	25.4	8.8
Non-current	10.9	23.1
	36.3	31.9

	Contingent purchase consideration £m	Dilapidations and vacant property £m	Product warranty £m	Legal, contractual and other £m	Total £m
At 1 April 2018	25.0	2.1	4.3	0.5	31.9
Unwinding of discount	0.1	–	–	–	0.1
Additional provision in the year	0.1	0.2	1.8	1.5	3.6
Arising on acquisition (note 25)	8.3	0.1	0.4	–	8.8
Utilised during the year	(3.6)	(0.1)	(0.5)	(0.2)	(4.4)
Released during the year	(3.5)	(0.1)	(0.6)	–	(4.2)
Exchange adjustments	0.4	–	0.1	–	0.5
At 31 March 2019	26.8	2.2	5.5	1.8	36.3

Contingent purchase consideration

The provision at the beginning of the year comprised £3.7m payable within one year relating to the previous acquisitions of FluxData and Cardios and £21.3m payable after one year, relating to the acquisitions of CasMed NIBP, FluxData, Mini-Cam and Visiometrics.

The £8.3m addition arising on acquisition relates to the acquisitions during the year of LAN Control Systems Limited (LAN) and Navtech Radar Limited (Navtech). See note 25.

The £3.6m utilised during the year related to the second earnout period for FluxData.

The £3.5m released during the year related to revision to the estimate of the final earnout for FluxData (£2.7m reduction due to delays in contracts from a major customer), Cardios (£0.5m remaining provision released against goodwill as the minimum target for payment was not met) and Mini-Cam (£0.3m reduction).

The closing total provision is £26.8m, of which £18.9m is payable within one year. The following amounts are based on actual results for the relevant periods: the final earnout period for FluxData for the year ended 31 March 2019; the first earnout period for Mini-Cam for the 17 months ended 31 March 2019; the first earnout period for Navtech for the year ended 31 March 2019. The balance includes estimates for the final earnout period for Visiometrics, for the year ended 31 December 2018, which is subject to final agreement, and the earnout period for CasMed NIBP for the 24 months ended 30 June 2019.

The balance due after more than one year of £8.0m comprises the estimate for the final earnout period for Mini-Cam and the two remaining earnout periods for Navtech.

The range of total possible contingent purchase consideration payable that is not based on known amounts is between £7.2m and a maximum of £58.0m.

The basis for the calculation of each contingent consideration arrangement is set out on page 174 in note 27, including sensitivity of the estimation of the liabilities to changes in those assumptions.

Dilapidations and vacant property

Dilapidations and vacant property provisions exist where the Group has lease contracts under which the unavoidable costs of meeting its obligations under the contracts exceed the economic benefits expected to be received under them. The provisions comprise the Directors' best estimates of future payments:

- to restore the fabric of buildings to their original condition where it is a condition of the leases prior to return of the properties; and
- on vacant properties, the rental costs of which are not expected to be recoverable from subleasing the properties.

These commitments cover the period from 2019 to 2029 though they predominantly fall due within five years.

Product warranty

Product warranty provisions reflect commitments made to customers on the sale of goods in the ordinary course of business and included within the Group companies' standard terms and conditions. The warranties represent assurance type warranties within the definition of IFRS 15. Warranty commitments cover a period of between one and five years and typically apply for a 12-month period. The provision represents the Directors' best estimate of the Group's liability based on past experience.

£0.7m of additions in the year relate to the reclass of amounts previously classified as accruals.

20 Provisions continued

Legal, contractual and other

Legal, contractual and other provisions comprise mainly amounts reserved against open legal and contractual disputes. The Company has on occasion been required to take legal or other actions to defend itself against proceedings brought by other parties. Provisions are made for the expected costs associated with such matters, based on past experience of similar items and other known factors, taking into account professional advice received, and represent Directors' best estimate of the likely outcome. The timing of utilisation of these provisions is frequently uncertain reflecting the complexity of issues and the outcome of various court proceedings and negotiations. Contractual and other provisions represent the Directors' best estimate of the cost of settling future obligations. Unless specific evidence exists to the contrary, these reserves are shown as current.

However, no provision is made for proceedings which have been or might be brought by other parties against Group companies unless the Directors, taking into account professional advice received, assess that it is more likely than not that such proceedings may be successful.

£0.9m of additions in the year relate to the reclass of amounts previously classified as accruals.

21 Trade and other payables: falling due after one year

	31 March 2019 £m	31 March 2018 £m
Other payables	2.0	1.5
Accruals	0.8	2.5
Contract liabilities (note 18)	8.2	–
Deferred income	–	8.0
Deferred government grant income	0.6	0.6
	11.6	12.6

22 Deferred tax

	Retirement benefit obligations £m	Acquired intangible assets £m	Accelerated tax depreciation £m	Short-term timing differences £m	Share-based payment £m	Goodwill timing differences £m	Total £m
At 1 April 2018	9.8	(45.7)	(4.3)	0.1	3.1	7.0	(30.0)
(Charge)/credit to Consolidated Income Statement	(1.5)	8.1	(0.8)	4.7	0.3	(3.0)	7.8
Charge to Consolidated Statement of Comprehensive Income	(1.3)	–	–	(0.3)	–	–	(1.6)
Charge to equity	–	–	–	–	0.9	–	0.9
Acquired (note 25)	–	(6.7)	–	(0.2)	–	3.7	(3.2)
Exchange adjustments	–	(2.3)	(0.3)	0.3	–	(3.4)	(5.7)
At 31 March 2019	7.0	(46.6)	(5.4)	4.6	4.3	4.3	(31.8)

	Retirement benefit obligations £m	Acquired intangible assets £m	Accelerated tax depreciation £m	Short-term timing differences £m	Share-based payment £m	Goodwill timing differences £m	Total £m
At 2 April 2017	13.9	(68.0)	(6.6)	1.4	3.2	12.8	(43.3)
(Charge)/credit to Consolidated Income Statement	(1.7)	29.0	2.0	(0.8)	0.4	(8.0)	20.9
(Charge)/credit to Consolidated Statement of Comprehensive Income	(2.4)	–	–	–	–	–	(2.4)
Charge to equity	–	–	–	–	(0.5)	–	(0.5)
Acquired (note 25)	–	(11.5)	(0.2)	0.2	–	–	(11.5)
Exchange adjustments	–	4.8	0.5	(0.7)	–	2.2	6.8
At 31 March 2018	9.8	(45.7)	(4.3)	0.1	3.1	7.0	(30.0)

Notes to the Accounts

Continued

22 Deferred tax continued

Certain deferred tax assets and liabilities have been offset. The following is the analysis of the deferred tax balances (after offset) for financial reporting purposes:

	31 March 2019 £m	31 March 2018 £m
Deferred tax liability	(73.9)	(67.0)
Deferred tax asset	42.1	37.0
Net deferred tax liability	(31.8)	(30.0)

Movement in net deferred tax liability:

	31 March 2019 £m	31 March 2018 £m
At beginning of year	(30.0)	(43.3)
(Charge)/credit to Consolidated Income Statement:		
UK	(1.6)	(1.6)
Overseas	9.4	22.5
Charge to Consolidated Statement of Comprehensive Income	(1.6)	(2.4)
Credit/(charge) to equity	0.9	(0.5)
Acquired (note 25)	(3.2)	(11.5)
Exchange adjustments	(5.7)	6.8
At end of year	(31.8)	(30.0)

It is likely that the unremitted earnings of overseas subsidiaries would qualify for the UK dividend exemption such that no UK tax would be due upon remitting those earnings to the UK. However, £39.6m (2018: £36.2m) of those earnings may still result in a tax liability, principally as a result of the dividend withholding taxes levied by the overseas jurisdictions in which those subsidiaries operate. These tax liabilities are not expected to exceed £3.9m (2018: £3.9m) of which only £0.7m has been provided as the Group is able to control the timing of the dividends. It is not expected that further amounts will crystallise in the foreseeable future. Temporary timing differences in connection with the interest in associate are insignificant.

At 31 March 2019 the Group had unused capital tax losses of £0.3m (2018: £0.3m) for which no deferred tax asset has been recognised.

23 Share capital

	31 March 2019 £m	31 March 2018 £m
Ordinary shares of 10p each	38.0	38.0

Issued and fully paid

The number of ordinary shares in issue at 31 March 2019 was 379,645,332 (2018: 379,645,332), including treasury shares of nil (2018: 3,990) and shares held by the Employee Benefit Trust of 370,354 (2018: 631,991).

24 Share-based payments

The total cost recognised in the Consolidated Income Statement in respect of share-based payment plans (the 'employee share plans') was as follows:

	Year ended 31 March 2019			Year ended 31 March 2018		
	Equity-settled £m	Cash-settled £m	Total £m	Equity-settled £m	Cash-settled £m	Total £m
Share incentive plan	0.6	–	0.6	0.7	–	0.7
Performance share plan	–	–	–	1.3	–	1.3
Executive share plan	9.7	0.5	10.2	6.6	0.2	6.8
	10.3	0.5	10.8	8.6	0.2	8.8

Share incentive plan

Shares awarded under this Plan are purchased in the market by the Plan's trustees at the time of the award and are held in trust until their transfer to qualifying employees; vesting is conditional upon completion of three years' service. The costs of providing this Plan are recognised in the Consolidated Income Statement over the three-year vesting period.

Performance share plan (PSP)

The PSP was approved by shareholders on 3 August 2005 and replaced the previous share option plans. During the 2016 fiscal year the PSP was replaced with the Executive share plan. The remaining awards under the PSP plan vested during the prior financial year.

Awards made under this Plan vest after three years on a sliding scale subject to the Group's relative Total Shareholder Return against the FTSE 250 excluding financial companies, combined with an absolute Return on Total Invested Capital (ROTIC) measure. Awards which do not vest, lapse on the third anniversary of their award.

A summary of the movements in share awards granted under the PSP is as follows:

	2019 Number of shares awarded	2018 Number of shares awarded
Outstanding at beginning of year	–	960,654
Converted to equity during the year	–	–
Vested during the year (pro-rated for 'good leavers')	–	(843,938)
Lapsed during the year	–	(116,716)
Outstanding at end of year	–	–
Exercisable at end of year	–	–

The weighted average share price at the date of awards vesting during the year was 1398.5p (2018: 1094.9p).

Executive share plan (ESP)

During the year ended 2 April 2016 the Group introduced the ESP, in which executive Directors and certain senior employees participate.

Deferred share awards are made under this Plan as either performance awards or deferred awards. Performance awards vest after three years based on Earnings Per Share and Return on Total Invested Capital (ROTIC) targets, and after two or three years for deferred share awards based on continuing service of the employee only. Awards which do not vest, lapse on the second or third anniversary of their grant.

	2019 Number of shares awarded	2018 Number of shares awarded
Outstanding at beginning of year	2,597,268	1,694,812
Granted during the year	872,838	952,650
Vested during the year (pro-rated for 'good leavers')	(931,820)	–
Lapsed during the year	(248,367)	(50,194)
Outstanding at end of year	2,289,919	2,597,268
Exercisable at end of year	–	–

The performance shares outstanding at 31 March 2019 had a weighted average remaining contractual life of 14 months (2018: 25 months).

Notes to the Accounts

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24 Share-based payments continued

Executive share plan (ESP) continued

The fair value of the awards was calculated using an appropriate simulation method.

	2019	2018	2017
Expected life (years)	3	3	2
Share price on date of grant (p)	1,370.0	1,114.0	1,046.0
Option price (p)	Nil	Nil	Nil
Fair value per option (%)	100%	100%	100%
Fair value per option (p)	1,369.2	1,130.0	1,036.0

Cash settled

Awards under the above plans are normally settled in shares but may be settled in cash at the Board's discretion or where required by local regulations. Cash settled awards follow the same vesting conditions as the plans under which they are awarded.

25 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.

During the year ended 31 March 2019, the Group made four acquisitions namely:

- LAN Control Systems Limited;
- Limotec bvba;
- Navtech Radar Limited; and
- Business Marketers Group, Inc (trading as Rath Communications).

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

- a) the total of acquisitions;
- b) LAN Control Systems Limited, on a stand-alone basis;
- c) Limotec bvba, on a stand-alone basis;
- d) Navtech Radar Limited, on a stand-alone basis;
- e) Business Marketers Group, Inc (trading as Rath Communications), on a stand-alone basis; and
- f) The aggregate adjustments arising on prior year acquisitions.

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 acquisitions above under IFRS 3, excluding acquired intangible assets recognised and deferred taxation thereon, increased the goodwill recognised by £2.0m (2018: £2.8m increase).

As at the date of approval of the financial statements, the acquisition accounting for all prior year acquisitions is complete.

The accounting for all current year acquisitions is provisional; relating to finalisation of the valuation of acquired intangible assets, the initial consideration, which is subject to agreement of certain contractual adjustments, and certain other provisional balances.

25 Acquisitions continued

a) Total of acquisitions

	Total £m
Non-current assets	
Intangible assets	31.2
Property, plant and equipment	1.7
Current assets	
Inventories	4.6
Trade and other receivables	4.7
Corporation tax	0.1
Cash and cash equivalents	5.3
Total assets	47.6
Current liabilities	
Trade and other payables	(4.4)
Provisions	(0.5)
Corporation tax	0.2
Non-current liabilities	
Deferred tax	(3.2)
Total liabilities	(7.9)
Net assets of businesses acquired	39.7
Initial cash consideration paid	63.0
Additional amounts paid in respect of cash acquired	5.1
Amounts owed to vendors*	1.1
Contingent purchase consideration estimated to be paid in respect of current year acquisitions	8.3
Contingent purchase consideration adjustment in respect of prior year acquisitions	(0.5)
Total consideration	77.0
Goodwill arising on acquisitions (current year)	37.7
Goodwill arising on acquisitions (prior year)	(0.4)
Total goodwill	37.3

* In respect of net tangible asset adjustments and corporation tax relating to share options granted prior to acquisition and other adjustments relating to prior year acquisitions.

Analysis of cash outflow in the Consolidated Cash Flow Statement

	Year ended 31 March 2019 £m	Year ended 31 March 2018 £m
Initial cash consideration paid	63.0	114.2
Cash acquired on acquisitions	(5.3)	(3.9)
Initial cash consideration adjustment on current year acquisitions	5.7	0.1
Initial cash consideration adjustment on prior year acquisitions	(0.1)	0.2
Contingent consideration paid and loan notes repaid in cash in relation to prior year acquisitions*	3.7	1.1
Net cash outflow relating to acquisitions (per Consolidated Cash Flow Statement)	67.0	111.7

* The £3.7m comprises £0.1m loan notes and £3.6m contingent consideration paid in respect of prior period acquisitions all of which had been provided in the prior period's financial statements.

Notes to the Accounts

Continued

25 Acquisitions continued

b) LAN Control Systems Limited, on a stand-alone basis

	Total £m
Non-current assets	
Intangible assets	0.9
Current assets	
Trade and other receivables	0.1
Cash and cash equivalents	0.1
Total assets	1.1
Current liabilities	
Trade and other payables	(0.1)
Non-current liabilities	
Deferred tax	(0.2)
Total liabilities	(0.3)
Net assets of business acquired	0.8
Initial cash consideration paid	1.0
Contingent purchase consideration estimated to be paid	0.1
Total consideration	1.1
Goodwill arising on acquisition	0.3

The Group acquired the entire share capital of LAN Control Systems Limited ('LAN') on 6 September 2018 for an initial cash consideration of £1.0m. The maximum contingent consideration payable is £0.8m.

The contingent purchase consideration recognised represents the estimated amount payable, based on revenue-based targets, for each of the three annual earnout periods, commencing 6 September 2018.

LAN, located in Nottingham, UK, provides specialist safety services for buildings, with extensive knowledge of a number of safety systems, including CCTV, Fire alarms, Intruder alarms and Access Controls. LAN will be a bolt-on to FFE Limited within the Group's Infrastructure Safety sector.

The excess of the fair value of the consideration paid over the fair value of the assets acquired is represented by technology related intangibles of £0.9m; with residual goodwill arising of £0.3m. The goodwill represents:

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

LAN contributed £0.3m of revenue and £nil profit after tax for the year ended 31 March 2019.

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 £0.2m and £nil higher respectively.

Acquisition costs totalling £0.1m were recorded in the Consolidated Income Statement.

The goodwill arising on the acquisition is not expected to be deductible for tax purposes.

25 Acquisitions continued

c) Limotec bvba, on a stand-alone basis

	Total £m
Non-current assets	
Intangible assets	3.5
Property, plant and equipment	1.4
Current assets	
Inventories	0.8
Trade and other receivables	1.1
Cash and cash equivalents	2.0
Total assets	8.8
Current liabilities	
Trade and other payables	(1.0)
Provisions	(0.1)
Corporation tax payable	(0.1)
Non-current liabilities	
Deferred tax	(1.1)
Total liabilities	(2.3)
Net assets of business acquired	6.5
Initial cash consideration paid	8.2
Additional amounts paid in respect of cash acquired	1.8
Total consideration	10.0
Goodwill arising on acquisition	3.5

The Group acquired the entire share capital of Limotec bvba ('Limotec') on 18 October 2018 for an initial cash consideration of €9.3m (£8.2m), adjustable for cash acquired. The adjustment was determined to be €2.1m (£1.8m).

Limotec, located in Vichte, Belgium is a leading fire control panel designer and manufacturer and seller of fire safety systems in Belgium. The company will continue to run under its own management team, and will become part of the Group's Infrastructure Safety sector.

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 £1.1m; trade name of £0.8m and technology related intangibles of £1.6m; with residual goodwill arising of £3.5m. The goodwill represents:

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

Limotec contributed £2.8m of revenue and £0.2m of profit after tax for the year ended 31 March 2019.

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 £3.5m higher and £0.2m higher respectively.

Acquisition costs totalling £0.1m were recorded in the Consolidated Income Statement.

The goodwill arising on the Limotec acquisition is not expected to be deductible for tax purposes.

Notes to the Accounts

Continued

25 Acquisitions continued

d) Navtech Radar Limited, on a stand-alone basis

	Total £m
Non-current assets	
Intangible assets	12.6
Property, plant and equipment	0.2
Current assets	
Inventories	2.1
Trade and other receivables	2.1
Corporation tax	0.1
Cash and cash equivalents	3.2
Total assets	20.3
Current liabilities	
Trade and other payables	(2.7)
Provisions	(0.2)
Non-current liabilities	
Deferred tax	(1.8)
Total liabilities	(4.7)
Net assets of business acquired	15.6
Initial cash consideration paid	21.0
Additional amounts paid in respect of cash acquired	3.3
Amounts owed to vendors*	0.6
Contingent purchase consideration estimated to be paid	8.2
Total consideration	33.1
Goodwill arising on acquisition	17.5

* In respect of net tangible asset adjustments and corporation tax relating to share awards granted prior to acquisition.

The Group acquired the entire share capital of Navtech Radar Limited ('Navtech') on 14 November 2018 for an initial cash consideration of £21.0m, adjustable for cash acquired, estimated net tangible assets adjustments and tax receivables in respect of share awards granted prior to acquisition. The total adjustments were estimated to be £3.9m. Maximum contingent purchase consideration payable is £18.0m.

The current contingent consideration payable represents the fair value of the estimated amounts payable for each of three annual consecutive earnout periods, commencing 1 April 2018. The earnout in each period is calculated by reference to the relevant earnings for the period compared to the target for the period. Further detail of the earnout is given on page 174 in note 27.

Navtech, located in Wantage, UK, combines radar, cameras and software to improve road safety and provide real-time incident detection, including for tunnels and smart motorways. Navtech also delivers cost-effective real-time perimeter protection for critical infrastructure sites, such as airports, and supplies sensing applications for industrial automation in harsh outdoor environments. Navtech will continue to run under its current management team, and will become part of the Group's Infrastructure Safety sector.

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 £5.8m; trade name of £1.3m and technology related intangibles of £5.5m; with residual goodwill arising of £17.5m. The goodwill represents:

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

Navtech contributed £2.6m of revenue and £0.6m of profit after tax for the year ended 31 March 2019.

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 £4.9m higher and £2.1m higher respectively.

Acquisition costs totalling £0.4m were recorded in the Consolidated Income Statement.

The goodwill arising on the Navtech acquisition is not expected to be deductible for tax purposes.

25 Acquisitions continued

e) Business Marketers Group, Inc (trading as Rath Communications), on a stand-alone basis

	Total £m
Non-current assets	
Intangible assets	14.2
Property, plant and equipment	0.1
Current assets	
Inventories	1.7
Trade and other receivables	1.4
Total assets	17.4
Current liabilities	
Trade and other payables	(0.7)
Provisions	(0.2)
Non-current liabilities	
Deferred tax	(0.1)
Total liabilities	(1.0)
Net assets of business acquired	16.4
Initial cash consideration paid	32.8
Total consideration	32.8
Goodwill arising on acquisition	16.4

The Group acquired the entire share capital of Business Marketers Group, Inc trading as Rath Communications ('Rath'), on 17 January 2019 for an initial cash consideration of US\$42.4m (£32.8m).

Rath, located in Wisconsin, USA, operates in a number of communications markets, including the provision of two-way communication systems in public and commercial buildings, for areas of refuge where evacuation may not be safe or possible. The company also operates in other market segments including elevator and public safety phones. Rath will become part of the Group's Infrastructure Safety sector, within the Avire business.

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 £7.7m; trade name of £3.6m and technology related intangibles of £2.9m; with residual goodwill arising of £16.4m. The goodwill represents:

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

Rath contributed £2.9m of revenue and £0.9m of profit after tax for the year ended 31 March 2019.

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 £9.5m higher and £2.5m higher respectively.

Acquisition costs totalling £0.1m were recorded in the Consolidated Income Statement.

The goodwill arising on the acquisition of Rath is expected to be deductible for tax purposes.

Notes to the Accounts

Continued

25 Acquisitions continued

f) Adjustments in respect of prior year acquisitions

	Total £m
Current liabilities	
Trade and other payables	0.1
Corporation tax	0.3
Total liabilities	0.4
Net adjustments to assets of businesses acquired in prior years	0.4
Amounts owed to vendors	0.5
Contingent purchase consideration paid	(0.5)
Total adjustments to consideration	–
Adjustment to goodwill	(0.4)

In finalising the acquisition accounting for the prior year acquisitions of Setco, Cardios and Argus, adjustments were made to the opening balance sheet totalling a net credit to goodwill of £0.4m.

The adjustments were not material individually or in aggregate and as such the comparative balance sheet was not restated; instead the adjustments have been made through the current year.

The adjustments related to the release of a tax provision and corresponding indemnity asset in Argus, release of contingent consideration and recognition of accruals in Cardios and adjustments to inventory provisions in Setco.

26 Notes to the Consolidated Cash Flow Statement

	Year ended 31 March 2019 £m	Year ended 31 March 2018 £m
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 loss on disposal of operations	217.8	181.2
Non-cash movement on hedging instruments	(0.1)	(0.3)
Depreciation of property, plant and equipment	20.0	18.9
Amortisation of computer software	1.8	1.6
Amortisation of capitalised development costs and other intangibles	8.8	7.1
Impairment of intangibles	0.7	0.7
Amortisation of acquired intangible assets	35.6	34.7
Share-based payment expense in excess of amounts paid	4.7	4.4
Additional payments to pension plans	(11.4)	(10.7)
Defined benefit pension charge	2.1	–
Profit on sale of property, plant and equipment and computer software	(0.6)	(0.5)
Operating cash flows before movement in working capital	279.4	237.1
Increase in inventories	(9.2)	(9.1)
Increase in receivables	(15.3)	(24.6)
Increase in payables and provisions	8.2	9.3
Revision to estimate of, and exchange differences arising on, contingent consideration payable	(3.5)	1.7
Cash generated from operations	259.6	214.4
Taxation paid	(40.6)	(41.1)
Net cash inflow from operating activities	219.0	173.3

	Year ended 31 March 2019 £m	Year ended 31 March 2018 £m
Analysis of cash and cash equivalents		
Cash and bank balances	81.2	70.7
Overdrafts (included in current borrowings)	(9.1)	(1.0)
Cash and cash equivalents	72.1	69.7

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26 Notes to the Consolidated Cash Flow Statement continued

	1 April 2018 £m	Cash flow £m	Net cash/ (debt) acquired £m	Loan notes repaid £m	Exchange adjustments £m	31 March 2019 £m
Analysis of net debt						
Cash and bank balances	70.7	4.2	5.3	–	1.0	81.2
Overdrafts	(1.0)	(8.1)	–	–	–	(9.1)
Cash and cash equivalents	69.7	(3.9)	5.3	–	1.0	72.1
Loan notes falling due within one year	(0.1)	–	–	–	–	(0.1)
Loan notes falling due after more than one year	(176.6)	–	–	0.1	(2.8)	(179.3)
Bank loans falling due after more than one year	(113.3)	43.9	–	–	(5.0)	(74.4)
Total net debt	(220.3)	40.0	5.3	0.1	(6.8)	(181.7)

The net increase in cash and cash equivalents of £1.4m comprised cash outflow of £3.9m and cash acquired of £5.3m.

The net cash outflow from bank loans of £43.9m comprised repayments of £110.3m offset by drawdowns of £66.4m.

The net cash outflow from loan notes relates to £0.1m repayment of existing loan notes issued in relation to the previous acquisition of Advanced Electronics Limited ('Advanced').

Reconciliation of movements of the Group's liabilities from financing activities

Liabilities from financing activities are those for which cash flows were, or will be, classified as cash flows from financing activities in the Consolidated Cash Flow Statement.

	1 April 2018 £m	Changes from financing cash flows £m	Acquisition and disposal of subsidiaries £m	Other changes* £m	Effects of foreign exchange £m	31 March 2019 £m
Loan notes falling due within one year	0.1	–	–	–	–	0.1
Overdraft	1.0	–	–	8.1	–	9.1
Borrowings (current)	1.1	–	–	8.1	–	9.2
Loan notes falling due after more than one year	176.6	(0.1)	–	–	2.8	179.3
Bank loans falling due after more than one year	113.3	(43.9)	–	–	5.0	74.4
Borrowings (non-current)	289.9	(44.0)	–	–	7.8	253.7
Total liabilities from financing activities	291.0	(44.0)	–	8.1	7.8	262.9
Trade and other payables: falling due within one year	149.6	(8.2)	3.7	17.1	2.6	164.8

* Other changes include movements in overdraft which is treated as cash, interest accruals and other movements in working capital balances.

27 Financial instruments

Policy

The Group's treasury policies seek to minimise financial risks and to ensure sufficient liquidity for the Group's operations and strategic plans. No complex derivative financial instruments are used, and no trading or speculative transactions in financial instruments are undertaken. Where the Group does use financial instruments, these are mainly to manage the currency risks arising from normal operations and its financing. Operations are financed mainly through retained profits and, in certain geographic locations, bank borrowings. Foreign currency risk is the most significant aspect for the Group in the area of financial instruments. It is exposed to a lesser extent to other risks such as interest rate risk and liquidity risk. The Board reviews and agrees policies for managing each of these risks and these policies are summarised below. The Group's policies have remained unchanged since the beginning of the financial year.

Details of the significant accounting policies and methods adopted (including the criteria for recognition, the basis of measurement and the bases of recognition of income and expenses) for each class of financial asset, financial liability and equity instrument are disclosed in the Accounting Policies note.

Capital risk management

The Group manages its capital to ensure that entities in the Group will be able to continue as going concerns while maximising the return to stakeholders through the optimisation of the debt and equity balance. The capital structure of the Group consists of debt, which includes the borrowings disclosed in note 19 to the Accounts, cash and cash equivalents and equity attributable to equity holders of the parent, comprising issued capital, reserves and retained earnings as disclosed in the Consolidated Statement of Changes in Equity.

The Group is not subject to externally imposed capital requirements.

Foreign currency risk

The Group is exposed to foreign currency risk as a consequence of both trading with foreign companies and owning subsidiaries located in foreign countries.

The Group earns a significant proportion of its profit in currencies other than Sterling. This gives rise to translational currency risk, where the Sterling value of profits earned by the Group's foreign subsidiaries fluctuates with the strength of Sterling relative to their operating (or 'functional') currencies. The Group does not hedge this risk, so its reported profit is sensitive to the strength of Sterling, particularly against the US Dollar and Euro. The Group also has transactional currency exposures. These arise on sales or purchases by operating companies in currencies other than the companies' operating (or 'functional') currency. Significant sales and purchases are matched where possible and a proportion of the net exposure is hedged by means of forward foreign currency contracts.

The Group has significant investments in overseas operations in the USA and EU, with further investments in Australia, New Zealand, Singapore, Switzerland, Brazil, China and India. As a result, the Group's balance sheet can be affected by movements in these countries' exchange rates. Where significant and appropriate, currency denominated net assets are hedged by currency borrowings. These currency exposures are reviewed regularly.

Interest rate risk

The Group is exposed to interest rate fluctuations on its borrowings and cash deposits. Where bank borrowings are used to finance operations they tend to be short term with floating interest rates. Longer-term funding is provided by the Group's bank loan facilities which are at floating rates, or by the Group's fixed rate United States Private Placement completed in November 2015.

Surplus funds are placed on short-term fixed rate deposit or in floating rate deposit accounts.

Credit risk

Credit risk is defined as the risk that a counterparty will default on its contractual obligations resulting in financial loss to the Group. The Group has adopted a policy of only dealing with creditworthy counterparties, as a means of mitigating the risk of financial loss from defaults. Credit ratings are supplied by independent agencies where available, and if not available, the Group uses other publicly available financial information and its own trading records to rate its major customers. The Group's exposure and the credit ratings of its counterparties are continuously monitored and the aggregate value of transactions concluded is spread amongst approved counterparties. Credit exposure is controlled by counterparty limits that are reviewed regularly.

Trade receivables consist of a large number of customers, spread across diverse industries and geographic areas. Ongoing credit evaluation is performed on the financial condition of accounts receivable and, where appropriate, credit guarantee insurance cover is purchased.

The carrying amount of trade, tax and other receivables, derivative financial instruments and cash of £323.3m (2018: £290.8m) represents the Group's maximum exposure to credit risk as no collateral or other credit enhancements are held.

The credit risk on liquid funds and derivative financial instruments is limited because the counterparties are banks with high credit ratings assigned by international credit-rating agencies.

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27 Financial instruments continued

Liquidity risk

The Group has a syndicated multi-currency revolving credit facility which was refinanced in November 2016 and remains at £550m. The facility, in Sterling, US Dollar, Euro and Swiss Franc, currently runs to November 2023 subsequent to a one-year extension option exercised during the current year.

In addition, in November 2015 the Group completed a United States Private Placement and issued \$250m of loan notes in January 2016, repayable at five, seven and ten-year intervals. These facilities are the main sources of long-term funding for the Group.

The Group has a strong cash flow and the funds generated by operating companies are managed regionally based on geographic location.

Funds are placed on deposit with secure, highly-rated banks. For short-term working capital purposes, most operating companies utilise local bank overdrafts. These practices allow a balance to be maintained between continuity of funding, security and flexibility. Because of the nature of their use, the facilities are typically 'on demand' and as such uncommitted. Overdraft facilities are typically renewed annually.

Currency exposures

Translational exposures

It is estimated, by reference to the Group's US Dollar and Euro denominated profits, that a one per cent change in the value of the US Dollar relative to Sterling would have had a £1.1m (2018: £0.9m) impact on the Group's reported profit before tax; and a one per cent change in the value of the Euro relative to Sterling would have had a £0.3m (2018: £0.3m) impact on the Group's profit before tax for the year ended 31 March 2019.

Transactional exposures

The Group has net foreign currency monetary assets and liabilities that are assets and liabilities not denominated in the functional currency of the underlying company. These comprise cash and overdrafts as well as certain trade receivable and payable balances. These foreign currency monetary assets and liabilities give rise to the net currency gains and losses recognised in the Consolidated Income Statement as a result of movement in exchange rates. The exposures are predominantly US Dollar and Euro. Group policy is for a significant portion of foreign currency exposures, including sales and purchases, to be hedged by forward foreign exchange contracts in the company in which the transaction is recorded.

Interest rate risk profile

The Group's financial assets which are subject to interest rate fluctuations comprise interest-bearing cash equivalents which totalled £4.7m at 31 March 2019 (2018: £4.5m). These comprised Sterling denominated deposits of £0.3m (2018: £1.0m), and Euro, US Dollar and Renminbi deposits of £4.4m (2018: £3.5m) which are placed on local money markets and earn interest at market rates. Cash balances of £76.5m (2018: £66.2m) earn interest at local market rates.

The financial liabilities which are subject to interest rate fluctuations comprise bank loans, bank overdrafts, and certain unsecured loans, which totalled £83.5m at 31 March 2019 (2018: £114.3m). All bank loans bear interest at floating rates where the fixed period is typically no more than three months. Interest rates are based on the LIBOR of the currency in which the liabilities arise plus a small margin. Bank overdrafts bear interest at local market rates.

The loan notes related to the acquisition of Advanced Electronics Limited outstanding at 31 March 2019 attract interest at a fixed rate of 1%. The loan notes related to the United States Private Placement attract interest at a weighted average fixed rate of 2.5%.

The Group's weighted average interest cost on net debt for the year was 3.26% (2018: 2.83%).

	31 March 2019 £m	31 March 2018 £m
Analysis of interest-bearing financial liabilities		
Sterling denominated bank loans	–	20.0
US Dollar denominated bank loans	59.4	61.8
Euro denominated bank loans	6.4	23.2
Swiss Franc denominated bank loans	8.6	8.3
Total bank loans	74.4	113.3
Overdrafts (principally Sterling and US Dollar denominated)	9.1	1.0
Sterling denominated loan notes	82.2	82.2
US Dollar denominated loan notes	49.0	45.5
Euro denominated loan notes	48.2	49.0
Total interest-bearing financial liabilities	262.9	291.0

For the year ended 31 March 2019 it is estimated that a general increase of one percentage point in interest rates would have reduced the Group's profit before tax by £1.0m (2018: £1.2m).

27 Financial instruments continued

Maturity of financial liabilities

The gross contractual maturities of the Group's non-derivative financial liabilities that are neither current nor on demand are as follows.

	One to two years £m	Between two and five years £m	After more than five years £m	Gross maturities £m	Effect of discounting/ financing rates £m	Total £m
At 31 March 2019						
Accruals	0.1	0.2	0.5	0.8	–	0.8
Other payables	0.9	0.3	0.8	2.0	–	2.0
Contingent purchase consideration	5.9	2.1	–	8.0	–	8.0
Other provisions	1.1	1.2	0.6	2.9	–	2.9
Bank loans	–	74.4	–	74.4	–	74.4
Loan notes	76.8	83.1	37.1	197.0	(17.7)	179.3
	84.8	161.3	39.0	285.1	(17.7)	267.4
	One to two years £m	Between two and five years £m	After more than five years £m	Gross maturities £m	Effect of discounting/ financing rates £m	Total £m
At 31 March 2018						
Accruals	1.0	1.1	0.4	2.5	–	2.5
Other payables	0.7	0.1	0.7	1.5	–	1.5
Contingent purchase consideration	16.7	4.7	–	21.4	(0.1)	21.3
Other provisions	0.5	0.7	0.6	1.8	–	1.8
Bank loans	–	113.3	–	113.3	–	113.3
Loan notes	4.1	155.6	38.3	198.0	(21.4)	176.6
	23.0	275.5	40.0	338.5	(21.5)	317.0

The Group's bank loans are revolving credit facilities and the amount and timing of future payments and drawdowns is unknown. It is therefore not possible to calculate the interest arising on these loans and we have therefore not disclosed the maturity of the gross cash flows (including interest) in relation to these liabilities.

Borrowing facilities

The Group's principal sources of long-term funding are its unsecured five-year £550m Revolving Credit Facility and its US\$250m United States Private Placement. The Revolving Credit Facility was refinanced in November 2016 and initially ran to November 2021. Effective November 2017, the Group extended this facility for a further year to November 2022, and effective November 2018 for a further year to November 2023.

The United States Private Placement of US\$250m was completed in November 2015. The unsecured loan notes were drawn on 6 January 2016 as £82m, €56m and US\$64m at a weighted average fixed interest rate of 2.5%. The loan notes mature at five, seven and ten-year intervals. Interest is payable half yearly.

The Group's undrawn committed facilities available at 31 March 2019 were £475.6m (2018: £436.7m) of which £nil (2018: £nil) matures within one year and £475.6m (2018: £436.7m) between two and five years.

The Group has additional short-term unsecured and committed US bank facilities, £6m matures in November 2019 and £12m matures in November 2021. Both facilities were undrawn at 31 March 2019.

Other short-term operational funding is provided by cash generated from operations and by local bank overdrafts. These overdraft facilities are uncommitted and are generally renewed on an annual or ongoing basis and hence the facilities expire within one year or less.

UK companies have cross-guaranteed £15.3m (2018: £15.3m) of overdraft facilities of which £9.1m (2018: £1.0m) was drawn.

Notes to the Accounts

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27 Financial instruments continued

Fair values of financial assets and financial liabilities

With the exception of the Group's fixed rate loan notes, there were no significant differences between the book value and fair value (as determined by market value) of the Group's financial assets and liabilities.

The fair value of floating borrowings approximates to the carrying value because interest rates are reset to market rates at intervals of less than one year.

The fair value of the Group's fixed rate loan notes arising from the United States Private Placement completed in January 2016 is estimated to be £180.7m (2018: £175.8m). The fair value is estimated by discounting the future contracted cash flow using readily available market data and represents a level 2 measurement in the fair value hierarchy under IFRS 7.

The fair value of derivative financial instruments is estimated by discounting the future contracted cash flow, using readily available market data, and represents a level 2 measurement in the fair value hierarchy under IFRS 7.

The fair value of deferred contingent consideration arising on acquisitions is estimated by discounting the possible future cash flows for the acquired company identified as best, base and worst-case scenarios, using probability weightings of 25%, 50% and 25% respectively. The relevant future cash flows are dependent on the specific terms of the sale and purchase agreement. Those terms are as follows:

- CasMed NIBP – Based on a sliding scale between 82.5% and 105% around a target threshold of sales to a particular customer for the 24 months to 30 June 2019, subject to a maximum earnout of \$2.0m (£1.5m).
- Mini-Cam – Based on a 10-times multiple of EBITDA above a target threshold of the higher of prior year and £7.3m for the year ended 31 March 2020.
- Navtech – Based on 7.5 times multiple of EBIT excluding R&D capitalisation and amortisation above a target threshold of £2.9m and £3.6m for the years ended 31 March 2020 and 31 March 2021 respectively, subject to a maximum earn out of £5.6m and £9.4m.

This calculation represents a level 3 measurement in the fair value hierarchy under IFRS 7. The fair value is sensitive to the weighting assigned to the expected future cash flows. For those earnouts where the payable is based on expectations of future cash flows, a change in weighting of 10 percentage points towards the best-case scenario would result in an increase in the undiscounted estimate of future cash flows of:

	Current expected future cash flow £m	10 pp shift in weighting towards upside expectation £m
CasMed NIBP	1.5	–
Mini-Cam	2.7	0.8
Navtech	5.2	1.7

Classification of financial assets and liabilities

All financial assets and liabilities, with the exception of derivatives and contingent purchase consideration, are classified as amortised cost for accounting purposes.

Derivatives in a hedging relationship are classified as fair value hedging instruments. Derivatives not in a hedging relationship are classified as fair value through profit or loss.

Contingent purchase consideration is classified as fair value through profit or loss.

27 Financial instruments continued

Hedging

The Group's policy is to hedge significant sales and purchases denominated in foreign currency using forward currency contracts. These instruments are initially recognised at fair value, which is typically £nil, and subsequent changes in fair value are taken to the Consolidated Income Statement, unless hedge accounted.

The following table details the foreign currency contracts outstanding as at the year end, which mostly mature within one year and therefore the cash flows and resulting effect on profit and loss are expected to occur within the next 12 months:

	Average exchange rate/£		Foreign currency		Contract value		Fair value	
	31 March 2019	31 March 2018	31 March 2019 m	31 March 2018 m	31 March 2019 £m	31 March 2018 £m	31 March 2019 £m	31 March 2018 £m
Forward contracts not in a designated cash flow hedge								
US Dollars	1.32	1.41	0.9	0.5	0.7	0.3	–	–
Euros	1.16	1.13	2.8	0.1	2.4	0.1	–	–
Other currencies					18.5	10.5	0.1	(0.1)
					21.6	10.9	0.1	(0.1)
Forward contracts in a designated cash flow hedge								
US Dollars	1.26	1.35	2.4	9.6	1.9	7.2	(0.1)	0.3
Euros	1.13	1.12	25.8	25.9	23.0	23.0	0.5	0.3
Other currencies					8.8	5.3	0.1	–
					33.7	35.5	0.5	0.6
Total forward contracts								
US Dollars	1.28	1.35	3.3	10.1	2.6	7.5	(0.1)	0.3
Euros	1.13	1.12	28.6	25.9	25.4	23.1	0.5	0.3
Other currencies					27.3	15.8	0.2	(0.1)
					55.3	46.4	0.6	0.5
Amounts recognised in the Consolidated Income Statement							0.2	0.1
Amounts recognised in the Consolidated Statement of Comprehensive Income and Expenditure							0.4	0.4
							0.6	0.5

The fair values of the forward contracts are disclosed as a £0.9m (2018: £0.7m) asset and £0.3m (2018: £0.2m) liability in the Consolidated Balance Sheet. Of the £18.5m (2018: £10.5m) of open contracts for other currencies not in a designated cash flow hedge £16.9m (2018: £9.0m) relates to a Swiss Franc contract for expected cash flows between two subsidiaries within the Group.

Any movements in the fair values of the contracts in a designated cash flow hedge are recognised in equity until the hedged transaction occurs, when gains/losses are recycled to finance income or finance expense.

	31 March 2019 £m	31 March 2018 £m
Analysis of movement in the Hedging reserve		
Amounts removed from Consolidated Statement of Changes in Equity and included in Consolidated Income Statement during the year	(0.4)	(0.5)
Amounts recognised in the Consolidated Statement of Comprehensive Income and Expenditure	0.4	0.4
Net movement in the Hedging reserve in the year in relation to the effective portion of changes in fair value of cash flow hedges	–	(0.1)

Hedge effectiveness is determined at the inception of the hedge relationship, and through periodic prospective effectiveness assessments to ensure that an economic relationship exists between the hedged item and hedging instrument.

There was no ineffectiveness arising with regards to forward contracts in a designated cash flow hedge.

The foreign currency forwards are denominated in the same currency as the highly probable future transaction, therefore the hedge ratio is 1:1.

With the exception of currency exposures, the disclosures in this note exclude short-term receivables and payables.

Notes to the Accounts

Continued

27 Financial instruments continued

Market risk

The Group's activities expose it primarily to the financial risks of changes in foreign currency exchange rates. The Group enters into derivative financial instruments to manage its exposure to foreign currency risk, including:

- forward foreign exchange contracts to hedge the exchange rate risk arising on the export of goods to and from the USA, Mainland Europe and the UK; and
- foreign exchange loans to hedge the exchange rate risk arising on translation of the Group's investment in foreign operations which have the Euro, US Dollar and Swiss Franc as their functional currencies.

Bank loans and loan notes with a carrying value set out in the table on page 172 are used as net investment hedges for foreign currency net assets with carrying value of €63.5m (2018: €80.5m), US\$141.4m (US\$199.5m) and CHF11.1m (2018: CHF11.1m). The hedging ratio was 1:1. The change in the carrying value of the borrowings that was recognised is other comprehensive income was a loss of £7.9m (2018: gain of £13.3m).

Market risk exposures are measured using sensitivity analysis as described below.

There has been no change to the Group's exposure to market risks or in the manner in which these risks are managed and measured.

Foreign currency sensitivity analysis

The Group is mainly exposed to the currency of the USA (US Dollar) and the currency of Mainland Europe (Euro).

The carrying amount of the Group's US Dollar and Euro denominated monetary assets and monetary liabilities at the reporting date are as follows:

	Assets		Liabilities	
	31 March 2019 £m	31 March 2018 £m	31 March 2019 £m	31 March 2018 £m
US Dollar	764.8	678.1	190.0	202.5
Euro	242.2	232.3	81.6	89.9

If Sterling increased by 10% against the US Dollar and the Euro, profits before taxation and other equity would decrease as follows:

	US Dollar		Euro	
	31 March 2019 £m	31 March 2018 £m	31 March 2019 £m	31 March 2018 £m
Profit	10.5	8.6	2.9	2.7
Other equity	61.8	43.2	19.3	12.9

The profit sensitivity arises mainly from the translation of overseas profits earned during the year. 10% is the sensitivity rate which management assesses to be a reasonably possible change in foreign exchange rates. The Group's profit sensitivity has increased against the US Dollar because more of the Group's profits is earned in this currency.

28 Commitments

Capital commitments

Capital expenditure relating to the purchase of equipment authorised and contracted at 31 March 2019 but not recognised in these accounts amounts to £2.5m (2018: £0.6m).

Commitments under operating leases

The Group has entered into commercial leases on properties and other equipment. The former expire between April 2019 and August 2029 and the latter between June 2019 and May 2025. Only certain property agreements contain an option for renewal at rental prices based on market prices at the time of exercise. Refer to note 6 for the value of operating lease expenditure recognised during the current period.

Total payments under non-cancellable operating leases will be made as follows:

	Land and buildings		Other	
	31 March 2019 £m	31 March 2018 £m	31 March 2019 £m	31 March 2018 £m
Within one year	11.8	10.4	0.9	0.8
Within two to five years	28.7	23.3	1.6	1.4
After five years	9.5	9.1	—	—
	50.0	42.8	2.5	2.2

29 Retirement benefits

Group companies operate both defined benefit and defined contribution pension plans. The Halma Group Pension Plan and the Apollo Pension and Life Assurance Plan (both UK) have defined benefit sections with assets held in separate trustee administered funds. Both of these sections had already closed to new entrants in 2002/03 and closed to future benefit accruals for 2014/15. From that date, the former defined benefit members joined the existing defined contribution section within the Halma Group Pension Plan.

Overseas subsidiaries have adopted mainly defined contribution plans, with the exception of small defined benefit plans in the Swiss entities of Medice AG and Robutech AG.

Total pension costs of £13.3m (2018: £10.6m) recognised in employee costs (note 7), comprise £10.4m (2018: £9.8m) related to defined contribution plans and £2.9m (2018: £0.8m) related to defined benefit plans, including administration expenses and the past service charge for the effect of equalisation of pension benefits for men and women in the defined benefit plans ('Guaranteed Minimum Pension equalisation').

Defined contribution plans

The amount charged to the Consolidated Income Statement in respect of defined contribution plans was £10.4m (2018: £9.8m) and represents contributions payable to these plans by the Group at rates specified in the rules of the plans. The assets of the plans are held separately from those of the Group in funds under the control of trustees. Where there are employees who leave the plans prior to vesting fully in the contributions, the ancillary contributions payable by the Group may be reduced by the amount of forfeited contributions.

Defined benefit plans

The Group's significant defined benefit plans are for qualifying employees of its UK subsidiaries. Under the plans, the employees are entitled to retirement benefits of up to two thirds of final pensionable salary on attainment of a retirement age of 60, for members of the Executive Board, and 65, for all other qualifying employees. No other post-retirement benefits are provided. The plans are funded plans.

The most recent actuarial valuation of the Halma Group Pension Plan was carried out for the Trustees of the Plan as at 30 November 2017 by Mr A Gibbons, Fellow of the Institute and Faculty of Actuaries, of Mercer Limited. The present value of the liabilities was measured using the Projected Unit method. This method is an accrued benefits valuation method in which the plan liabilities include an allowance for projected earnings.

The most recent actuarial valuation of the Apollo Pension and Life Assurance Plan was carried out for the Trustees of the Plan as at 1 April 2018 by Mr M Whitcombe, Fellow of the Institute and Faculty of Actuaries, also of Mercer Limited. The same Projected Unit method was used.

An alternative to the projected unit credit method is a valuation on a solvency basis, which is an estimate of the cost of buying out benefits with a suitable insurance company. This amount represents the amount that would be required to settle the plan liabilities rather than the Group continuing to fund the ongoing liabilities of the Plans. The most recent estimate of the solvency liability was £375.4m as at 30 November 2017 for the Halma Group Pension Plan and £104.2m as at 1 April 2018 for the Apollo Pension and Life Assurance Plan.

	31 March 2019	31 March 2018	1 April 2017
Key assumptions used (UK plans):			
Discount rate	2.4%	2.5%	2.5%
Expected return on plan assets	2.4%	2.5%	2.5%
Expected rate of salary increases (while still applicable)	n/a	3.1%	3.1%
Pension increases LPI 2.5%	2.1%	2.1%	2.1%
Pension increases LPI 3.0%	2.4%	2.3%	2.3%
Inflation – RPI	3.2%	3.1%	3.1%
Inflation – CPI	2.2%	2.1%	2.1%

In line with market practices during the year the Group has adopted a 'single agency' approach to bond ratings and has excluded non-corporate bonds. The changes increased the discount rate by 0.2%, offset by a 0.3% reduction from changes in market conditions.

Notes to the Accounts

Continued

29 Retirement benefits continued

Mortality assumptions

CMI tables have been used, consistent with those used in the recently completed triennial valuations. The assumed life expectations on retirement at age 65 are:

	31 March 2019 Years	31 March 2018 Years	1 April 2017 Years
Retiring today:			
Males	22.1	22.1	22.5
Females	24.0	24.0	24.5
Retiring in 20 years:			
Males	23.5	23.5	24.4
Females	25.5	25.5	26.5

The sensitivities regarding the principal assumptions used to measure the UK plan liabilities are set out below:

Assumption	Change in assumption	Impact on plan liabilities
Discount rate	Increase/decrease by 0.5%	Decrease by 8.7%/increase by 9.8%
Rate of inflation	Increase/decrease by 0.5%	Increase by 6.1%/decrease by 5.6%
Rate of mortality	Decrease by one year	Decrease by 3.6%

Amounts recognised in the Consolidated Income Statement in respect of the UK and Swiss defined benefit plans are as follows:

	31 March 2019			31 March 2018		
	UK defined benefit plans £m	Other defined benefit plans £m	Total £m	UK defined benefit plans £m	Other defined benefit plans £m	Total £m
Current service cost	–	0.3	0.3	–	0.3	0.3
Guaranteed Minimum Pension equalisation	2.1	–	2.1	–	–	–
Net interest charge on pension plan liabilities	1.2	–	1.2	1.7	–	1.7
	3.3	0.3	3.6	1.7	0.3	2.0

The Guaranteed Minimum Pension equalisation amount of £2.1m is an estimate calculated by the Group's actuary, Mercer, to value the effect of equalising benefits between men and women in the UK schemes, following the judgement on 26 October 2018 in relation to the Lloyds Banking Group's case.

Actuarial gains and losses have been reported in the Consolidated Statement of Comprehensive Income and Expenditure.

The actual return on plan assets was a gain of £17.4m (2018: gain of £6.7m).

The cumulative amount of actuarial losses recognised in the Consolidated Statement of Comprehensive Income and Expenditure since the date of transition to IFRS is £81.7m (2018: £88.2m).

The amount included in the Consolidated Balance Sheet arising from the Group's obligations in respect of its defined benefit retirement plans is as follows:

	31 March 2019			31 March 2018		
	UK defined benefit plans £m	Other defined benefit plans £m	Total £m	UK defined benefit plans £m	Other defined benefit plans £m	Total £m
Present value of defined benefit obligations	(325.4)	(6.0)	(331.4)	(320.6)	(5.0)	(325.6)
Fair value of plan assets	287.6	4.6	292.2	267.7	4.0	271.7
Net Retirement benefit obligation	(37.8)	(1.4)	(39.2)	(52.9)	(1.0)	(53.9)

Under the current arrangements, cash contributions in the region of £13-14m per year will be made for the immediate future with the objective of eliminating the pension deficit.

29 Retirement benefits continued

Movements in the present value of the UK and Swiss defined benefit obligations were as follows:

	Year ended 31 March 2019 £m	Year ended 31 March 2018 £m
At beginning of year	(325.6)	(339.9)
Service cost	(0.3)	(0.3)
Past service charge	(2.1)	–
Interest cost	(8.0)	(8.2)
Remeasurement gains/(losses):		
Actuarial losses and gains arising from changes in demographic assumptions	(0.2)	10.9
Actuarial losses and gains arising from changes in financial assumptions	(9.4)	1.7
Actuarial gains and losses arising from experience adjustments	5.5	(1.0)
Contributions from plan members	(0.5)	(0.4)
Benefits paid	9.2	11.2
Foreign exchange	–	0.4
At end of year	(331.4)	(325.6)

Movements in the fair value of the UK and Swiss plan assets were as follows:

	Year ended 31 March 2019 £m	Year ended 31 March 2018 £m
At beginning of year	271.7	265.0
Interest income	6.8	6.5
Actuarial gains excluding interest income	10.6	0.2
Contributions from the sponsoring companies	11.7	11.1
Contributions from plan members	0.5	0.4
Benefits paid	(9.2)	(11.2)
Foreign exchange	0.1	(0.3)
At end of year	292.2	271.7

The net movement on actuarial gains and losses of the UK and Swiss plans was as follows:

	Year ended 31 March 2019 £m	Year ended 31 March 2018 £m
Defined benefit obligations	(4.1)	11.6
Fair value of plan assets	10.6	0.2
Net actuarial gains	6.5	11.8

Notes to the Accounts

Continued

29 Retirement benefits continued

The analysis of the UK plan assets and the expected rate of return at the balance sheet date were as follows:

Fair value of assets	31 March 2019	31 March 2018
	Total £m	Total £m
Equity instruments	95.4	138.4
Debt instruments	172.3	110.5
Property/cash	19.9	18.8
	287.6	267.7

All the UK plan assets are market quoted.

	Expected rate of return	
	31 March 2019 %	31 March 2018 %
Equity instruments	2.40	2.50
Debt instruments	2.40	2.50
Property/cash	2.40	2.50
	2.40	2.50

In conjunction with the trustees, the Group conducts asset-liability reviews for its defined benefit pension plan. The results of these reviews are used to assist the trustees and the Group to determine the optimal long-term asset allocation with regard to the structure of the liabilities of the plan. They are also used to assist the trustees in managing the volatility in the underlying investment performance and risk of a significant increase in the defined benefit deficit by providing information used to determine the plan's investment strategy.

As a consequence, the Group is progressively giving more emphasis to a closer return matching of plan assets and liabilities, both to ensure the long-term security of its defined benefit commitment and to reduce earnings and balance sheet volatility.

Based on the most recent actuarial valuation, the estimated amount of contributions expected to be paid to the UK and Swiss plans during the year ended 31 March 2020 is £12.7m.

The levels of contributions are based on the current service cost and the expected future cash flows of the defined benefit pension plans. The Group estimates the plan liabilities on average to fall due over 20 and 25 years, respectively, for the Halma and Apollo plans.

The expected maturity analysis of the undiscounted pension obligation for the next ten years is as follows:

	Less than one year £m	Between one and two years £m	Between two and five years £m	Between five and ten years £m	Total £m
At 31 March 2019					
Halma	8.2	8.4	26.9	50.6	94.1
Apollo	0.9	0.9	3.0	5.6	10.4

The Group has considered the requirements of IFRIC 14 with respect to the UK plans and in particular the need to recognise an additional liability in respect of any minimum funding requirements. The Group has determined that it has an unconditional right to a refund under the plans and hence no additional liabilities are required.

30 Disposal of operations

On 30 June 2018, the Group sold the trade and assets of Accudynamics Inc, part of the Fluid Technology CGU group, for sale proceeds of £4.2m less disposal costs of £0.3m, of which £3.1m was received during the year, and we expect to receive the remaining £0.8m approximately one year after the sale, in accordance with the Asset Sale agreement.

The net assets on disposal were £4.4m comprising plant and equipment, inventory and trade receivables and payables, which together with the disposal of related goodwill of £0.8m and disposal costs of £0.3m, offset by the recycling of foreign exchange gains of £0.3m, resulted in a net loss on disposal (before taxation) of £1.0m.

In the prior year, on 27 March 2018, Optomed completed a new share offering for €5.5m in which the Group did not participate. This diluted our ownership interest to 23.3% from 26.7%, realising a gain for the Group which was included as an adjusting item in the Consolidated Income Statement. The share issue was used to fund the acquisition of a digital software company, Commit Oy. Optomed continues to meet the tests for an associate.

31 Contingent liabilities

Group financing exemptions applicable to UK controlled foreign companies

As previously reported, on 24 November 2017 the European Commission published an opening decision that the United Kingdom controlled foreign company group financing partial exemption ('FCPE') constitutes State Aid. On 2 April 2019, the European Commission's final decision concluded that the FCPE rules, as they applied up to 31 December 2018, constitute State Aid. The Group has benefitted from the FCPE in 2018 and prior periods. The total benefit at 31 March 2019 was approximately £15.4m (31 March 2018: £12.0m) in respect of tax and approximately £0.6m in respect of interest (31 March 2018: £0.3m). The Group is currently evaluating whether to appeal the European Commission's decision and the UK government may also appeal. Therefore, at present the Group believes that no provision is required in respect of this issue, although a cash payment may be required in the next year which would be refundable on a successful appeal.

Other contingent liabilities

The Group has widespread global operations and is consequently a defendant in many legal, tax and customs proceedings incidental to those operations. In addition, there are contingent liabilities arising in the normal course of business in respect of indemnities, warranties and guarantees. These contingent liabilities are not considered to be unusual in the context of the normal operating activities of the Group. Provisions have been recognised in accordance with the Group accounting policies where required. None of these claims are expected to result in a material gain or loss to the Group.

32 Events subsequent to end of reporting period

There were no known material non-adjusting events which occurred between the end of the reporting period and prior to the authorisation of these financial statements on 11 June 2019.

33 Related party transactions

Trading transactions

	Year ended 31 March 2019 £m	Year ended 31 March 2018 £m
Associated companies		
Transactions with associated companies		
Purchases from associated companies	1.3	1.6
Balances with associated companies		
Amounts due to associated companies	0.2	0.3
Other related parties		
Transactions with other related parties		
Rent charged by other related parties	–	–
Balances with other related parties		
Amounts due to other related parties	–	–

Other related parties comprised one company that rents its premises from a pension scheme of which one of the Directors is a member. 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 Annual Remuneration Report on pages 96 to 107.

	Year ended 31 March 2019 £m	Year ended 31 March 2018 £m
Wages and salaries	6.8	6.0
Pension costs	0.2	0.1
Share-based payment charge	3.3	3.2
	10.3	9.3

Company Balance Sheet

	Notes	31 March 2019 £m	31 March 2018 £m
Fixed assets			
Intangible assets	C3	0.4	0.3
Tangible assets	C4	5.3	3.2
Investments	C5	284.3	249.5
Deferred tax asset	C10	5.3	7.5
		295.3	260.5
Current assets			
Debtors	C6	628.5	661.0
Short-term deposits		0.1	0.1
Current tax		4.5	–
Cash at bank and in hand		1.8	1.2
		634.9	662.3
Creditors: amounts falling due within one year			
Borrowings	C7	29.6	17.7
Creditors	C8	74.4	47.3
Current tax payable		–	4.0
		104.0	69.0
Net current assets		530.9	593.3
Total assets less current liabilities		826.2	853.8
Creditors: amounts falling due after more than one year			
Borrowings	C7	253.7	289.9
Retirement benefit obligations	C13	22.3	36.2
Creditors	C9	20.5	20.2
		296.5	346.3
Net assets		529.7	507.5
Capital and reserves			
Share capital	C11	38.0	38.0
Share premium account		23.6	23.6
Own shares		(4.7)	(6.3)
Capital redemption reserve		0.2	0.2
Other reserves		(22.2)	(17.5)
Profit and loss account		494.8	469.5
Total equity		529.7	507.5

The Company reported a profit for the financial year ended 31 March 2019 of £75.0m (2018: £110.9m).

The financial statements of Halma plc, company number 00040932, were approved by the Board of Directors on 11 June 2019.

Andrew Williams
Director

Marc Ronchetti
Director

Company Statement of Changes in Equity

	Share capital £m	Share premium account £m	Own shares £m	Capital redemption reserve £m	Other reserves £m	Profit and loss account £m	Total £m
At 1 April 2018	38.0	23.6	(6.3)	0.2	(17.5)	469.5	507.5
Profit for the year	–	–	–	–	–	75.0	75.0
Other comprehensive income and expense:							
Actuarial gains on defined benefit pension plan	–	–	–	–	–	8.3	8.3
Tax relating to components of other comprehensive income and expense	–	–	–	–	–	(1.6)	(1.6)
Total comprehensive income for the year	–	–	–	–	–	6.7	6.7
Dividends paid	–	–	–	–	–	(57.2)	(57.2)
Share-based payment charge	–	–	–	–	5.3	–	5.3
Deferred tax on share-based payment transactions	–	–	–	–	0.3	–	0.3
Excess tax deductions related to exercised share awards	–	–	–	–	–	0.8	0.8
Purchase of Own shares	–	–	(3.8)	–	–	–	(3.8)
Performance share plan awards vested	–	–	5.4	–	(10.3)	–	(4.9)
At 31 March 2019	38.0	23.6	(4.7)	0.2	(22.2)	494.8	529.7
At 2 April 2017	38.0	23.6	(7.3)	0.2	(15.2)	404.5	443.8
Profit for the year	–	–	–	–	–	110.9	110.9
Other comprehensive income and expense:							
Actuarial gains on defined benefit pension plan	–	–	–	–	–	8.8	8.8
Tax relating to components of other comprehensive income and expense	–	–	–	–	–	(1.9)	(1.9)
Total comprehensive income for the year	–	–	–	–	–	6.9	6.9
Dividends paid	–	–	–	–	–	(53.4)	(53.4)
Share-based payment charge	–	–	–	–	5.0	–	5.0
Deferred tax on share-based payment transactions	–	–	–	–	(0.4)	–	(0.4)
Excess tax deductions related to exercised share awards	–	–	–	–	–	0.6	0.6
Purchase of Own shares	–	–	(2.6)	–	–	–	(2.6)
Performance share plan awards vested	–	–	3.6	–	(6.9)	–	(3.3)
At 31 March 2018	38.0	23.6	(6.3)	0.2	(17.5)	469.5	507.5

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Other Information

Notes to the Company Accounts

C1 Accounting policies

Basis of preparation

The separate Company financial statements are presented as required by the Companies Act 2006 and have been prepared on the historical cost basis, and in accordance with Financial Reporting Standard 101 'Reduced Disclosure Framework' except for the revaluation of certain financial instruments and contingent purchase consideration at fair value as permitted by the Companies Act 2006.

The principal accounting policies have been applied consistently in both the current and prior year.

Financial reporting standard 101 – reduced disclosure exemptions

The Company has taken advantage of the following disclosure exemptions under FRS 101:

- the requirements of paragraphs 45(b) and 46–52 of IFRS 2 Share-based payment;
- the requirements of IFRS 7 Financial Instruments: Disclosures;
- paragraph 79(a) (iv) of IAS 1;
- paragraph 73(e) of IAS 16 Property, Plant and Equipment;
- paragraph 118(e) of IAS 38 Intangible Assets;
- the requirements of paragraphs 10(d), 10(f), 16, 38A, 38B, 38C, 38D, 40A, 40B, 40C, 40D, 111 and 134–136 of IAS 1 Presentation of Financial Statements;
- the requirements of IAS 7 Statement of Cash Flows;
- the requirements of paragraphs 30 and 31 of IAS 8 Accounting Policies, Changes in Accounting Estimates and Errors;
- the requirements in IAS 24 Related Party Disclosures to disclose related party transactions entered into between two or more members of a group, provided that any subsidiary which is a party to the transaction is wholly owned by such a member; and
- paragraph 17 of IAS 24, 'Related party disclosures' (key management compensation).

New Standards and Interpretations applied for the first time in the year ended 31 March 2019

The following Standards and Interpretations applied for the first time, with effect from 1 April 2018, and have been adopted in the preparation of these Company Accounts.

- IFRS 9 'Financial Instruments: Classification and Measurement'.
- IFRS 15 'Revenue from Contracts with Customers'.
- Amendments to IFRS 2: Classification and Measurement of Share-based Payment Transactions.
- Annual Improvements 2014–2016 Cycle.
- IFRIC Interpretation 22 Foreign Currency Transactions and Advance Consideration.

None of the above mentioned new Standards and Interpretations have affected the Company's results.

Significant accounting judgements and estimates

In preparing the financial statements, management has made judgements, estimates and assumptions that affect the application of the Company's accounting policies and the reported amounts of assets, liabilities, income and expenses. Actual results may differ from these estimates. Estimates and assumptions are reviewed on an ongoing basis and are based on historical experience and various other factors that are believed to be reasonable under the circumstances.

The most significant critical judgement is in determining the value of the future defined benefit obligation in respect of the assumptions used to calculate present values. These include future mortality, discount rate and inflation. Management makes these judgements in consultation with an independent actuary. Details of the judgements made in calculating the defined benefit obligation are disclosed in note 29 to the Group accounts.

The most significant area of estimate is determining whether there is impairment of the Company's investments which requires estimation of the investments' value in use. The value in use calculation requires the Company to estimate the future cash flows expected to arise from the investments and apply suitable discount rates in order to calculate present values.

Summary of significant accounting policies

Foreign currencies

Transactions in foreign currency are recorded at the rate of exchange at the date of the transaction. Monetary assets and liabilities denominated in foreign currencies at the balance sheet date are reported at the rates prevailing at that date. Any gain or loss arising from subsequent exchange rate movements is included as an exchange gain or loss in the Profit and Loss Account.

Financial Instruments

The Company recognises financial instruments when it becomes a party to the contractual arrangements of the instrument. Financial instruments are de-recognised when they are discharged or when the contractual terms expire. The Company's accounting policies in respect of financial instruments transactions are explained below:

Financial assets

The Company recognises its financial assets into one of the categories discussed below, depending on the purpose for which the asset was acquired.

C1 Accounting policies continued

Financial assets continued

Other than the financial assets in a qualifying hedging relationship, the Company's accounting policy for each category is as follows:

Fair value through profit or loss – These are carried in the balance sheet at fair value with changes in fair value recognised in the Profit and Loss Account.

Amortised costs – Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. They arise principally through the provision of goods and services to customers (other group companies), but also incorporate other types of contractual monetary asset. They are initially recognised at fair value plus transaction costs that are directly attributable to their acquisition or issue and are subsequently carried at amortised cost using the effective interest rate method, less provision for impairment.

The Company's receivables relate entirely to balances due from other group companies. Where the intercompany receivable is payable on demand the Company determines whether any impairment provision is required by assessing the company's ability to repay the loan. Where it is determined that the Company does not have the capacity to repay the loan at the balance sheet date, or the loan is not repayable on demand, an expected credit loss model is used to calculate the impairment provision required.

Financial liabilities

The Company classifies its financial liabilities into one of the categories discussed below, depending on the purpose for which the liability was acquired.

Fair value through profit or loss – These comprise only out-of-the-money derivatives. They are carried in the balance sheet at fair value with changes in fair value recognised in the Profit and Loss Account.

At amortised cost – Financial liabilities at amortised cost including bank borrowings are initially recognised at fair value. Such interest-bearing liabilities are subsequently measured at amortised cost using the effective interest rate method.

Share-based payments

The Company has adopted IFRS 2 and the accounting policies followed are in all material respects the same as the Group's policy. This policy is shown on page 135.

Investments

Investments are stated at cost less provision for impairment.

Fixed assets and depreciation

Fixed assets are stated at cost less provisions for impairment and depreciation which, with the exception of freehold land which is not depreciated, is provided on all fixed assets on the straight-line method, each item being written off over its estimated life. The principal annual rates used for this purpose are:

Freehold property	2%
Plant, equipment and vehicles	8% to 33.3%

Leases

The costs of operating leases of property and other assets are charged on a straight-line basis over the life of the lease.

Pensions

The Company makes contributions to defined contribution pension plans, which are charged against profits when they become payable. The Company also operates a UK defined benefit pension plan. For defined benefit plans, the asset or liability recorded in the Company Balance Sheet is the difference between the fair value of the plan's assets and the present value of the defined obligation at that date. The defined benefit obligation is calculated separately for the plan on an annual basis by an independent actuary using the projected unit credit method.

Actuarial gains and losses are recognised in full in the year in which they occur, and are taken to other comprehensive income.

Current and past service costs, along with the impact of settlements or curtailments, are charged to profit and loss. The unwinding of the discounting on the net liability is recognised within finance income or expense as appropriate.

Taxation

Tax on the profit or loss for the year comprises both current and deferred tax. Tax is recognised in the Profit and Loss Account except to the extent that it relates to items recognised either in other comprehensive income or directly in equity.

Current tax is the expected tax payable, on the taxable income for the year, using tax rates enacted, or substantively enacted, at the balance sheet date, and any adjustments to tax payable in respect of previous years.

Deferred taxation is provided on taxable temporary differences between the carrying amounts of assets and liabilities in the financial statements and their corresponding tax bases. Deferred tax is measured at the tax rates that are expected to apply in the periods in which the temporary differences are expected to reverse, based on tax rates and laws that have been enacted or substantively enacted by the balance sheet date. Deferred tax assets are only recognised if recovery is considered more likely than not on the basis of all available evidence.

The recognition of deferred tax assets is dependent on assessments of future taxable income.

Notes to the Company Accounts

Continued

C2 Result for the year

As permitted by Section 408(3) of the Companies Act 2006, the Profit and Loss Account of Halma plc is not presented as part of these accounts. The Company has reported a profit after taxation for the financial year of £75.0m (2018: £110.9m).

Auditors' remuneration for audit services to the Company was £0.3m (2018: £0.3m).

Total employee costs (including Directors) were:

	Year ended 31 March 2019 £m	Year ended 31 March 2018 £m
Wages and salaries	16.3	13.3
Social security costs	2.0	1.6
Pension costs	0.9	0.9
	19.2	15.8

Included within wages and salaries are share-based payment charges under IFRS 2 of £4.3m (2018: £3.5m).

	Year ended 31 March 2019 Number	Year ended 31 March 2018 Number
Number of employees (all in the UK)	67	59

Details of Directors' remuneration are set out on pages 96 to 107 within the Annual Remuneration Report and form part of these financial statements.

C3 Fixed assets – intangible assets

	Computer Software £m
Cost	
At 1 April 2018	1.1
Additions at cost	0.2
At 31 March 2019	1.3
Accumulated amortisation	
At 1 April 2018	0.8
Charge for the year	0.1
At 31 March 2019	0.9
Carrying amounts at 31 March 2019	0.4
At 31 March 2018	0.3

C4 Fixed assets – tangible assets

	Freehold properties £m	Plant equipment and vehicles £m	Total £m
Cost			
At 1 April 2018	3.1	1.4	4.5
Additions at cost	2.2	0.3	2.5
Disposals	–	(0.2)	(0.2)
At 31 March 2019	5.3	1.5	6.8
Accumulated depreciation			
At 1 April 2018	0.7	0.6	1.3
Charge for the year	0.1	0.2	0.3
Disposals	–	(0.1)	(0.1)
At 31 March 2019	0.8	0.7	1.5
Carrying amounts at 31 March 2019	4.5	0.8	5.3
At 31 March 2018	2.4	0.8	3.2

C5 Investments

Shares in Group companies

	31 March 2019 £m	31 March 2018 £m
At cost less amounts written off at beginning of year	249.5	173.1
Increase in investments	34.8	77.4
Decrease in investments	–	(1.0)
At cost less amounts written off at end of year	284.3	249.5

The increase of £34.8m in the year comprises additions from acquisitions in the period: £1.1m for the 100% acquisition of LAN Control Systems Limited including estimated deferred contingent consideration of £0.1m, and £33.1m for the acquisition of Navtech Radar Limited including estimated deferred contingent consideration of £8.2m. There was also an additional investment of £0.6m in the year in an existing subsidiary, Halma Euro Trading Limited.

The increase of £77.4m in the prior year comprised additions from acquisitions in the period: £73.0m for the 100% acquisition of Mini-Cam Enterprises Limited including estimated deferred contingent consideration of £8.1m; and £3.8m for the 100% acquisition of Sterling Safety Systems Limited. There was also an additional investment of £0.6m in the year in an existing subsidiary, Halma Euro Trading Limited. The decrease of £1.0m in the year related to the closure of a UK business subsequent to the year end arising due to the transfer of its operations to its sister company in the USA.

Notes to the Company Accounts

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Subsidiaries

Details of the Company's subsidiaries at 31 March 2019 are below.

Name	Registered Address	Country	Class	Group %
A & G Security Electronics Limited	(1)	United Kingdom	Ordinary Shares	100*
Accutome, Inc.	3222 Phoenixville Pike, Malvern PA 19355	United States	Ordinary Shares	100
Adler Diamant BV	Simon Homburgstraat 21, 5431 NN Cuijk	Netherlands	Ordinary Shares	100
Advanced Electronics Limited	34 Moorland Way, Nelson Park, Cramlington, Northumberland NE23 1WE	United Kingdom	Ordinary Shares	100*
Advanced Fire Systems Inc.	100 South Street, Hopkinton MA 01748	United States	Common Stock	100
Alicat Scientific, Inc.	7641 N Business Park Drive, Tucson AZ 85743	United States	Common Stock	100
Alicat BV	Geograaf 24, 6921 EW Duiven	Netherlands	Ordinary Shares	100
Analytical Development Company Limited	(1)	United Kingdom	Ordinary Shares	100*
Apollo (Beijing) Fire Products Co. Ltd	Block A5, Jinghai Industrial Park, No. 156 Jinghai Fourth Road, BDA Beijing	China	Ordinary Shares	100
Apollo America, Inc.	25 Corporate Drive, Auburn Hills MI 48326	United States	Common Stock	100
Apollo Fire Detectors Limited	36 Brookside Road, Havant, Hampshire PO9 1JR	United Kingdom	Ordinary & Deferred Shares	100*
Apollo GmbH	Am Anger 31, D-33332 Gütersloh	Germany	Ordinary Shares	100
Aquionics, Inc.	1455 Jamike Avenue, Suite 100, Erlanger Kentucky 41018	United States	Ordinary Shares	100
Argus Security S.R.L.	Via Maurizio Gonzaga no. 7, Milan, 20123	Italy	Quotas	100
ASL Holdings Limited	Ty Coch House, Llantarnam Park Way, Cwmbarn, Gwent NP44 3AW	United Kingdom	Ordinary Shares	100*
Avire Elevator Technology India Pte. Ltd	Plot A/147, Road No. 24, Wagle Industrial Estate, Thane West, 400604	India	Ordinary & Preference Shares	100
Avire Elevator Technology Shanghai Ltd	4 Floor, Buling 75, No.1066, Qinzhou Road, Shanghai, 200233	China	Ordinary Shares	100
Avire Global Pte. Ltd	80 Raffles Place, #32-01 UOB Plaza, 048624	Singapore	Ordinary Shares	100
Avire Inc.	415 Oser Avenue, Suite Q, Hauppauge NY 11788	United States	Ordinary Shares	100
Avire Limited	Unit 1 The Switchback Gardner Road, Maidenhead, Berkshire SL6 7RJ	United Kingdom	Ordinary Shares	100
Avire Trading Limited	Unit 1 The Switchback Gardner Road, Maidenhead, Berkshire SL6 7RJ	United Kingdom	Ordinary Shares	100*
Avire s.r.o.	Okružní 2615, České Budějovice, 370 01	Czech Republic	Ordinary Shares	100
Avo Photonics (Canada) Inc.	20 Mural Street, Unit 7, Richmond Hill, Ontario L4B 1K3	Canada	A & B Shares	100
Avo Photonics, Inc.	700 Business Center Drive, Suite 125, Horsham PA 19044	United States	A & B Preferred Stock & Common Stock	100
B.E.A. Holdings, Inc.	100 Enterprise Drive, RIDC West, Pittsburgh PA 15275	United States	Ordinary Shares	100
B.E.A. Inc.	100 Enterprise Drive, RIDC West, Pittsburgh PA 15275	United States	Ordinary Shares	100
B.E.A. Investments, Inc.	100 Enterprise Drive, RIDC West, Pittsburgh PA 15275	United States	Ordinary Shares	100
Baoding Longer Precision Pump Co., Ltd	Building A, Chuangye Center, Baoding National High-Tech Development Zone, Baoding, Hebei, 071051	China	Ordinary Shares	100
BEA Electronics (Beijing) Co Ltd	Room 5959, Shenchang Building, No.51, Zhichun Road, Haidian District, Beijing	China	Ordinary Shares	100
BEA Electronics Singapore Pte. Ltd	16 Raffles Quay, #38-03 Hong Leong Building, Singapore 048581	Singapore	Ordinary Shares	100
BEA Japan KK	154-0012 Komazawa, Setagaya-ku 3-28-11, Tokyo	Japan	Ordinary Shares	100
Beijing Ker'Kang Instrument Limited Company	Unit 316, Area 1 Tower B, Chuangxin Building, 12 Hongda North Rd, Beijing, 100176	China	Ordinary Shares	100
Berson Milieutechniek BV	PO Box 90, 5670 AB Nuenen	Netherlands	Ordinary Shares	100
Bio-Chem Fluidics, Inc.	85 Fulton Street, Boonton New Jersey 07005	United States	Ordinary Shares	100
Bureau d'Electronique appliquée S.A.	Allée des Noisetiers 5, Liège Science Park B-4031 LIEGE-Angleur	Belgium	Ordinary Shares	100

Name	Registered Address	Country	Class	Group %
Business Marketers Group, Inc (trading as Rath Communications)	24720 N Corporate Cir, Sussex WI 53089.	United States	Ordinary shares	100
Cardios Sistemas Comercial e Industrial Ltda	Avenida Paulista, 509, 1º e 2º andares, conjuntos 201, 212, 213 e 214, Bela Vista, São Paulo, Estado de São Paulo, CEP 01311-910	Brazil	Quotas	100
Cardio Dinâmica Ltda	Avenida Paulista nº 509, 16º andar, conjuntos 1601 e 1602, São Paulo, Estado de São Paulo, CEP 01311-910-0	Brazil	Quotas	100
Castell Interlocks, Inc.	Suite 865, 150 N Michigan Avenue, Chicago Illinois 60601	United States	Ordinary Shares	100
Castell Locks Limited	(1)	United Kingdom	Ordinary Shares	100*
Smart Process Safety China Ltd (previously Castell China Ltd)	Section A, Floor 2, Block 23, No. 1 Factory Building, No. 123, Lane 1165, Jindu Road, Minhang District, Shanghai, 201108	China	Ordinary Shares	100
Castell Safety International Limited	The Castell Building, 217 Kingsbury Road, London NW9 9PQ	United Kingdom	Ordinary Shares	100*
Castell Safety Technology Limited	(1)	United Kingdom	Ordinary Shares	100*
CEF Safety Systems BV	Delftweg 69, 2289 BA Rijswijk	Netherlands	Ordinary Shares	100
CenTrak, Inc.	125 Pheasant Run, Newton PA 18940	United States	Common Stock	100
Clinical Patents, LLC	125 Pheasant Run, Newton PA 18940	United States	Common Stock	100
Cosasco Middle East (FZE)	PO Box 8186, SAIF Zone, Sharjah	UAE	Common Stock	100
Crowcon Detection Instruments Limited	172 Brook Drive, Milton Park, Milton, Abingdon, Oxfordshire OX14 4SD	United Kingdom	A & Ordinary Shares	100*
Diba Industries Limited	2 College Park, Coldhams Lane, Cambridge CB1 3HD	United Kingdom	Ordinary Shares	100*
Diba Industries, Inc.	4 Precision Road, Danbury CT 06810	United States	Common Stock	100
Diba Japan K.K.	Urban Komazawa, 3-28-11 Komazawa, Setagaya-ku, Tokyo	Japan	Ordinary Shares	100
Eco Rupture Disc Limited	(1)	United Kingdom	Ordinary Shares	100*
Eiffel APAC PTE. Ltd	4 Shenton Way, #15-01, SGX Centre II	Singapore	Ordinary Shares	100
Eiffel Holdings Limited	(1)	United Kingdom	Ordinary Shares	100
Eiffel Investments UK Limited	(1)	United Kingdom	Ordinary Shares	100
Eiffel Investments Ltd	2 Grand Canal Square, Grand Canal Harbour, Dublin 2	Ireland	Ordinary Shares	100
Eiffel Lux S.a.r.l.	20 Rue des Peupliers, L-2328	Luxembourg	Ordinary Shares	100
Eiffel Management Services Ltd	2 Grand Canal Square, Grand Canal Harbour, Dublin 2	Ireland	Ordinary Shares	100
Elfab Hughes Limited	(1)	United Kingdom	Ordinary Shares	100*
Elfab Limited	Alder Road, West Chirton Industrial Estate, North Shields, Tyne & Wear NE29 8SD	United Kingdom	Ordinary Shares	100*
F.I.R.E. Panel, LLC	8435 N. 90th St., Suite 2, Scottsdale AZ 85258	United States	Common Stock	100
Fabrication de Produits de Sécurité SoRL	21 Rue du Cuir, ZI Sidi Rezig, Mégrine, 2033	Tunisia	Ordinary Shares	100
FFE Holdings Limited	(1)	United Kingdom	Deferred, A & Ordinary Shares	100*
FFE Limited	9 Hunting Gate, Hitchin, Hertfordshire SG4 0TJ	United Kingdom	Ordinary Shares	100*
Fiberguide Industries, Inc.	1 Bay Street, Stirling NJ 07980	United States	Ordinary Shares	100
Fire Fighting Enterprises Limited	(1)	United Kingdom	Ordinary Shares	100*
Firetrace Aerospace, LLC	8435 N. 90th St., Suite 7 Scottsdale, AZ 85258	United States	Ordinary Shares	100
Firetrace International Asia Pte. Ltd	16 Collyer Quay, #11-01, Hitachi Tower, Singapore, 049318	Singapore	Ordinary Shares	100
Firetrace International Limited	(1)	United Kingdom	Ordinary Shares	100*
Firetrace USA, LLC	8435 N. 90th St., Suite 2 Scottsdale, AZ, 85258	United States	Ordinary Shares	100
Fluid Conservation Systems, Inc.	502 Technecenter Drive, Suite B, Milford OH 45150	United States	Ordinary Shares	100
FluxData Inc.	176 Anderson Ave, STE F304, Rochester, NY 14607	United States	Ordinary Shares	100
Fortress Interlocks Limited	2 Inverclyde Drive, Wolverhampton, West Midlands WV4 6FB	United Kingdom	Ordinary & Preferred Shares	100*

Notes to the Company Accounts

Continued

Name	Registered Address	Country	Class	Group %
Fortress Interlocks Pty Ltd	Ross Wadeson Accountants, Unit 13, 20-30 Malcolm Road, Braeside VIC 3195	Australia	Ordinary Shares	100
Halma (China) Group	Block 1, 3rd Floor, No. 123, Lane 1165, Jindu Road, Minghang District, Shanghai, 201108	China	Ordinary Shares	100
Halma Do Brasil – Equipamentos De Segurança Ltda	Av. Tancredo Neves 620, Salas 1003/1004, Caminho das Árvores, Salvador, Bahia, 41.820-020	Brazil	Ordinary Shares	100
Halma Euro Trading Limited	(1)	United Kingdom	Ordinary Shares	100*
Halma Europe DS BV	J. Keplerweg 14, 2408 AC Alphen aan den Rijn	Netherlands	Ordinary Shares	100
Halma Financing Limited	(1)	United Kingdom	Ordinary Shares	100
Halma Holding GmbH	PO Box 35, Bruckstrasse 31, D-72417 Jungingen	Germany	Ordinary Shares	100
Halma Holdings, Inc.	502 Techne Center Dr Suite B, Milford, OH 45150	United States	Ordinary Shares	100
Halma India Private Ltd	'Prestige Shantiniketan', Gate 2, Tower C, 7th Floor, Whitefield Main Road, Mahadevapura, Bengaluru, Bangalore, Karnataka, 560048	India	Ordinary Shares	100
Halma International BV	De Huufkes 23, 5674TL Nuenen	Netherlands	Ordinary Shares	100
Halma International Limited	(1)	United Kingdom	A & Ordinary Shares	100*
Halma Investment Holdings Limited	(1)	United Kingdom	Ordinary Shares	100
Halma IT Services Limited	(1)	United Kingdom	Ordinary Shares	100*
Halma Overseas Funding Limited	(1)	United Kingdom	Ordinary Shares	100
Halma PR Services Limited	(1)	United Kingdom	Ordinary Shares	100*
Halma Resistors Unlimited	(1)	United Kingdom	Ordinary Shares	100
Halma Safety Limited	(1)	United Kingdom	Ordinary Shares	100*
Halma Saúde e Ótica do Brasil – Importação, Exportação e Distribuição Ltda	Avenida Marcos Pentead de Ulhoa Rodrigues, n. 1119, 11th Floor, Suite 1102, Tambore, Barueri/São Paulo, 06.460-040	Brazil	Ordinary Shares	100
Halma Services Limited	(1)	United Kingdom	Ordinary Shares	100*
Hanovia Limited	780/781 Buckingham Avenue, Slough, Berkshire SL1 4LA	United Kingdom	Ordinary Shares	100*
HFT Shanghai Co., Ltd	Floor 2, No. 1 Factory Building, No. 123, Lane 1165, Jindu Road, Minghang District, Shanghai, 201108	China	Ordinary Shares	100
HWM-Water Limited	Ty Coch House, Llantarnam Park Way, Cwmbran, Gwent NP44 3AW	United Kingdom	Ordinary Shares	100*
Hydreka SAS	1 Chemin des Vergers, Batiment 2A, 69760, Limonest	France	Ordinary Shares	100
InPipe GmbH	Walserstraße 92a, 6991 Riezlern im Kleinwalsertal	Austria	Ordinary Shares	100
Iso-Lok Limited	(1)	United Kingdom	Ordinary Shares	100*
Keeler Instruments, Inc.	456 Parkway, Lawrence Park Ind. Estate, Broomall PA 19008	United States	Ordinary Shares	100
Keeler Limited	Clewer Hill Road, Windsor, Berkshire SL4 4AA	United Kingdom	Ordinary Shares	100*
Kerry Ultrasonics Sdn Bhd	10th Floor, Wisma Havela Thakardas, No. 1, Jalan Tiong Nam, Off Jalan Raja Laut, 50350 Kuala Lumpur, Wilayah Persekutuan	Malaysia	Ordinary Shares	100
Kirk Key Interlock Company, LLC	9048 Meridian Circle NW, North Canton OH 44720	United States	Ordinary Shares	100
Klaxon Signals Limited	(1)	United Kingdom	Ordinary Shares	100*
Labsphere, Inc.	231 Shaker Street, North Sutton NH 03260	United States	Ordinary Shares	100
LAN Control Systems Limited	H1 Ash Tree Court, Mellors Way, Nottingham Business Park, Nottingham. NG8 6PY	United Kingdom	Ordinary Shares	100*
Langer Instruments Corporation	85 Fulton Street, Unit 12, Boonton NJ 07005	United States	Ordinary Shares	100
Limotec bvba	Bosstraat 21, 8570 Anzegem (Vichte)	Belgium	Ordinary Shares	100
Meadowbridge Holdings Limited	(1)	United Kingdom	Ordinary Shares	100*
Medicel AG	Dornierstrasse 11, CH – 9423 Altenrhein	Switzerland	A & B Preference & C Ordinary Shares	100

Name	Registered Address	Country	Class	Group %
MicroSurgical Technology, Inc.	8415 154th Avenue NE, Redmond WA 98052	United States	Common Stock	100
Mini-Cam Limited	Unit 4 Yew Tree Way, Golborne, Warrington, WA3 3FN	United Kingdom	Ordinary Shares	100*
Mini-Cam Enterprises Limited	Unit 4 Yew Tree Way, Golborne, Warrington WA3 3FN	United Kingdom	Ordinary Shares	100*
Mini-Cam Holdings Limited	Unit 4 Yew Tree Way, Golborne, Warrington, WA3 3FN	United Kingdom	Ordinary Shares	100*
Mistura Systems Limited	(1)	United Kingdom	Ordinary Shares	100*
Morley Electronics Limited	Unit 34 Moorland Way, Nelson Park, Cramlington, Northumberland NE23 1WE	United Kingdom	Ordinary Shares	100
Navtech Radar Limited	Home Farm, Ardington, Wantage, Oxfordshire. OX12 8PD	United Kingdom	Ordinary Shares	100*
Ocean Optics (Shanghai) Co., Ltd	Block B, 3rd Floor, No. 123, Lane 1165, Jindu Road, Minghang District, Shanghai	China	Ordinary Shares	100
Ocean Optics Asia LLC	Suite 601, Kirin Tower, 666 Gubei Road, Shanghai, 200336	United States	Common Stock	100
Ocean Optics BV	Geograaf 24, 6921EW Duiven	Netherlands	Ordinary Shares	100
Ocean Optics Germany GmbH	Maybachstrasse 11, D-73760 Ostfildern-Stuttgart	Germany	Ordinary Shares	100
Ocean Optics, Inc.	830 Douglas Avenue, Dunedin Florida 34698	United States	Ordinary Shares	100
Oklahoma Safety Equipment Co, Inc.	PO Box 1327, 1701 West Tacoma, Broken Arrow OK 74013	United States	Ordinary Shares	100
Palintest Limited	Palintest House, Kingsway, Team Valley Trading Estate, Gateshead Tyne & Wear NE11 0NS	United Kingdom	Ordinary & Deferred Shares	100*
Palmer Environmental Limited	(1)	United Kingdom	Ordinary Shares	100*
Palmer Environmental Services Limited	(1)	United Kingdom	A & Ordinary Shares	100*
Perma Pure India Pte Ltd	Plot No. A/147, Road No. 24, Wagle Industrial Estate, Thane West, Maharashtra, THANE 400064	India	Ordinary Shares	100
Perma Pure, LLC	1001 New Hampshire Ave., Lakewood NJ 08701	United States	Ordinary Shares	100
Pixelteq, Inc.	8060A Bryan Dairy Road, Largo Florida 33777	United States	Ordinary Shares	100
Power Equipment Limited	(1)	United Kingdom	Preference & Ordinary Shares	100*
Radcom (Technologies) Limited	Ty Coch House, Llantarnam Park Way, Cwmbran, Gwent NP44 3AW	United Kingdom	Ordinary Shares	100*
Radio-Tech Limited	(1)	United Kingdom	Ordinary Shares	100*
RCS Corrosion Services Sdn. Bhd	Level 21, Suite 21.01, The Garden South Tower, Mid Valley City, Lingkaran Syed Putra, 59200 Kuala Lumpur, Wilayah Persekutuan	Malaysia	Ordinary Shares	100
RCS International Limited	(1)	United Kingdom	Ordinary Shares	100
Research Engineers Limited	(1)	United Kingdom	Ordinary Shares	100*
Reten Acoustics Limited	(1)	United Kingdom	Ordinary Shares	100*
Riester USA, LLC	507 Airport Blvd Ste 113, Morrisville NC 27560-8200	United States	Ordinary Shares	100
Robutec AG	Dornierstrasse 11, CH – 9423 Altenrhein	Switzerland	Ordinary Shares	100
Rohrback Cosasco International Limited	OIL (Offshore Inc Limited) PO Box 957, Offshore Incorporations Centre, Road Town, Tortola	British Virgin Islands	Ordinary Shares	100
Rohrback Cosasco System China Corporation	No. A, Apartment 15F, Building 1, Tianchen Plaza, Yi-12 Chaoyangmen North Street, Chaoyang District, Beijing, 100020	China	Common Stock	100
Rohrback Cosasco Systems LLC	Gulf Consulting House Al-Shablan Tower – 5th Floor King Fahd Rd, Al Hizam Al Thahabi P.O.Box 3140 AL Khobar, 31952	Saudi Arabia	Common Stock	100
Rohrback Cosasco Systems Pte Ltd	Ardent Business Advisory, 146, Robinson Road, #12-01, Singapore, 068909	Singapore	Ordinary Shares	100

Notes to the Company Accounts

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Name	Registered Address	Country	Class	Group %
Rohrback Cosasco Systems Pty Ltd	Unit 5, 17 Caloundra Road, Clarkson, WA	Australia	Ordinary Shares	100
Rohrback Cosasco Systems UK Limited	(1)	United Kingdom	Ordinary Shares	100*
Rohrback Cosasco Systems, Inc	11841 Smith Ave, Santa Fe Springs CA 90670	United States	Common Stock	100
Rudolf Riester GmbH	Bruckstrasse 31, D-72417 Jungingen	Germany	Ordinary Shares	100
S.E.R.V. Trayvou Interferrouillage SA	1 Ter, Rue du Marais Bat B, 93106 Montreuil, Cedex	France	Ordinary Shares	100
Sensorex s.r.o	Okružní 2615, České Budějovice, 370 01	Czech Republic	Ordinary Shares	100
Sensorex Corporation	11751 Markon Drive, Garden Grove CA 92841	United States	Common Stock	100
Setco S.A.	c/Miquel Romeu 56, L'Hospitalet de Llobregat, Barcelona, 08907	Spain	Ordinary Shares	100
Shanghai Labsphere Optical Equipments Co., Ltd	Block 1, No. 123, Lane 1165, Jindu Road, Minhang District, Shanghai, 201108	China	Ordinary Shares	100
Smith Flow Control Limited (previously Swift 943 Ltd)	(1)	United Kingdom	Ordinary Shares	100*
Smith Flow Control, Inc.	1390 Donaldson Rd, Suite B, Erlanger Kentucky 41018	United States	Ordinary Shares	100
Sofis BV (previously Netherlocks Safety Systems BV)	J Keplerweg 14, 2408 AC Alphen aan den Rijn	Netherlands	Ordinary Shares	100
Sofis GmbH (previously Netherlocks Safety Systems GmbH)	Hahnenkammstrasse 12, 63811 Stockstadt	Germany	Ordinary Shares	100
Sofis Limited (previously Smith Flow Control Ltd)	6 Waterside Business Park, Eastways Industrial Estate, Witham, Essex CM8 3YQ	United Kingdom	Ordinary Shares	100*
Sonar Research & Development Limited	(1)	United Kingdom	Ordinary Shares	100*
Sterling Safety Systems Limited	B12a Holly Farm Business Park, Honiley, Kenilworth, Warwickshire, CV8 1NP	United Kingdom	Ordinary Shares	100*
SunTech Group EB Trustee Limited	(1)	United Kingdom	Ordinary Shares	100
SunTech Medical (USA), LLC	507 Airport Boulevard, Suite 117, Morrisville NC 27560-8200	United States	Common Stock	100
SunTech Medical Devices (Shenzhen) Co. Ltd	2-3/F, Block A, Jinxiongda Technology Park, Guanlan, Bao'an District, Shenzhen, Guangdong, 518110	China	Ordinary Shares	100
SunTech Medical Group Limited	Oakfield Industrial Estate, Eynsham, Witney, Oxfordshire OX29 4TS	United Kingdom	Ordinary Shares	100
SunTech Medical Limited	Oakfield Industrial Estate, Eynsham, Witney, Oxfordshire OX29 4TS	United Kingdom	Ordinary Shares	100
SunTech Medical Ltd (Hong Kong)	8th Floor, Gloucester Tower, The Landmark, 15 Queen's Road Central	Hong Kong	Ordinary Shares	100
SunTech Medical, Inc.	507 Airport Boulevard, Suite 117, Morrisville NC 27560-8200	United States	Common Stock	100
T.L. Jones Ltd	50 Hazeldean Road, Addington, Christchurch, 8024	New Zealand	Ordinary Shares	100
Talentum Developments Limited	9 Hunting Gate, Hitchin, Hertfordshire SG4 0TJ	United Kingdom	Ordinary Shares	100*
Telegan Gas Monitoring Limited	(1)	United Kingdom	Ordinary Shares	100*
Texecom Limited	Bradwood Court, St. Crispin Way, Haslingden, Rossendale, Lancashire BB4 4PW	United Kingdom	Ordinary Shares	100*
Thinketron Precision Equipment Company Ltd	Room 813 8/F Tai Yau Building, 181 Johnston Road, Wan Chai	Hong Kong	Ordinary Shares	100
Value Added Solutions LLC	26 Duane Lane, Burlington CT 06013	United States	Common Stock	100
Visiometrics S.L.	Argenters, 8. Edifici 3, Parc Tecnològic del Vallès, 08290 Cerdanyola	Spain	Ordinary Shares	100
Visual Performance Diagnostics, Inc.	26895 Aliso Creek Rd, Suite B223, Aliso Viejo CA 92656	United States	Common Stock	100
Volk Optical Inc.	7893 Enterprise Drive, Mentor Ohio 44060	United States	Common Stock	100
Wilkinson & Simpson Limited	(1)	United Kingdom	Deferred & Ordinary Shares	100*

* Directly held by the Company.

(1) Misbourne Court, Rectory Way, Amersham, Buckinghamshire HP7 0DE.

C6 Debtors

	31 March 2019 £m	31 March 2018 £m
Amounts falling due within one year:		
Amounts due from Group companies	616.8	651.3
Other debtors	0.1	0.1
Prepayments	11.6	9.6
	628.5	661.0

C7 Borrowings

	31 March 2019 £m	31 March 2018 £m
Falling due within one year:		
Overdrafts	29.5	17.6
Loan notes	0.1	0.1
	29.6	17.7
Falling due after more than one year:		
Unsecured loan notes	179.3	176.6
Unsecured bank loans	74.4	113.3
	253.7	289.9
Total borrowings	283.3	307.6

The Company has two sources of long-term funding, which comprise:

- an unsecured five-year £550m Revolving Credit Facility, which, having been extended during the year, expires in November 2023 and is therefore classified as expiring within two to five years (2018: within two to five years). At 31 March 2019 £475.6m (2018: £436.7m) remained committed and undrawn, and
- unsecured loan notes agreed on 2 November 2015 in a mix of Sterling, US Dollars and Euro with borrowing periods of five, seven and ten years. At 31 March 2019 the outstanding loan notes totalled £179.3m (2018: £176.6m). The loan notes are classified as falling due after more than one year.

Further details are included in note 27 to the Group accounts.

The remaining loan notes due within one year outstanding at the balance sheet date of £0.1m were converted at par to cash in May 2019.

The bank overdrafts, which are unsecured, at 31 March 2019 and 1 April 2018 were drawn on uncommitted facilities which all expire within one year and were held pursuant to a Group pooling arrangement which offsets them against credit balances in subsidiary undertakings.

The Company is part of an arrangement between UK subsidiaries whereby overdraft facilities of £15.3m (2018: £15.3m) are cross-guaranteed. Of these facilities £9.1m (2018: £1.0m) was drawn.

C8 Creditors: amounts falling due within one year

	31 March 2019 £m	31 March 2018 £m
Trade creditors	2.6	1.5
Amounts owing to Group companies	52.3	37.1
Other taxation and social security	1.2	1.5
Other creditors	0.6	0.3
Provision for contingent consideration	8.2	–
Accruals	9.5	6.9
	74.4	47.3

Notes to the Company Accounts

Continued

C9 Creditors: amounts falling due after more than one year

	31 March 2019 £m	31 March 2018 £m
Amounts owing to Group companies	12.1	11.9
Other creditors	0.4	0.2
Provision for contingent consideration	8.0	8.1
	20.5	20.2
These liabilities fall due as follows:		
Within one to two years	6.3	3.6
Within two to five years	2.1	4.7
After more than five years	12.1	11.9

The contingent consideration payable relates to the prior year acquisition of Mini-Cam Enterprises Limited and the acquisitions during the year of LAN Control Systems Limited and Navtech (see note 20 to the Group accounts).

C10 Deferred tax

	Retirement benefit obligations £m	Short-term timing differences £m	Total £m
At 1 April 2018	6.7	0.8	7.5
(Charge)/credit to Profit and Loss account	(1.0)	0.1	(0.9)
Charge to comprehensive income	(1.6)	–	(1.6)
Credit to equity	–	0.3	0.3
At 31 March 2019	4.1	1.2	5.3
At 2 April 2017	9.7	1.6	11.3
Charge to Profit and Loss account	(1.2)	(0.4)	(1.6)
Charge to comprehensive income	(1.8)	–	(1.8)
Charge to equity	–	(0.4)	(0.4)
At 31 March 2018	6.7	0.8	7.5

C11 Share capital

	Issued and fully paid	
	31 March 2019 £m	31 March 2018 £m
Ordinary shares of 10p each	38.0	38.0

The number of ordinary shares in issue at 31 March 2019 was 379,645,332 (2018: 379,645,332), including treasury shares of nil (2018: 3,990) and 370,354 shares (2018: 631,991) held by the Employee Benefit Trust.

C12 Reserves

The Capital redemption reserve was created on the repurchase and cancellation of the Company's own shares. The Other reserves represent the provision being established in respect of the value of equity-settled share awards made by the Company. Own shares are ordinary shares in Halma plc purchased by the Company and held to fulfil the its obligations under the Group's share plans.

C13 Retirement benefits

The Company participates in, and is the sponsoring employer of, the Halma Group Pension Plan. The plan closed to new entrants in 2002/03 and to future benefit accrual in 2014/15. From that date, the former defined benefit members joined the Company's existing defined contribution plan.

There is no contractual agreement or stated policy for charging the net defined benefit cost within the Group. In accordance with IAS 19 (Revised 2011), the Company contribution made to the defined benefit plan during the year ended 31 March 2019 was £3.3m (2018: £3.4m).

The results for the Company include a past service cost of £1.8m (2018: £nil) in respect of a Guaranteed Minimum Pension equalisation charge, estimated by the Group's actuary, Mercer, to value the effect of equalising benefits between men and women in the pension scheme following the High Court's judgement on 26 October 2018 in relation to the Lloyd's Banking Group's case.

Net interest charges on pension plan liabilities of £0.8m (2018: £1.2m) were recognised in the Profit and Loss Account in respect of the Company defined benefit plan.

C13 Retirement benefits continued

The net movement on actuarial gains and losses of the plan reported in the Company Statement of Comprehensive Income and Expenditure was as follows:

	Year ended 31 March 2019 £m	Year ended 31 March 2018 £m
Defined benefit obligations	(1.3)	8.8
Fair value of plan assets	9.6	–
Net actuarial gains	8.3	8.8

The actual return on plan assets was a gain of £15.1m (2018: gain of £5.3m).

The amount included in the Company Balance Sheet arising from the Company's obligations in respect of its defined benefit retirement plans is as follows:

	31 March 2019 £m	31 March 2018 £m	1 April 2017 £m
Present value of defined benefit obligations	(255.2)	(253.8)	(266.1)
Fair value of plan assets	232.9	217.6	214.7
Liability recognised in the Company Balance Sheet	(22.3)	(36.2)	(51.4)

Under the current arrangements, cash contributions in the region of £8.6m per year will be made for the immediate future with the objective of eliminating the pension deficit.

Movements in the present value of the defined benefit obligation were as follows:

	Year ended 31 March 2019 £m	Year ended 31 March 2018 £m
At beginning of year	(253.8)	(266.1)
Past service cost	(1.8)	–
Interest cost	(6.3)	(6.5)
Remeasurement (losses)/gains:		
Actuarial gains and losses arising from changes in demographic assumptions	–	8.6
Actuarial gains and losses arising from changes in financial assumptions	(7.1)	1.2
Actuarial gains and losses arising from experience adjustments	5.8	(1.0)
Benefits paid	8.0	10.0
At end of year	(255.2)	(253.8)

Movements in the fair value of the plan assets were as follows:

	Year ended 31 March 2019 £m	Year ended 31 March 2018 £m
At beginning of year	217.6	214.7
Interest income	5.5	5.3
Actuarial gains, excluding interest income	9.6	–
Contributions from the sponsoring companies	8.2	7.6
Benefits paid	(8.0)	(10.0)
At end of year	232.9	217.6

Further details of Halma Group Pension Plan, including all disclosures required under FRS 101, are contained in note 29 to the Group accounts.

Summary 2009 to 2019

	2009/10 £m	2010/11 £m	2011/12 £m
Revenue (note 1)	459.1	518.4	579.9
Overseas sales (note 1)	360.8	412.3	454.3
Profit before taxation, and adjustments (note 2)	86.2	104.6	120.5
Net tangible assets/capital employed	145.5	147.0	163.3
Borrowings (excluding overdrafts)	21.9	79.7	64.0
Cash and cash equivalents (net of overdrafts)	31.0	42.6	45.3
Number of employees (note 1)	3,689	3,875	4,347
Earnings per ordinary share (note 1)	16.10p	19.23p	23.01p
Adjusted earnings per ordinary share (note 2)	16.89p	20.49p	24.46p
Year-on-year increase in adjusted earnings per ordinary share	10.4%	21.3%	19.4%
Return on Sales (notes 1 and 3)	18.8%	20.2%	20.8%
Return on Capital Employed (restated – note 4)	55.9%	72.2%	78.6%
Return on Total Invested Capital (restated – note 4)	14.0%	16.0%	17.6%
Year-on-year increase in dividends per ordinary share (paid and proposed)	7%	7%	7%
Ordinary share price at financial year end	259p	355p	381p
Market capitalisation at financial year end	978.1	1,342.7	1,440.8

All years are presented under IFRS.

Notes:

- 1 Continuing and discontinued operations.
- 2 Adjusted to remove the amortisation and impairment of acquired intangible assets and acquisition transaction costs, release of fair value adjustments to inventory, adjustments to contingent consideration (collectively 'acquisition items') and restructuring costs. IFRS figures include results of operations up to the date of their sales or closure but exclude material discontinued and continuing profits on sales or closures of operations. In 2013/14 only, the effects of closure to future benefit accrual of the defined benefit pension plans have also been removed. In the current year, the adjustments also include the effect of equalising pension benefits for men and women in the Group's defined benefit pension plans.
- 3 Return on Sales is defined as profit before taxation, the amortisation and impairment of acquired intangible assets; acquisition items (from 2010/11); restructuring costs, profit or loss on disposal of operations; and the effects of closure to future benefit accrual of the defined benefit pension plans net of associated costs (2013/14 only) expressed as a percentage of revenue.
- 4 See note 3 to the Report and Accounts for the definitions of ROCE and ROTIC. The ROCE and ROTIC measures were restated in 2014/15 and for all prior years to use an average Capital Employed and Total Invested Capital respectively. This measure is considered to be more representative.
- 5 IAS 19 (as revised in June 2011) 'Employee Benefits' was adopted by the Group in 2013/14. To aid comparison, and as required by IAS 19 (revised), the Consolidated Financial Statements and affected notes for 2012/13 were restated as if IAS 19 (revised) had always applied during that year. Results prior to 2012/13 were not restated.
- 6 The 2015/16 figures were restated in 2016/17, as required by IFRS 3 (revised) 'Business Combinations', for material changes arising on the provisional accounting for acquisitions in 2014/15.

2012/13 £m	(Restated) (note 5) 2012/13 £m	2013/14 £m	2014/15 £m	(Restated) (note 6) 2015/16 £m	2016/17 £m	2017/18 £m	2018/19 £m
619.2	619.2	676.5	726.1	807.8	961.7	1,076.2	1,210.9
503.6	503.6	548.6	587.8	663.0	806.7	902.9	1,010.0
130.7	128.5	140.2	153.6	166.0	194.0	213.7	245.7
188.7	188.7	189.7	219.1	258.6	302.2	322.0	358.9
160.0	160.0	107.6	140.4	296.2	262.1	290.0	253.8
49.7	49.7	33.1	39.5	49.5	65.6	69.7	72.1
4,716	4,716	4,999	5,328	5,604	5,771	6,113	6,508
25.22p	24.79p	28.14p	27.49p	28.76p	34.25p	40.69p	44.78p
26.22p	25.79p	28.47p	31.17p	34.26p	40.21p	45.26p	52.74p
7.2%	5.4%	10.4%	9.5%	9.9%	17.4%	12.6%	16.5%
21.1%	20.8%	20.7%	21.2%	20.6%	20.2%	19.9%	20.3%
76.4%	75.8%	76.6%	77.6%	72.4%	72.5%	71.6%	75.1%
16.9%	16.6%	16.7%	16.3%	15.6%	15.3%	15.2%	16.1%
7%	7%	7%	7%	7%	7%	7%	7%
518p	518p	579p	701p	912p	1024p	1179p	1672p
1,962.6	1,962.6	2,192.6	2,661.3	3,462.4	3,887.6	4,476.0	6,347.7

Shareholder Information

Financial calendar

Annual General Meeting	25 July 2019
2018/19 Final dividend payable	14 August 2019
2019/20 Half year end	30 September 2019
2019/20 Half year results	19 November 2019
2019/20 Interim dividend payable	February 2020
2019/20 Year end	31 March 2020
2019/20 Final results	June 2020

Analysis of shareholders as at 6 June 2019

Number of shares held	Shareholders (number)	%	Shares (number)	%
1 – 5,000	4,284	77.30%	5,093,035	1.34%
5,001 – 25,000	677	12.22%	7,560,591	1.99%
25,001 – 100,000	283	5.11%	14,656,223	3.86%
100,001 – 750,000	215	3.88%	61,699,299	16.25%
750,001 and over	83	1.50%	290,636,184	76.55%
Total	5,542	100.00%	379,645,332	100.00%

Share price history

	2019	2018	2017	2016	2015
Highest	1675	1330	1126	917	726
Lowest	1146	1007	887	699	559

Dividend history

	2019	2018	2017	2016	2015
Interim	6.11	5.71	5.33	4.98	4.65
Final	9.60*	8.97	8.38	7.83	7.31
Total	15.71	14.68	13.71	12.81	11.96

* Proposed.

Investor information

Visit our website, www.halma.com, for investor information and Company news. In addition to accessing financial data, you can view and download Annual and Half Year Reports, analyst presentations, find contact details for Halma senior executives and subsidiary companies and access links to Halma subsidiary websites. You can also download our iPad app or subscribe to an email news alert service to automatically receive an email when significant announcements are made.

Shareholding information

Please contact our Registrar, Computershare, directly for all enquiries about your shareholding. Visit their Investor Centre website www.investorcentre.co.uk for online information about your shareholding (you will need your shareholder reference number which can be found on your share certificate or dividend confirmation), or telephone the Registrar direct using the dedicated telephone number for Halma shareholders: +44 (0)370 707 1046.

Dividend mandate

Shareholders can arrange to have their dividends paid directly into their bank or building society account by completing a bank mandate form. The advantages to using this service are: the payment is more secure than sending a cheque through the post; it avoids the inconvenience of paying in a cheque and reduces the risk of lost, stolen or out-of-date cheques. A mandate form can be obtained from Computershare or you will find one on the reverse of your last dividend confirmation.

Dividend reinvestment plan

The Company operates a dividend reinvestment plan (DRIP) which offers shareholders the option to elect to have their cash dividends reinvested in Halma ordinary shares purchased in the market. You can register for the DRIP online by visiting Computershare's Investor Centre website (as above) or by requesting an application form direct from Computershare. Shareholders who wish to elect for the DRIP for the forthcoming final dividend, but have not already done so, should return a DRIP application form to Computershare no later than 24 July 2019.

Electronic communications

All shareholder communications, including the Company's Annual Report and Accounts, are made available to shareholders on the Halma website and you may opt to receive email notification that documents and information are available to view and download rather than to receive paper copies through the post. Using electronic communications helps us to limit the amount of paper we use and assists us in reducing our costs. If you would like to sign up for this service, visit Computershare's Investor Centre website. You may change the way you receive communications at any time by contacting Computershare.

Annual General Meeting

The 125th Annual General Meeting of Halma plc will be held at The King's Fund, No. 11 Cavendish Square, London W1G 0AN on Thursday 25 July 2019 at 12.00 pm.

Shareholder Information

Continued

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