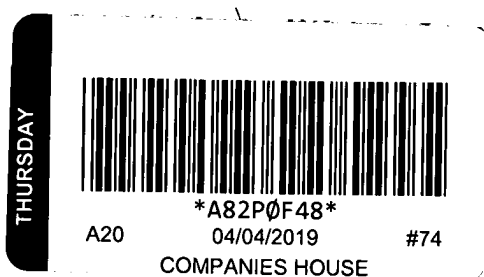


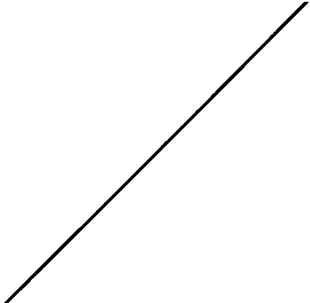
BUILDING A STRONGER BUSINESS

CHEMRING GROUP PLC

ANNUAL REPORT AND ACCOUNTS 2018

Registered number 86662



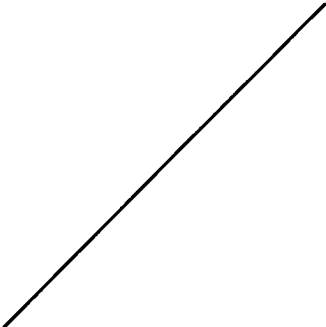


2018 was a mix of financial and operational progress, offset by the impact of the incident at our UK Countermeasures site in August.

Since joining the Group six months ago, I have been impressed by the technological spread that Chemring has and the strength of our positions in many of our markets. I have also been struck by the depth of technical capability within our workforce. I have and will continue to place the greatest emphasis on safety. Protecting our people, customers and communities has to be at the heart of what we do.

Chemring is a technology-rich company with an international footprint and a breadth of market leading products and services. Our strategy is to deliver profitable growth by operating in markets where we have differentiators such as intellectual property, niche technology, expertise, and high barriers to entry. We have enviable platforms for future growth and now need to ensure that we deliver on our potential and the market opportunities that arise.

Michael Ord
Group Chief Executive



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To find out more visit
chemring.co.uk

2018 performance

Revenue

£297m

(-3%)

The decline in revenue, which principally reflected the impact of the incident at our UK Countermeasures site, was partially offset by growth in US Countermeasures.

Order book

£394m

(+21%)

Building in all three continuing sectors in line with strategy. Targeted 2019 revenue from continuing operations approximately 70% covered by orders in hand.

Underlying operating profit*

£31m

(-2%)

Reflects the impact of the incident at our UK Countermeasures site in August 2018, which offset a stronger year in the US Countermeasures business.

Statutory operating loss

£16m

(2017: £5m profit)

Reflects the transformation of our Tennessee facility, the strategic review of the Group's product portfolio leading to an impairment charge of certain products, and legal costs associated with ongoing investigations.

Key points

- Underlying operating profit flat at £31m, reflecting the impact of the incident at our UK Countermeasures site in August, offsetting growth in US Countermeasures
- Strategic decision to exit commodity Energetics businesses, which have been classified as discontinued and held for sale resulting in impairment charges of £69m. Order book of these businesses at year end of £68m (2017: £153m)
- Net debt flat year on year, reflecting good operational cash generation, offset by the start of the investment in the Tennessee facility and the impact of the incident at our UK Countermeasures site. Net debt: underlying continuing EBITDA of 1.64x and pension fund in IAS19 surplus
- Contract awards on US counter-IED, chemical and biological detection Programs of Record
- Order book of the continuing business at year end of £394m (2017: £325m), increase driven by growth in Energetics and US Countermeasures. £242m currently due as revenue in FY19, approximately 70% coverage of FY19 targeted revenue
- Board recommending a final dividend of 2.2p per ordinary share, giving a total dividend of 3.3p per ordinary share (2017: 3.0p)
- Board's expectations for 2019 performance remain unchanged, again with a significant H2 weighting

Underlying operating profit (£m)*

Chemring Group

2018	31.0
2017	31.5

Countermeasures

2018	12.1
2017	14.4

Sensors

2018	15.3
2017	13.4

Energetics

2018	11.8
2017	14.1

Progress

Building a stronger business approach adopted to ensure solid foundations are in place to deliver medium-term growth opportunities.

Safety

As part of our commitment to continuous improvement, we are establishing three core values: safety, as paramount, excellence and innovation.

2019 outlook

Countermeasures order book, US Programs of Record wins and growth in niche Energetics businesses' order book all support improving medium-term expectations.

* References to underlying operating profit and earnings per share throughout this strategic report are to underlying measures from continuing operations; see note 3 for a reconciliation to the statutory loss after tax from both continuing and discontinued operations of £105.8m (2017: £6.6m profit).

At a glance

Chemring is a leading technology business designing, manufacturing, supplying and supporting high technology detection systems, countermeasures and energetic products and technology services to over 50 countries around the world. Our enduring purpose is to relentlessly innovate to protect our customers. Our purpose underpins everything we do across our business segments of Countermeasures, Sensors and Energetics.

Countermeasures

#1 global supplier with more than 50% of market share

Read more on pages 20–21

Our countermeasures protect aircraft and ships from guided missile attack by decoying the threat away from the platform they are protecting. Our businesses combine a deep understanding of platform signatures, missile seekers and chemical formulations to develop new decoys against new threats.

Revenue

£126m

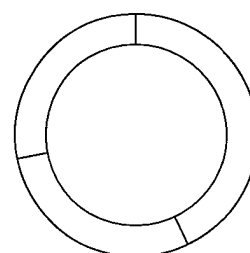
(2017: £125m)

Underlying

operating margin

9.6%

(2017: 11.5%)



Sensors

World-leading technologies and key programme positions

Read more on pages 22–23

Our systems and services protect people, platforms and information by detecting threats with a very high degree of confidence. Our targets include explosive, chemical, biological, radio and cyber threats, which are all becoming more complex, driving a constant need to engineer improved technological solutions to meet customer needs.

Revenue

£87m

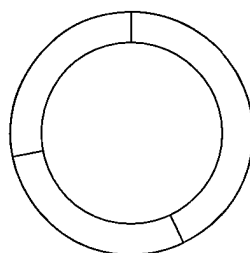
(2017: £91m)

Underlying

operating margin

17.5%

(2017: 14.7%)



Energetics

Niche positions on long-term programmes

Read more on pages 24–25

Our energetic products harness the ability of energetic materials to very rapidly release energy to perform any of a number of functions, from propelling an aircraft ejection seat to separating satellites in space. We invest in the full range of technical disciplines needed to safely design, develop, test and manufacture our products at our dedicated Energetics sites.

Revenue

£84m

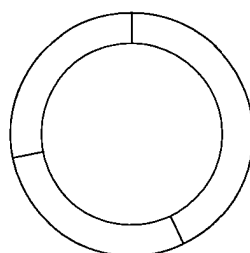
(2017: £91m)

Underlying

operating margin

14.0%

(2017: 15.6%)



Where we operate

Our customers are National Defence and Security agencies, and Defence prime contractors. Our home markets in the UK, US, Australia and Norway represent some of the most demanding users in the world, with well-funded militaries and international credibility, which helps achieve export sales.



Our strategy is to deliver profitable growth by operating in markets where we have differentiators.

The percentages below represent the proportion of the Group's total 2018 revenue, (see note 1 on page 97).

US

46%

The US maintains the largest defence budget in the world, and remains our core market. Our position secured on all targeted, key long-term US programmes, particularly in the Sensors segment, also enables us to take advantage of growing budgets.

US revenue

£137.6m

(2017: £123.3m)

Investing for the future

In May 2018 the Board approved a US\$50m investment to upgrade our Countermeasures facility in Tennessee. The project, which is expected to take approximately three years to complete, will result in an automated capability with additional capacity reflecting expected customer demand over the medium term.

UK

28%

Growing customer demand for our cyber and information security solutions in national security, defence and commercial sectors.

Europe

13%

In Europe, our Norwegian business has achieved record order intake delivered through long-term supply agreements and efforts to enhance capacity.

Asia Pacific

13%

Steady year-on-year growth in key regional markets as defence spending increases in response to increased threats and our Australian business enables us to maintain, support and evolve next-generation capabilities for the Australian military.

Chairman's statement



The Group has made progress on its roadmap to deliver long-term growth. 

Carl-Peter Forster
Chairman

2018 was a year of contrasts. The tragic incident at our UK Countermeasures facility and the loss of one of our colleagues overshadowed improved business performance and the significant progress that the Group made on the long-term growth programmes.

2018 performance

In 2018 the Group made progress on its roadmap to deliver long-term growth and a more sustainable business model, and in the final quarter of the year made encouraging progress on the targeted US programs in counter-IED and chemical and biological detection. However, on 10 August an incident occurred in a flare mixing building at our UK Countermeasures site in which two colleagues were injured, one fatally. Production at the site was immediately suspended and an investigation launched into the cause of the incident.

The injured colleague continues to make good progress and the Group is committed to supporting him and his family throughout his recovery, along with the family of our colleague who lost his life in the incident.

The incident at our UK Countermeasures site serves as a reminder that elements of our manufacturing processes involve the use of hazardous materials. We shall continue to invest in safety and in automation in order to remove personnel from exposure to hazard.

The Board is fully committed to the goal of zero harm.

Following the closure of our UK Countermeasures site, and in close collaboration with the regulatory bodies, a phased restart of non-energetic material production and the shipment of finished goods inventory, was commenced. The resulting impact of the incident on the Group's FY18 result was to reduce revenue by £22m and underlying operating profit by £17m. 2019 will be a year in which the site focuses on gradually increased activity levels.

Elsewhere, the Group has made good progress on its strategy to move away from commoditised product lines to focus on higher margin and more predictable revenue streams.

In light of this, the Board announced on 15 November 2018 that it had decided to exit the commoditised Energetics business, these businesses have therefore been treated as discontinued activities and shown as held for sale.

Two years ago, and following the rights issue that strengthened the Group's balance sheet, we reported that ongoing execution against the US Programs of Record within the Sensors segment, combined with a slow but steady ramp up of F-35 Joint Strike Fighter countermeasure requirements, were key to future growth. It was therefore pleasing to see the progress made in the year against these goals.

Given some of the items mentioned above and a review of a number of balance sheet items, all announced on 15 November 2018, these FY18 results reflect non-underlying items, primarily non-cash, of £131m. These results provide disclosure on the various items and necessitate the disclosure of adjusted, continuing and discontinued figures which makes the disclosure more extensive. The Board believes these actions are necessary and part of us building a stronger business for the future.

The global countermeasures market is recovering and we have seen an increase in market activity throughout the year, most notably from our US customers. Chemring's position within the market remains strong and we have seen the F-35 programme continue to evolve as the number of platforms entering service continues to grow. Importantly, our facility in Australia, as a newly qualified second source provider of F-35 countermeasures, is expected to produce and deliver its first F-35 countermeasures in 2019.

In order to safeguard and expand the Group's market-leading position in the global countermeasures market, May 2018 saw the Board approve a \$50m investment project to upgrade and automate the Group's Tennessee facility. The project will take approximately three years to complete, and will result in an automated capability with additional capacity reflecting expected customer demand over the medium term. Most importantly, it will mean that we have fully automated production lines at all three of our Countermeasures businesses in the US, UK and Australia.

In the Sensors segment the Group has secured its position on all the key US Programs of Record it was targeting.

The Group secured a \$14m development contract and a three-year \$93m indefinite delivery/indefinite quantity ("IDIQ") sole-source contract on the US Army's Husky Mounted

Detection System ("HMDS") Program of Record. We expect this program to run for the next decade providing a recurring level of business as the US Army moves to its objective of producing and fielding a fleet of 369 HMDS by mid-2021.

In biological detection the Joint Biological Tactical Detection System ("JBTDs") program continues to progress through customer testing, and this sole-source position was enhanced with the award of a second biological program, the Enhanced Maritime Biological Detection System ("EMBD"), where the customer is the US Navy. This program is expected to be worth up to \$100m over 5–10 years once in full rate production. On the Next Generation Chemical Detector program (now known as Aerosol and Vapor Chemical Agent Detector – "AVCAD") Chemring was one of two contractors selected to progress on this program. The AVCAD program has a potential value of up to \$838m over the next ten years. These awards are significant achievements and the culmination of a number of years of research and development activity. They provide improved visibility of future earnings and are evidence of the progress the Group is making on its roadmap to focus on higher margin, niche market positions where the Group is best placed to generate future value.

Revenue from continuing operations in the year declined by 3% to £297.4m (2017: £307.1m) which principally reflected the revenue lost as a result of the incident at our UK Countermeasures site. Underlying operating profit fell 2% to £31.0m (2017: £31.5m), which again reflected the impact of the same incident. The closing order book of £394m (2017: £325m) provides good visibility of 2019 revenue, particularly in the Countermeasures segment which saw strong order intake, particularly in the US.

Statutory total loss for the year was £105.8m, which comprised continuing (£40.8m) and discontinued (£65.0m) operations. The statutory loss includes a number of items which the Board consider to be non-underlying. Continuing non-underlying items total £60.0m, thus the underlying continuing profit after tax was £19.2m. Discontinued non-underlying items totalled £71.2m, thus the underlying discontinued profit after tax totalled £6.2m. Full details of the non-underlying items are in the financial review on page 31 and in notes 3 and 5, together with a reconciliation of statutory IFRS to underlying numbers.

Revenue

£297m

(2017: £307m)

Dividend

3.3p

(2017: 3.0p)

Underlying operating profit

2018	£31.0m
2017	£31.5m

Chairman's statement continued

Strategy

The Group's strategy is to deliver profitable growth by operating in markets where we have differentiators such as intellectual property, niche technology and high barriers to entry.

In a number of our markets we are already market leader, or one of the market leaders. This is particularly so in Countermeasures and to a growing extent in Sensors as a result of our recent long-term contract wins. A strategic review of the Group's Energetics portfolio was conducted during the year. The Board concluded that the future focus within the Energetics segment should be on the Energetic Devices businesses. It therefore made the decision to exit the Commodity Energetics businesses located in Derby and Florida, and these businesses are treated as discontinued in these financial statements.

We will continually review the portfolio, to ensure that we maintain sustainable niche positions where technical and qualification barriers to entry enable high margins.

In recent years, significant focus has been placed on building a safe and resilient business that is able to deliver margin progression through continuous improvement in operational performance and execution. We shall continue to invest in both our infrastructure and people in order to deliver this strategy.

Safety

Safety underpins all that we do and, as always, remains an absolute priority for the Group. The tragic incident at our UK Countermeasures site was a reminder that much of what we do, particularly in the Countermeasures segment, involves processes that are dangerous. As a Board we must therefore continue to drive investment and improvement in this area, reducing the risk of harm to our employees, and automating our facilities wherever possible. We will continue to foster a culture of safety awareness across the Group and will drive towards zero harm.

People

The Board has visited several sites throughout the year, spending time at each with a number of our employees. We are continually impressed by the knowledge and expertise of our workforce, and the commitment they show in meeting the needs of our customers.

A number of key initiatives were launched during the year.

The Group is focused on ensuring we continue to increase the depth of talent in key roles and to this end a programme focusing on identifying and developing Chemring's Future Leaders commenced in July.

This nine month programme is working with Future Leaders from every part of the business to support them to develop key leadership skills and a broad network of support across the Group. This network of emerging talent is an essential element of a programme to ensure we deepen the talent pool for the future business.

A renewed focus on supporting the graduate and early careers population within the Group has seen the formalisation of a Graduate Network through the launch of an annual Graduate Conference for graduates working and training in the UK and Norwegian businesses, with a replica event planned for April 2019 in the US.

Technical training in operations processes and safety continues to have a high profile across the Group and I am very pleased that the Group has invested in resources to develop this further, alongside broader management and leadership skills in 2018.

On behalf of the Board I thank all employees for their high level of commitment and enthusiasm.

Dividends

The Board is recommending a final dividend in respect of the year ended 31 October 2018 of 2.2p (2017: 2.0p) per ordinary share. With the interim dividend of 1.1p per share (2017: 1.0p), this results in a total dividend of 3.3p (2017: 3.0p) per ordinary share.

If approved, the final dividend will be paid on 18 April 2019 to shareholders on the register on 5 April 2019.

In accordance with accounting standards, this final dividend has not been recorded as a liability as at 31 October 2018.

Board of directors

Michael Ord joined the Board on 1 June 2018, and was appointed as Group Chief Executive on 1 July 2018, following Michael Flowers' retirement. Michael Ord joined Chemring from BAE Systems, where he held a number of senior roles across air, land and sea domains, including Managing Director of the BAE Systems Naval Ships business and Managing Director of the BAE Systems F-35 Joint Strike Fighter business. Michael Flowers stepped down from the Board on 30 June 2018, and left the Group on 31 October 2018.

On 8 August 2018, Daniel Dayan gave notice of his intention to step down from the Board, where he served as a non-executive director and Chairman of the Group's Remuneration Committee. He formally stepped down from the Board on 30 November 2018.

Andrew Davies, non-executive director of Chemring, assumed the role of Chairman of the Remuneration Committee on 8 August 2018.

Stephen King was appointed as a non-executive director on 1 December 2018.

Current trading and outlook

Trading since the start of the current financial year has been in line with expectations across all businesses.

The current phased restart plan for the UK Countermeasures site has operations commencing in the second quarter and revenue generated in the second half of the 2019 financial year. This remains subject to internal and external health and safety approval and as such remains a significant uncertainty.

While we continue to work towards a more balanced delivery of revenue and profit, the operational disruption at our Countermeasures sites in Salisbury and Australia, the expected profile of orders, revenue and margins in 2019, combined with routine seasonality within the business, means that the Group again expects its trading performance to be significantly weighted towards the second half of the financial year.

The order book of the continuing businesses as at 31 October 2018 was £394m, of which £242m is currently expected to be recognised as revenue in 2019.

The Board's expectations for the Group's 2019 performance from continuing operations remain unchanged, based on the assumption that insurance proceeds will cover remediation and operating costs at the UK Countermeasures site in the period before production is re-established.

The Board is focused on restructuring, simplifying and building a stronger business. With high technology products and market leading positions Chemring has the platforms for long-term future growth.

Carl-Peter Forster

Chairman
17 January 2019

We are Chemring



The Group is focused on ensuring we continue to increase the depth of talent in key roles. 

To find out more visit
www.chemring.co.uk/media/image-library/videos/we-are-chemring

Group Chief Executive's review

Delivering performance and growth



I am confident in delivering positive returns for all our stakeholders. //

Michael Ord
Group Chief Executive

In 2018, the Group made progress in both underlying financial and operational performance, and in improving the balance and predictability of the business. In winning key positions on long-term US Programs of Record that will underpin future growth, the Group now has a foundation from which to build a stronger business. However, this progress was overshadowed by the incident at our UK Countermeasures site in August, and the tragic loss of one of our colleagues.

Introduction

I became Chief Executive on 1 July 2018 and spent my first six months visiting all our businesses and meeting as many colleagues and customers as possible. I have been impressed by the technological spread that Chemring has and the strength of our positions in many of our markets. Most of all I have been struck by the depth of technical capability within our workforce. I have placed the greatest emphasis on safety, to ensure that everyone goes home safely at the end of the day. Protecting our people, customers and communities has to be at the heart of what we do.

Our values, which form the foundation of our organisation, our strategy and which are requisite to our success have been revised.

Safety – we place safety at the heart of everything we do.

Excellence – we are focused on ensuring we consistently meet high standards in all that we do.

Innovation – we create world-class solutions and develop world-class thinking.

Safety

Our goal is a zero harm environment, this is not set as a statistical target, but as a moral imperative that will be achieved through establishing a Generative Safety Culture, with three focus areas of People, Plant and Process.

In September 2018, we commissioned an independent safety review of all our sites, which assessed in-depth our culture, management systems and practises. As a result of this review, we have introduced a completely new Health and Safety strategy and plan, in order to ensure that we become a more proactive organisation with an even greater focus on prevention not cure; enabling us to better identify in advance potential hazards and to put in place mitigations in order to reduce the probability of an incident occurring.

This strategy will also deliver a more consistent way of managing safety across our organisation, particularly the control of major hazards.

Strategy and organisation

Chemring is a technology-rich company with an international footprint and a breadth of market leading products and services. It occupies niche market positions and has strong, long-term relationships with its customers. These provide a strong platform for future growth, however, we will only achieve this success by complete commitment to our purpose, which is to relentlessly innovate to protect our customers. Our strategy is to deliver profitable growth by operating in markets where we have differentiators such as intellectual property, niche technology, expertise, high barriers to entry, and by investing in innovation to meet our customers' needs.

Going forward, we will focus our efforts on strategy, structure and our culture.

Strategy

The Board concluded that the Group would exit the low margin commoditised Energetics businesses located in Derby and Florida, where contracts are often lumpy. On 15 November 2018 the Group announced its intention to treat these businesses as discontinued operations, and that within the Energetics segment our future focus should be on the niche specialist energetic materials businesses in Chicago, Scotland and Norway, where we have strong intellectual property and high barriers to entry.

This strategic move will simplify the Group and enable greater focus and investment. It will improve the quality of the Group and its earnings.

My review also concluded that in parts Chemring still maintains a federated business model with limited collaboration. As a consequence of this there are a mix of processes and standards across the Group. The opportunity therefore exists to restructure, simplify, and build a stronger group that can capitalise on the significant market prospects that exist.

Statutory total loss for the year was £105.8m, which comprised continuing (£40.8m) and discontinued (£65.0m) operations. The statutory loss includes a number of items which the Board consider to be non-underlying. Continuing non-underlying items total £60.0m,

thus the underlying continuing profit after tax was £19.2m. Discontinued non-underlying items totalled £71.2m thus the underlying discontinued profit after tax totalled £6.2m. Full details of the non-underlying items are in the financial review on page 31 and in notes 3 and 5, together with a reconciliation of statutory IFRS to underlying numbers.

Structure

In future we will be organised under two sectors – Sensors & Information, and Countermeasures & Energetics. Future disclosure will be of these two sectors, rather than the current three segment approach.

The focus within each sector is clear:

In Sensors & Information we have world-leading technologies and incumbent supplier advantage, having secured positions on major long-term US Programs of Record. We now need to move successfully through technical qualification to large scale manufacture in the years ahead and to organise ourselves and invest accordingly. We will also look beyond these near-term programs and contracts and develop our plans to exploit our incumbent position for the longer term. We must utilise our capabilities in adjacent markets and across geographies by innovating and recognising our customer's needs before they do. The Board believes that the Sensors & Information sector offers the greatest opportunities for significant sustainable growth and attractive margin performance.

Following the proposed divestment of the commodity Energetics business, in Countermeasures & Energetics we will also have world-leading technologies and incumbent supplier advantage. We are the number one global countermeasures supplier and will invest to improve the quality and safety of our operations and match rising customer demand. We occupy niche positions in specialist energetics, often on long-term programmes, where long-term supply agreements are in place. We will invest to protect these positions and seek, over time, to safely improve our operating margins.

Culture

We have strengthened the leadership team both in the UK and the US. We have already begun the move to standardise our processes and standards. An Operational Framework, that defines both what we should do at Chemring, and how we should do it, has recently been put in place. This Operational

Framework is the reference source to all mandated policies across the Group. It incorporates our values, our policies and procedures, and provides the necessary governance to enable us to operate in a safe, consistent and accountable way.

The longer-term potential

We have already achieved a number of significant milestones on the journey to build a stronger business and will continue to focus our efforts on re-structuring, simplifying and strengthening the business in order to capitalise on our significant market opportunities. After success in building a stronger business our longer-term focus will increasingly move to further enhancing the Group's growth potential and delivery thereon.

I look forward to working with my colleagues in 2019 to continue to build and execute our strategy. In doing so I am confident in delivering positive returns for all our stakeholders.

Michael Ord

Group Chief Executive
17 January 2019

Our strategy

01 Target growing niches

02 Win market share

03 Grow our US business

04 Manage the portfolio

Read more on pages 10–15

Business model

We focus on providing innovative solutions that meet our customer requirements efficiently and on time.

Our values

Safety

We place safety at the heart of everything we do.

- We operate safely and manage risk.
- We promote best safety practice across the business and beyond.
- We ensure we minimise our impact on the environment.

Excellence

We are focused on ensuring we consistently meet high standards in all that we do.

- An ethos of continuous improvement is core to our approach.
- We take actions to ensure that we maintain and deliver operational excellence.
- We deliver on our promises.

Innovation

We create world-class solutions and develop world-class thinking.

- We inspire imaginative solutions.
- We work together to turn ideas into technologies and solutions.
- We value collaboration and sharing experience.

What we do

Invest in people, processes and products

Chemring is a technology business with over 2,000 employees worldwide. We target investment to secure our future by developing the capabilities of our people, maintaining safe and efficient operations and developing next-generation solutions to meet customers' current and emerging threats.

Win orders

We operate in niche markets in the global defence and security market. Our targeted investments ensure we are competitively positioned to offer reliable, state-of-the-art solutions to meet customers' needs. In Countermeasures, we are the world's largest supplier, with our leading technology and manufacturing position. In Sensors, we maintain our technological leadership to meet ever more demanding customer requirements. In Energetics, we win based on the technical superiority of our products.

Deliver solutions

We focus on providing innovative solutions that meet our customer requirements efficiently and on time. In addition to our capital and technology investments, we also invest in continuous improvement, which is key to minimise cycle time from order to delivery.

Outcomes

Cash flow

We aim to convert 100% of underlying EBITDA to underlying cash flow over the medium term, accepting timing differences will arise at individual period ends.

In 2018, the conversion ratio (continuing and discontinued) was 95%, reflecting a working capital investment in Countermeasures supporting growth in the US and the impact of the incident at our UK Countermeasures site in August.

Investment

Our investment in property, plant and equipment in the year totalled £21.1m. In addition, we invested £43.8m in product development, of which £36.2m was customer funded.

Looking forward, we have announced the significant investment in the transformation of our Tennessee Countermeasures site and excluding significant investments such as these, aim that investment at least matches depreciation and amortisation each year.

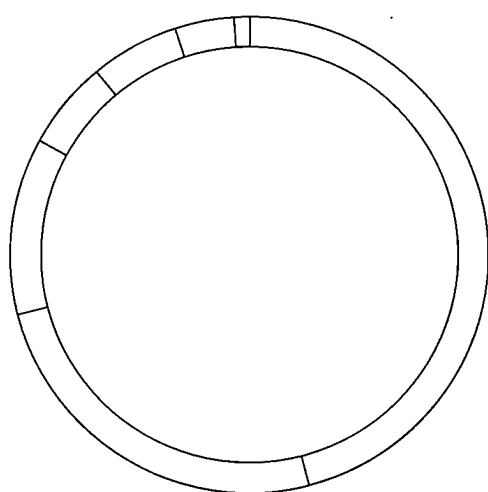
Dividends

For the year ended 31 October 2018, our dividend will be 3.3p per share, an increase of 10% on the prior year, subject to the approval of the final dividend at the Annual General Meeting.

Target markets

Chemring is an international technology company. Our home markets are the US, UK and Australia.

% of Chemring's global sales (2014-2018)



US 46%

UK 25%

Europe 12%

Australia 6%

Asia Pacific 6%

Middle East 4%

Rest of the world 1%

The US is the world's largest defence market and our US businesses are well positioned to benefit from this growing defence budget.

The FY19 National Defense Authorization Act was passed in August 2018. The base budget of \$617bn for FY19 "begins recovery from over \$400bn of lost capability" arising from past Bipartisan Budget Acts in 2011, 2013 and 2018'. The President's Budget Request also projects steady growth of 4% per year out to 2021 to sustain personnel increases in all four services, major equipment programmes such as the F-35 and investments in technology innovation.

Our US businesses are well positioned to benefit from this increase in budgeted spend:

- F-35 fleet ramp-up will drive a stock build for its new countermeasures to deliver full operational capability for the aircraft.
- HMDS is a Program of Record with a planned fleet of 369 systems.
- Procurement spend for Chemical and Biological Situational Awareness is set to more than double from FY18 levels.

In addition, several of the identified technology innovation initiatives align with Chemring's Group-wide capabilities in Electronic Warfare, Autonomy, Cyber, Artificial Intelligence and Space.

The UK is Europe's largest defence market. Chemring sells directly to the MOD and security agencies, as well as to prime contractors.

Expenditure levelled in 2015 but recovery has been slow, with budgets squeezed by major programme commitments and the cost of the fight against Daesh.

This pressure on defence spending is likely to remain for the foreseeable future, despite planned increases of 2% to 2021. For Chemring, the MOD accounts for less than 5% of Group revenues, but it is a partner for developing and qualifying new products.

In the security domain, Chemring is a key provider of capability to our clients, and with a growing concern about many national and international threats, our customers are continuing to increase demand for our services.

Australia is Chemring's third home market, and it aims to grow its defence spend to 2% of GDP by 2021.

Australia has a well-equipped military, which draws on both US and UK products as well as highly capable local suppliers. Its current budget of AUD 34.6bn is a 1.4% uplift on the previous year, and this is likely to continue as the Commonwealth aims to meet its 2% of GDP target by 2021.

Chemring Australia provides the Commonwealth with an on-shore capability in countermeasures manufacture, building on manufacturing know-how shared across the Group. It is positioned to benefit from the global F-35 programme as it gears up to share with our Countermeasures business in the US the production of countermeasures for F-35 operators around the world.

Europe combines modern, well-equipped forces with budget constrained new NATO members on its Eastern borders.

European defence spending is generally flat, although recent announcements by France and Germany signal some increase in spend in these large markets, which currently fall well short of NATO's 2% of GDP target. Although Chemring competes with highly capable rivals and national champions in Europe, we have succeeded in selling countermeasures, Electronic Warfare ("EW") and Improvised Explosive Devices ("IED") detectors to customers including Germany, France, Italy and Spain. In addition, we supply energetic materials and components to several leading prime contractors across the region.

The outlook for the market remains subdued, although there are some niche opportunities as new NATO members seek to upgrade their capabilities.

* Source: US Defense Budget Briefing presentation February 2018.



Our US businesses are well positioned to benefit from this growing defence budget. //

Our strategy

Our strategy is to deliver profitable growth by focusing on niche markets where we can be the world leader, and grow faster than the wider defence market.

01 Target growing niches

Global defence budgets are growing at 2–3% per year, but military investment in specific capabilities varies more widely. New capabilities to meet new perceived threats, such as electronic warfare and cyber are growing. Others, such as countermeasures, are subject to catch-up funding; and others are declining as military needs are changing. Our strategy is to target growing niches within the defence and security markets, based on our detailed understanding of customers' new and emerging needs and targeted investment in innovation, largely in the Sensors segment.

Strategy in action

In the US, we are capitalising on our successful investment in next-generation chemical and biological detection technologies where we have won the AVCAD and JBTDS Programs of Record. In the UK, we are developing next-generation Land Electronic Warfare and Electronic Countermeasures to detect and defeat threats in the Cyber Electronic activity ("CEMA") domain; and in our national security business, we are increasing our capacity, growing our capability and expanding our footprint to grow with the increasing market demand.

Risks

Our principal risks are documented on pages 34 to 41.

KPI

Order book

£394m

(2017: £325m)

02 Win market share

In addition to targeting innovation-driven growth niches, we also aim to win market share by focusing on meeting customer needs, cost effectively and on time.

The largest part of our current investment is in the Countermeasures sector to transform our North American manufacturing operations to capitalise on the surge in demand driven by the growing F-35 fleets.

Strategy in action

The US

The investment in the US manufacturing operations for our Countermeasures sector will improve safety through remote operations, improve quality through automation and deliver extrusion capacity required for next-generation flare production.

Norway

The other target for investment is in Chemring Nobel's explosives facility in Norway to improve productivity and capacity to capitalise on growing demand for its high quality products.

Risks

Our principal risks are documented on pages 34 to 41.

KPI

Order intake

£360m

(2017: £337m)

03 Grow our US business

Our US businesses deliver more than half the Group's revenue, and their recent successes in the F-35 countermeasures and sensors Programs of Record affirm their excellent access and insight into the US military needs, including classified programmes.

We will leverage this access to launch our non-US capabilities into the largest market in the world.

Strategy in action

In Countermeasures we are sharing conventional, spectral and kinematic flare products and processes with our US operations and are promoting the benefits of these capabilities to the US customer.

In Sensors, the next-generation HMDS will incorporate a Roke-developed wire detector for which the technology has been transferred into our US operations, and we will extend this to include our developments in land-based CEMA and Electronic Countermeasure ("ECM") products.

Risks

Our principal risks are documented on pages 34 to 41.

KPI

Revenue

£297m

(2017: £307m)

04 Manage the portfolio

The Group's portfolio comprises a technologically mature Energetics sector which delivers cash to fund capital investment in Countermeasures and technology investment in Sensors.

Strategy in action

As our pyrotechnics, ammunition and trading businesses complete large export contracts, we have reviewed the Group's portfolio and decided to exit the commoditised Energetics businesses. This will simplify the Group and enable greater focus on our growing differentiated Sensors and Countermeasures positions, where we have recently made significant progress.

Risks

Our principal risks are documented on pages 34 to 41.

KPI

Underlying operating margin

10.4%

(2017: 10.3%)

Key performance indicators

The Group's strategy is underpinned by focusing on a number of key performance indicators ("KPIs"). The KPIs that the Board and senior management utilise to assess Group performance are set out below.

These KPIs enable progress to be monitored on the implementation of the Group's strategy, levels of investment, operational performance and business development. They also give an early insight into how well the principal risks and uncertainties are being managed. Similar indicators are used to review performance by each of the Group's businesses, albeit that the exact nature of these varies between business units to reflect the differing nature of their operations.

All financial KPIs refer to continuing operations and therefore exclude businesses classified as discontinued and held for sale.

Safety

Many of Chemring's manufacturing activities involve the use of hazardous substances and energetic materials, and safety metrics are a fundamental part of the key performance indicators used to manage the business. All incidents and near misses are reported and investigated, in order to share findings and corrective actions throughout the Group. The Group's key lagging indicators are the number of incidents that result in lost time, and the number of energetic incidents that cause injury. In addition, the Group has a number of leading indicators, principally the level of near misses. The active reporting of near misses by employees is encouraged in order to highlight potential risk issues and enable these to be considered and addressed on a timely basis. Each of these is reviewed and resolved, gradually reducing risk.

Leading indicators¹

2,068

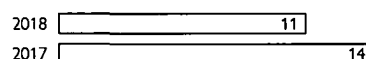
(2017: 2,264)

1. Near misses reported and actioned.

Lost time incidents

11

(2017: 14)



Injuries from energetic incidents²

6

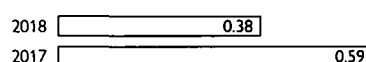
(2017: 0)

2. Injuries arising including two injuries (one fatal) from the CCM UK incident.

Lost time incident rate³

0.38

(2017: 0.59)



3. LTI: number of lost time incidents per 100 employees.

Orders

The Group uses a number of KPIs relating to orders. These comprise order intake, order book and the level of forecast revenue for the current financial year covered by orders on hand.

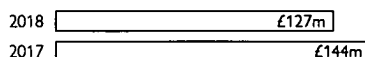
The closing order book for continuing operations at 31 October 2018 of £394m represents an increase of 21% on the prior year, principally reflecting the strong order intake in the US Countermeasures business and in the Sensors sector. As at 31 October 2018, of the orders on hand of £394m, £242m were expected to be fulfilled in the year ending 31 October 2019.

Order intake Group

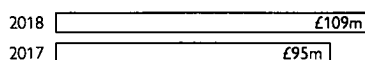
£360m

(2017: £337m)

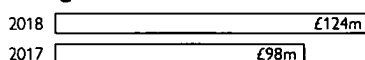
Countermeasures



Sensors



Energetics

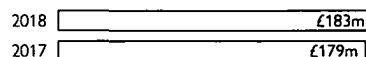


Order book Group

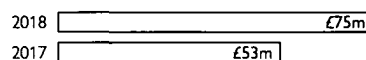
£394m

(2017: £325m)

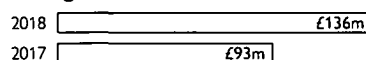
Countermeasures



Sensors



Energetics



Read more on pages 20–25

Revenue

Revenue provides a measure of business activity and growth, enabling customer behaviour trends to be identified and acted upon. In the case of business units that have experienced operational and production issues, revenue levels indicate their ability to deliver throughput and fulfil customer orders.

Revenue Group

£297m

(2017: £307m)

Group revenue

2018	£297m
2017	£307m

Countermeasures

2018	£126m
2017	£125m

Sensors

2018	£87m
2017	£91m

Energetics

2018	£84m
2017	£91m

Underlying operating profit and margin

Underlying operating profit provides a consistent year-on-year measure of the trading performance of the Group's operations. The continuing underlying operating profit decreased by 2% during the year, reflecting the impact of the Salisbury incident in August 2018.

Underlying operating margin is based on underlying operating profit and provides an assessment of the profitability of the business. A focus on operating margin allows the impact of changes in revenue and cost base to be monitored, enabling comparisons to be made of management performance and trading effectiveness. The changes in margin of each sector reflect the market conditions, volume changes and performance improvement actions, as set out in this strategic report. The changes in margin also reflect the impact of movements in revenue, offset by the benefit of cost-saving measures.

See note 3 to the financial statements for reconciliation to the statutory loss after tax from both continuing and discontinued operations.

Underlying operating profit Group

£31.0m

(2017: £31.5m)

Underlying operating margin Group

10.4%

(2017: 10.3%)

Countermeasures

2018	£12.1m
2017	£14.4m

Sensors

2018	£15.3m
2017	£13.4m

Energetics

2018	£11.8m
2017	£14.1m

Countermeasures

2018	9.6%
2017	11.5%

Sensors

2018	17.5%
2017	14.7%

Energetics

2018	14.0%
2017	15.6%

Read more on pages **20–25**

Key performance indicators continued

Working capital and inventory

Working capital is defined as inventories, trade and other receivables, and trade and other payables, excluding non-underlying accruals and payroll-related payables.

This excludes assets held for sale and comparatives have been restated for KPIs.

The primary focus for improvement within working capital is inventory.

Optimum inventory levels drive both effective staff utilisation and cost efficiency. Excess inventory results in second order costs such as increased storage and inventory management costs, the write off of ageing or obsolete inventory, and disposal costs, which can be significant for energetic materials.

Read more on page 28

Working capital Group

£83.7m

(2017: £89.0m)

Countermeasures

2018	£22.0m
2017	£30.7m

Sensors

2018	£28.8m
2017	£27.6m

Energetics

2018	£32.9m
2017	£30.7m

Inventory Group

£71.4m

(2017: £78.0m)

Countermeasures

2018	£33.5m
2017	£35.2m

Sensors

2018	£16.9m
2017	£16.7m

Energetics

2018	£21.0m
2017	£26.1m

Continuing underlying earnings per share

Underlying earnings per share is a key measure for the Group, reflecting the combined trading performance together with the impact of its funding structure and taxation. The increase in the year reflects the impact of the Salisbury incident and lower interest and tax costs.

Continuing underlying earnings per share

6.9p

(2017: 5.9p)

2018	6.9p
2017	5.9p

Change from previous year

Up 17%

(2017: up 18%)

2018	+17%
2017	+18%

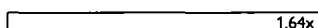
Net debt to continuing underlying EBITDA

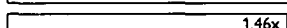
The ratio of underlying EBITDA to the Group's debt levels is a clear indicator of the leverage borne by the Group. The ratio is a specified financial covenant within the Group's revolving credit facility. We have calculated this ratio using continuing underlying EBITDA. The Group's aim over the medium term is to maintain the ratio of net debt to continuing underlying EBITDA to an average level of less than 1.50x.

Net debt:
continuing underlying EBITDA

1.64x

(2017: 1.46x)

2018  1.64x

2017  1.46x

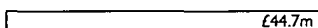
Continuing underlying operating cash flow

Operating cash flow provides a measure of the cash generated by the Group's trading. It represents the cash that is generated to fund capital expenditure, interest payments, tax and dividends. Given the Group's relatively short-cycle manufacturing operations and with a focus on working capital being improved through greater efficiency, operating cash conversion should closely follow operating profit, although the Group recognises that the timing of certain contracts and subsequent payment can have a timing effect from year to year. The Group's underlying continuing operating cash flow was £44.7m during the year, reflecting an 89% conversion of underlying EBITDA.

Continuing underlying operating cash flow

£44.7m

(2017: £41.6m)

2018  £44.7m

2017  £41.6m

Operational performance

Operational performance is measured using a series of indicators that include efficiency, labour utilisation and customer order performance. These performance indicators are considered at business unit level, as the varying nature of the Group's operations mean that it is not appropriate to consolidate this data. Improving operational performance is key to securing strong customer relationships and maximising returns from production activities. Closely monitored measures include gross margin percentages by business, on-time delivery of customer orders, overall manufacturing utilisation and product development spend.

Focus on Countermeasures

Chemring is the world leader in the design, development and manufacture of advanced expendable countermeasures and countermeasure suites for protecting air, sea and land platforms against the growing threat of guided missiles. The Group has a broad product range including conventional flares, advanced flares, special material decoys, chaff and naval countermeasures.

Strategy

The Countermeasures sector strategy continues to be one of strengthening our world-leading position through continuously improving our technological and operational base whilst working closely with our customers in the development of new solutions to meet emerging threats.

Investment in the sector will principally be directed towards automation and the enhancement of current facilities and capabilities. We also see great opportunity through partnering with our customer base on future technological developments.

Markets

The countermeasures market is starting to show some positive signs with an increase in solicitation, bid activity and orders received throughout the year, particularly within the US. The broader global countermeasures market remains more robust with improving levels of activity in the UK and the rest of the world.

Performance

The incident at our UK Countermeasures site in August 2018 has affected our 2018 reported results, reducing revenue by approximately £22m and underlying operating profit by approximately £17m.

Countermeasures revenue increased by 1% to £126.0m (2017: £125.3m) and the segment reported an underlying operating profit of £12.1m (2017: £14.4m), down 16%. This decline was driven by the Salisbury incident (see above) and to a much lesser extent a softer year in Australia and masked the improvement achieved in the US business. Underlying operating margin fell to 9.6% from 11.5%.

On a constant currency basis, revenue would have increased by 4% to £130.7m and underlying operating profit would have fallen 12% to £12.7m.

The statutory operating loss for the year was £4.2m (2017: £10.4m profit), the year being impacted by £16.3 of non-underlying items in respect of restructuring, deferred consideration of acquisitions and the amortisation of acquired intangibles.

Order intake in the year has been strong with significant orders for both air and naval countermeasures received from UK MOD, international and US customers in particular. The Group's new special material decoy continues to progress and there is evidence of growth in market share.

The year saw significant development on the F-35 program, with our \$12m Low Rate Initial Production ("LRIP") 6 contract for the F-35 operational flares now completed. The \$15m LRIP 7 contract was awarded and delivery commenced in the year. The contract for LRIP 8 is expected to be awarded later in the year and will be delivered from our Tennessee facility. Our Australian facility is currently bidding an F-35 contract directly with the US Navy, the outcome of which is expected in the first half of 2019.

Opportunities and outlook

After a number of years of weakness in the countermeasures markets that followed the end of the Iraq and Afghanistan conflicts, the outlook for the segment is increasingly positive. Segment focus remains on maintaining and growing the Group's market-leading position, in particular on key platforms such as the F-35 as it begins to enter service in increasing numbers, and in the important special material decoy market as older programmes decline in volume.

During the year, the Board approved a project to invest in the Tennessee facility. The project, which is expected to take approximately three years to complete, will result in an automated capability with additional capacity reflecting expected customer demand over the medium term. The majority of the investment will be capital, but some demolition, remediation work, asset and inventory write offs have been expensed in 2018 as non-underlying costs. This investment, which is expected to safeguard and expand the Group's position in the Global countermeasures market, will provide the Tennessee site with a fully automated production line. This is not expected to affect the site's ability to deliver product in 2019. The original budget was approximately \$50m and this is under review as plans are refined and issues addressed as work commences. This will contribute to higher Group capital expenditure over the next two years. Group capital expenditure in 2019 is expected to be in the range of £40m–£50m.

Our Australian facility will close in H1 2019 to be fitted and qualified for F-35 production. As such we expect little contribution from Australia in 2019, but it should exit the year with an F-35 qualified production facility.

The phased restart of our UK Countermeasures site is in progress. We are working with the appropriate regulatory authorities to agree a phased restart plan across the different activities on site. As such, 2019 is planned to be a year where the site progressively gets back to being fully operational. As a result revenue and underlying operating profit contribution is still expected to be lower than expected before the incident took place. For 2019 our current assumption is that the site will contribute approximately £30m of revenue and break even after accounting for insurance recoveries and remediation costs. Further investment in automation at the Salisbury site is being evaluated.

Countermeasures' order book at 31 October 2018 was £182.8m (2017: £178.6m) and at constant currency the order book would be 1% higher than at 31 October 2017. Of the 31 October 2018 order book, approximately £116m is currently expected to be delivered in 2019, of which £92m can be delivered from our US and Australian facilities.

With a solid order book in place, 2019 trading performance for Countermeasures is expected to be positive, albeit with a significant bias towards the second half as Salisbury progressively restarts and Australia is refitted and qualified.

Where we operate

Chemring Countermeasures USA

Consists of Alloy Surfaces, based in Philadelphia, and Kilgore Flares, based in Tennessee. Alloy Surfaces is a leading developer of special material decoys for the US Navy, Marine Corps, Army and Air Force, with exports to the UK and Australia. Kilgore Flares operates a high volume manufacturing facility making conventional and advanced flares, including flares for the F-22 and F-35.

Chemring Countermeasures UK

Manufactures advanced expendable countermeasures for air and sea platforms. Its aircraft products include conventional and advanced flares and chaff. Its naval products include infra-red and radio frequency decoys and the CENTURION trainable naval decoy launcher.

Chemring Australia

Develops and manufactures aircraft countermeasures, pyrotechnics, and counter-IED and electronic warfare solutions.

Key facts

Revenue

£126.0m

(+1%)

Underlying operating profit

£12.1m

(2017: £14.4m)

Order book

£182.8m

(2017: £178.6m)

Underlying operating margin

9.6%

(2017: 11.5%)

Opportunities:

- F-35 Joint Strike Fighter
- Chemring Australia as F-35 second source
- Capturing international market share through greater collaboration
- Further automation and new product introduction



Strengthening our world-leading position through continuously improving our technological and operational base. //

Focus on Sensors

Chemring's Sensors products include world-leading systems for detecting improvised explosive devices ("IEDs"), chemical and biological agents, and core technologies for detecting, intercepting and jamming electronic communications. The Group is also a leading contract research and development supplier, trusted by government and industrial partners worldwide to solve the most technically challenging security-critical issues.

Strategy

The Sensors sector remains Chemring's principal area of focus for long-term growth, reflecting customer demand and opportunities in this area. The Group continues to invest in order to grow its Sensors business by developing and exploiting technologies for its niche markets in IED defeat, chemical and biological threat detection, and land-based electronic warfare.

The Group's specialist contract research and development business operates in the growing cyber-security market, and investing in recruiting, developing and retaining our people, together with expanding our geographical and customer coverage, is key to profitable growth in this area.

Markets

Customer budgets for Roke's security services are rising, as are ongoing development efforts in support of US Programs of Record in the counter-IED, chemical and biological detection markets. Contract awards for new Sensors products have been achieved during the year under a number of US Programs of Record.

The increasing threat to information security, together with the proliferation of autonomous systems and artificial intelligence, is seeing customer budgets for Roke's services continue to improve. Continued investment in capability in this area is ongoing to optimise the opportunity for Chemring.

Performance

Sensors revenue decreased by 4% to £87.3m (2017: £91.2m) reflecting a good year at Roke, the continued focus of the US business on the research and development phases of the counter-IED, chemical and biological detection Programs of Record and a weaker year in the Electronic Warfare ("EW") market as the timing of customer orders was delayed. The segment reported an underlying operating profit of £15.3m (2017: £13.4m). Underlying operating margins increased to 17.5% (2017: 14.7%). Order intake was £109.2m, a 15% increase on the prior year.

On a constant currency basis, revenue would have fallen 3% to £88.8m and underlying operating profit would have increased by 16% to £15.5m.

The statutory operating profit for the year was £5.2m (2017: £1.0m), the year being impacted by £10.1m of non-underlying items in respect of the impairment of development costs and the amortisation of acquired intangibles.

Key developments in the year were customer decisions on major US Programs of Record.

The US DoD's counter-IED program, through Chemring's HMDS program, gave rise to two significant milestones. The award of both a \$14m development contract and a 3-year \$93m indefinite delivery, indefinite quantity ("IDIQ") sole-source contract, with an initial delivery order of \$23m, were in line with our expectations

of the program which has moved to one of spiral development, with concurrent development, trialing, and manufacturing to be undertaken. We expect this program to run for the next decade providing a recurring level of business as the US Army moves to its objective of producing and fielding a fleet of 369 HMDS by mid-2021. The new fleet will be comprised of both refurbished and new HMDS and this activity will run alongside technology upgrade programs.

The Joint Biological Tactical Detection System ("JBTDs") program moved into the Biological Point System Assessment phase in March 2018. The DoD will undertake testing of our product for the next 12–18 months, after which we expect a production decision.

We bid and won a second biological program, the Enhanced Maritime Biological Detection System ("EMBD"), where the customer is the US Navy. This was a competitive bid and our initial contract award for Engineering Manufacturing Development ("EMD") and LRIP was in the form of a \$24m IDIQ, with an initial delivery order of \$14m. The program is expected to be worth up to \$100m over 5–10 years once in full rate production.

The Next Generation Chemical Detector Program saw two of the three phases make contract decisions. Chemring won an award under "NGCD" 1 (now known as Aerosol and Vapor Chemical Agent Detector – "AVCAD"). This award is in the form of an IDIQ contract. The initial EMD and LRIP phase is expected to be worth approximately \$16m in the period to 2022. Following this the customer is expected to have a requirement of approximately \$800m. Chemring is one of two contractors selected for this program.

The cyber-security market, in which Roke is a leading participant, was buoyant in the year. Roke's focus on investing in its people ensures it has the right mix of skills to meet market requirements and has supported its success and revenue growth in the year.

During the year Chemring disposed of its 3d-Radar business, but retained the rights to use the technology in the military market.

Opportunities and outlook

The focus for Sensors continues to be on expanding the Group's product, service and capability offerings in the areas of tactical electronic warfare and cyber-security, and securing positions on the US DoD Programs of Record.

After a year of significant bid activity in the US, focus now turns to the execution phase for the contracts we have been successful on. Mobilisation has started, with some initial deliveries made in 2018, but the focus of 2019 will be ensuring the Virginia and North Carolina facilities are mobilised and resourced to deliver the AVCAD, EMBD, JBTDS and HMDS contracts.

Supporting the UK Government across National Security and Defence, and non-governmental industries in high value manufacturing and infrastructure, Roke will continue to focus on their customers' missions: to enable them to deliver competitive advantage, defend their people, assets and secrets, and defeat their adversaries. With a focus on emerging technologies in connectivity, cyber, automation and data analytics, Roke will deliver research, design, engineering and advisory services using its high quality people and capabilities. Concurrently, Roke is seeking to expand its capabilities into commercial and international markets.

The order book for Sensors at 31 October 2018 was £75.4m (2017: £53.2m).

2019 trading performance for Sensors is expected to show an improvement on 2018, driven primarily by initial deliveries under the HMDS awards.



Sensors remains Chemring's principal area of long-term growth. 

Where we operate

Chemring Sensors & Electronic Systems ("CSES")

Based in Virginia and North Carolina, CSES develops and manufactures ground penetrating radar, IED detection systems, and chemical and biological threat detection systems.

Roke

A technology company that provides electronics research, development and engineering services, and cyber-security solutions for UK Government agencies and prime contractors.

Chemring Technology Solutions

The Group's centre of excellence in land EW, and also develops and manufactures IED detection and neutralisation systems, including vehicle-mounted and hand-held sensors, disruptors and initiation systems.

Key facts

Revenue

£87.3m

(-4%)

Underlying operating profit

£15.3m

(2017: £13.4m)

Order book

£75.4m

(2017: £53.2m)

Underlying operating margin

17.5%

(2017: 14.7%)

Opportunities:

- Next-generation counter-IED Program of Record
- Long-term chemical and biological detection Programs of Record
- International electronic warfare customers
- Expanding Roke's innovation and engineering services into adjacent markets

Focus on Energetics

Chemring's energetic sub-systems include safety-critical components of missiles, aircraft and space launch systems. Operators and prime contractors depend on Chemring's very high reliability, single-use devices to perform key functions.

Strategy

The Group will secure the position of its energetic sub-systems components on next-generation platforms for missile and space programmes in the US and Europe, through excellent delivery performance on current programmes and strong customer and partner interaction.

Markets

Within Energetics, the Group is seeing a medium-term trend of increased demand for specialist products, particularly for applications in the space, missile, aerospace and high explosive materials markets, balanced by a decline in the more commodity-based pyrotechnics and ammunition markets. Following a strategic review of the Group's portfolio, the Board decided to exit the commodity Energetics businesses.

Performance – continuing operations

Revenue for Energetics decreased by 7% to £84.1m (2017: £90.6m), while underlying operating profit decreased by 16% to £11.8m (2017: £14.1m), giving an underlying operating margin of 14.0% (2017: 15.6%). The planned closure of the Torrance facility and integration into a modernised Chicago facility has caused some operational disruption, which has delayed some revenues to 2019.

On a constant currency basis, revenue would have fallen 5% to £86.0m and underlying operating profit would have fallen 15% to £12.0m.

The statutory profit for the year was £7.0m (2017: £3.5m), the year being impacted by £4.8m of non-underlying items in respect of the amortisation of acquired intangibles.

Chemring's high explosive manufacturing business in Norway has again achieved record order intake levels with significant effort being undertaken to enhance capacity. This investment is supported by a strategy of engaging customers in long-term agreements for supply, which has proved successful with a number of customers moving to this arrangement to secure their continuity of supply.

Performance – discontinued operations

Revenue for the discontinued Energetics business decreased by 42% to £138.6m (2017: £240.4m), while underlying operating profit decreased by 67% to £8.0m (2017: £23.9m), reflecting the decline in 40mm ammunition and non-standard ammunition ("NSA") revenue in 2018.

The expected decline in performance was due to the completion of the large 40mm ammunition contracts with customers in the Middle East. The final shipment under this contract was completed early in the year; therefore 40mm ammunition only contributed £11.2m (2017: £64.2m) to revenue in the year.

Sales of procured NSA product fell in the year. Due to the externally sourced nature of the products involved, margins on NSA sales are significantly lower than for manufactured product. Supply of NSA products to the US Government contributed £81.9m (2017: £97.6m) to revenue in the year.

Opportunities and outlook

The Group's niche propellant and devices businesses in Scotland and Chicago are increasingly securing long-term contracts with customers supporting greater short and medium-term visibility and providing a framework for long-term planning and investment decisions. Similarly, demand for high quality high explosives has enabled Chemring Nobel in Norway to work proactively with its customer base on long-term contracting models, providing much improved visibility.

The order book for the continuing Energetics businesses at 31 October 2018 was £135.5m (2017: £93.4m). 2019 trading performance for the continuing Energetics businesses is expected to show an improvement on 2018, driven primarily by the completion of the site consolidation at our facility in Chicago.

The order book for the discontinued Energetics businesses at 31 October 2018 was £68.2m (2017: £152.8m) and included £nil in respect of 40mm ammunition and £27.1m in respect of NSA.

Where we operate

Chemring Energetic Devices

A leading US supplier of pyrotechnic and electro-mechanical systems for missiles, space and safety applications, based in Chicago. Products include satellite and space launch vehicle separation systems, initiators and low-shock satellite separation systems, and a range of pyromechanisms for aircrew egress. Chemring Energetic Devices also supplies sub-systems for missiles.

Chemring Energetics UK

Based in Scotland, Chemring Energetics UK is a leading supplier of detonators, actuators, rocket motors, high explosive charges, canopy cutting cords and pyromechanisms for aircrew egress, and demolition stores.

Chemring Nobel

Chemring Nobel, located in Norway, is a leading supplier of high explosive charges, high explosives and energetic binders to the defence, security, oil and gas industries.



Our Energetics businesses provide niche market positions supported by strong intellectual property.

Key facts

Revenue

£84.1m

(-7%)

Underlying operating profit

£11.8m

(2017: £14.1m)

Order book

£135.5m

(2017: £93.4m)

Underlying operating margin

14.0%

(2017: 15.6%)

Opportunities:

- Growth in niche devices businesses
- Long-term partnering agreements
- Increased demand for niche high explosives in Norway

Financial review



The Group is well placed financially to support the implementation phase of building a stronger business. //

Andrew Lewis
Group Finance Director

In 2018 we have secured a number of opportunities. In Countermeasures order intake has been strong; in Sensors we have seen success in US Programs of Record. Our focus has been on "Building a stronger business" to ensure the Group has solid foundations from which to deliver these medium-term growth opportunities.

As expected, revenue in the now discontinued Energetics businesses decreased following the delivery of material export contracts in 2017. Until the incident at Salisbury in August 2018 the strategy of partially replacing that revenue with higher margin Countermeasures and Sensors business was being executed as planned. The Salisbury incident has affected the outturn of the 2018 year by £17m at an underlying operating profit level.

Setting aside the financial impact of the incident, we are encouraged that the 2018 financial results demonstrate the improving balance of the business as it becomes less reliant on Energetics export orders for which the timing is difficult to predict. The order book in Countermeasures and Program of Record contract awards in the US provide improving visibility for the Group. Our focus is to "Build a stronger business" to ensure we are able to deliver these opportunities over the medium term. This will require investment in the infrastructure of the Group, the first significant project being the investment in the Tennessee site announced during the year, due to be completed in 2020.

Group financial performance

The underlying operating profit from continuing operations of £31.0m (2017: £31.5m) resulted in an underlying operating margin of 10.4% (2017: 10.3%). The flat margin primarily reflects the financial impact of the Salisbury incident which offset a richer margin mix from a combination of operational improvement and the operational gearing in the US Countermeasures business.

Foreign exchange translation has had a limited impact on year-on-year comparison. On a continuing constant currency basis, restating the current year at the FY17 average exchange rate, revenue would have been £305.5m and underlying operating profit would have been £31.9m.

Total finance expense fell significantly to £6.1m (2017: £11.3m). This was driven by the repayment of expensive private placement loan notes in November 2017 and the focus on reducing intra-period working capital volatility, which is demonstrated in the weekly net debt graph below.

This left an underlying profit before tax from continuing operations of £24.9m (2017: £20.2m). The effective tax rate on the underlying profit before tax from continuing operations was 22.9% (2017: 18.3%). The underlying earnings from continuing operations per share was 6.9p (2017: 5.9p).

Statutory operating loss from continuing operations was £15.9m (2017: £4.6m profit) and after statutory finance expenses of £6.1m (2017: £11.3m), statutory loss before tax from continuing operations was £22.0m (2017: £6.7m), giving statutory loss per share from continuing operations of 14.6p (2017: 1.5p). The statutory loss from discontinued operations was £65.0m (2017: £10.9m profit), giving a statutory loss of £105.8m (2017: £6.6m profit) from continuing and discontinued operations. A reconciliation of underlying to statutory profit measures is provided in note 3. The non-underlying costs relate to the amortisation of acquired intangibles, deferred consideration on acquisitions, legal costs associated with the ongoing investigations, the write off of assets and demolition costs at the Tennessee site, the costs associated with the change of Chief Executive and the revaluation of deferred tax assets in the US following the new tax legislation enacted in December 2017. In addition, following a strategic product portfolio review the Group has recognised an impairment charge of £7.4m in respect of certain products where capitalised development costs are no longer considered fully recoverable.

Underlying operating profit from continuing operations

£31.0m

(2017: £31.5m)

Net debt

£81.8m

(2017: £80.0m)

Revenue from discontinued operations fell to £138.6m (2017: £240.4m) and underlying operating profit fell to £8.0m (2017: £23.9m) primarily as a result of the lower levels of activity on 40mm and NSA product lines. A review of the carrying value of the businesses held for sale resulted in an impairment of £69.3m (2017: £9.8m). This is based on the current market conditions in the military and law enforcement commodity ammunition and pyrotechnics market.

Finance expenses

Following the repayment of £51.4m of private placement loan notes in November 2017, the total finance expense fell to £6.1m (2017: £11.3m).

Total finance expenses included interest costs of £4.7m (2017: £8.5m), amortisation of debt finance costs of £1.3m (2017: £2.4m) and other non-cash finance expenses associated with the defined benefit pension scheme of £0.1m (2017: £0.4m).

Tax

The continuing statutory tax charge totalled £18.8m (2017: £2.4m credit) on a continuing statutory loss before tax of £22.0m (2017: £6.7m). The increase in the continuing effective rate of tax on the results of the Group is primarily due to recently enacted US tax legislation that reduces the US corporate tax rate, thus

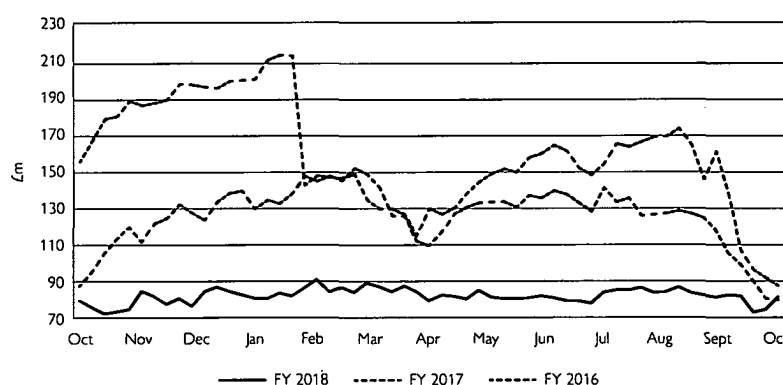
reducing the rate of our deferred tax asset, and changes the rules regarding US interest tax deduction limitations. In addition, the rate is impacted by the geographic mix of profits, changes to the amounts of deferred tax assets considered recoverable in respect of both tax losses and prior year adjustments.

The continuing underlying tax charge totalled £5.7m (2017: £3.7m) on a continuing underlying profit before tax of £24.9m (2017: £20.2m). The effective tax rate on underlying profit before tax for the year is a charge of 22.9% (2017: 18.3%).

The US Tax Cuts and Jobs Act ("TCJA") was substantively enacted on 22 December 2017. The TCJA provides for a reduction in the main rate of US federal corporate income tax from 35% to 21% for the period after 1 January 2018, thus first affecting Chemring for part of its 2018 financial year, however, the impact on the deferred tax asset has been recognised in full during 2018.

The impact on Chemring has been two-fold: the reduction in the main rate of US federal corporate income tax has resulted in a write off of deferred tax of £8.6m associated with tax losses and interest restrictions, offset by a £3.9m credit on the revaluation of the deferred tax liabilities associated with US-related acquired intangibles.

Weekly net debt



Financial review continued

Tax continued

This has resulted in a net write off of £4.7m in respect of the rate change. In addition, the introduction of restrictions on the availability of interest deductions has resulted in a write off of deferred tax of £12.7m. The total impact of £17.4m has been treated as a non-underlying item in 2018 (see note 3).

The discontinued underlying tax charge was £1.8m (2017: £4.4m) on an underlying profit before tax of £8.0m (2017: £23.9m).

Earnings per share

Underlying earnings per share from continuing operations were 6.9p (2017: 5.9p) and diluted underlying earnings from continuing operations per share were 6.7p (2017: 5.8p).

Total underlying basic earnings per share were 9.1p (2017: 12.9p) and the statutory basic loss per share was 37.8p (2017: 2.4p earnings).

Group financial position

Net debt and cash flow

The Group's net debt at 31 October 2018 was £81.8m (2017: £80.0m), representing a net debt: underlying EBITDA (continuing) ratio of 1.64x (2017: 1.46x). The financial condition of the Group has improved in a number of aspects during the year. Debt repayments were made which reduces future interest costs, working capital practices were improved to reduce intra-period volatility, capitalised development costs have reduced, amortisation now exceeds capitalisation and the pension scheme has moved into surplus on an IAS 19 basis of £7.5m (2017: £0.6m deficit). The Group is working to achieve further improvements over the medium term.

Underlying operating activities generated cash of £56.9m (2017: £47.1m), split between continuing £44.7m (2017: £41.6m) and discontinued £12.2m (2017: £5.5m). The Salisbury incident adversely impacted operating cash flow by c.£10m. Continuing cash conversion was 89% of continuing underlying EBITDA showing focus on working capital improvements is delivering in other areas of the business.

In November 2017, the Group repaid £5.3m and \$61.2m of outstanding loan notes out of existing cash resources and debt facilities. The remaining loan notes of \$83.6m are repayable in November 2019 and this payment is expected to be funded from our new revolving credit facility which runs to October 2022.

Working capital

Working capital relating to the continuing businesses was £83.7m (2017: £89.0m), a decrease of £5.3m. Working capital as a percentage of continuing revenue has improved 0.9% to 28.1% (2017: 29.0%).

Inventory decreased as improved inventory management across the continuing businesses was offset by the impact of the incident at our UK Countermeasures site where inventory at year-end exceeded our plan as a result of the site closure and subsequent inability to complete and fulfil planned orders in the year for which materials had been procured.

Trade receivables decreased by £3m and trade payables decreased by £4m as a result of the timing of activity in the final quarter of the year.

Debt facilities

The Group's principal debt facilities comprised \$83.6m of private placement loan notes, a £90.0m revolving credit facility and a \$10.0m overdraft facility. The revolving credit facility was established in October 2018, is with a syndicate of four banks and has a four-year initial term with options to extend by a further two years. The Group had £68.1m (2017: £106.0m) of undrawn borrowing facilities at the year end. The Group is subject to two key financial covenants, which are tested quarterly.

These covenants relate to the leverage ratio between underlying EBITDA and debt; and the interest cover ratio between underlying EBITDA and finance costs. The calculation of these ratios involves the translation of non-Sterling denominated debt using average, rather than closing, rates of exchange. The revolving credit facility and the loan notes have differing covenant compliance calculations. The Group was in compliance with the covenants throughout the year.

Retirement benefit obligations

The surplus on the Group's defined benefit pension schemes was £7.5m (2017: £0.6m deficit), measured in accordance with IAS 19 (Revised) *Employee Benefits*.

The surplus relates to the Chemring Group Staff Pension Scheme (the "Scheme"), a UK defined benefit scheme whose assets are held in a separately administered fund. The Scheme was closed to future accrual in April 2012. A full actuarial valuation for the Scheme as at 6 April 2018 has been prepared and updated to 31 October 2018, using the projected unit credit method. This valuation showed a surplus of £7.5m (2017: £0.6m deficit). The improvement reflects the funding structure agreed with the trustees, under which contributions of £7.9m were paid in 2018, together with the effect of changes in actuarial assumptions.

The 6 April 2018 triennial valuation shows a technical provisions deficit of £5.8m, which represents a funding level of 93.4% of liabilities. The Group has agreed with the Trustee that deficit recovery payments totalling £6.25m, which were the contributions due to be made in the period to 30 June 2019 under the previous deficit recovery plan, would be made prior to 31 December 2018. Of this, £0.4m has been paid in the 2019 financial year. After this, no further deficit recovery payments will be required and the Group will be released from the bank guarantee and letters of credit totalling £7.2m to the Scheme in respect of future contributions. The next actuarial valuation is due as at 6 April 2021 after which the future funding requirements will be reassessed.

Contingent liabilities

The Group is, from time to time, party to legal proceedings and claims, and is involved in correspondence relating to potential claims, which arise in the ordinary course of business. In addition the following matters, as previously disclosed in last year's annual report and subsequent announcements, remain open at year end:

A dispute between Alloy Surfaces Company, Inc. and the US Army, in relation to disputed pricing of a certain historic contract fulfilled

by Alloy Surfaces Company, Inc., proceeded to a hearing in front of the US Armed Services Board of Contract Appeals ("ASBCA") in April 2017.

ASBCA is expected to take approximately two years to issue its decision in relation to this matter. The range of possible outcomes is between £nil to £12.0m. A provision of £1.0m (2017: £1.1m) exists to cover estimated legal costs for the Group with regards to this issue.

Since 2013, the Group has benefited from the UK's Controlled Foreign Company ("CFC") Finance Company exemption. The European Commission has launched an investigation into whether the UK's CFC Finance Company exemption breaches state aid rules. No timescale has been set for the review and this could take several years to conclude. If, at the end of the investigation, the regime is considered to be in contravention of the State Aid provisions, the UK Government will be required to seek repayment of the lost tax from the relevant taxpayers. Given the early stage of the investigation, it is too early to determine whether a tax liability is probable. The range of possible outcomes is between £nil and £15m, plus interest.

The Serious Fraud Office ("SFO") is currently undertaking a formal investigation into concerns about bribery, corruption and money laundering involving intermediaries who previously represented one of the Group's UK-based subsidiaries, Chemring Technology Solutions Limited ("CTSL") and its predecessor companies. The investigation commenced following a voluntary report made by CTSL relating to two specific historic contracts, the first of which was awarded prior to the

Group's ownership of the business concerned and the second in 2011, neither of which are considered to be material in the context of the Group. It is too early to predict the outcome of the SFO's investigation and therefore the timings and amounts of the outcome cannot be estimated reliably. The Group continues to co-operate fully with the SFO in its investigation, and will provide a further update as and when appropriate.

On 10 August 2018 an incident occurred at the Group's Countermeasures site in Salisbury. This resulted in one employee fatality and one employee requiring hospital treatment for his injuries. The Group responded immediately to support employees and their families and maintains appropriate employers' liability insurance. The Group continues to fully support the Health and Safety Executive ("HSE") as they undertake their investigation. Whilst provisions have been recorded for costs that have been identified, it is possible that additional uninsured costs and, depending on the outcome of the HSE investigation, financial penalties may be incurred in the future.

The Group has a £2.5m deductible per claim under its material damage and business interruption insurance policy, subject to a maximum aggregate deductible of £3.5m in any one year.

Capital expenditure

The Group continues to invest in the infrastructure of its facilities, with particular focus on enhancing safety and operational performance. In the year £21.1m (2017: £12.4m) was spent on property, plant and equipment.

Research and development

R&D expenditure was £43.8m (2017: £51.8m). Continued investment in R&D is a key aspect of the Group's strategy, and levels of internally funded R&D are expected to be maintained as investment in product development continues, particularly within Sensors. An analysis of R&D expenditure is set out below:

	2018 £m	2017 £m
Customer-funded R&D	36.2	41.1
Internally funded R&D		
– expensed to the income statement	4.6	6.8
– capitalised	3.0	3.9
Total R&D expenditure	43.8	51.8

Amortisation of development and patent costs was £3.7m (2017: £7.0m), with the decrease reflecting a number of capitalised product developments that have been impaired following the appointment of a new Chief Executive who conducted a strategic review of the Group's product portfolio, to rationalise future resources on areas where we have a niche position and competitive advantage. An increase in amortisation of development and patent costs is anticipated for 2019 as additional Sensors projects complete their development phase.

Financial review continued

Alternative Performance Measures ("APMs")

In the analysis of the Group's financial performance and position, operating results and cash flows, APMs are presented to provide readers with additional information. The principal APMs presented are underlying measures of earnings including underlying operating profit, underlying profit before tax, underlying profit after tax, underlying EBITDA, underlying earnings per share, and underlying operating cash flow. In addition, EBITDA, net debt, and constant currency revenues are presented which are also considered to be non-IFRS measures. These measures are consistent with information regularly reviewed by management to run the business, including for planning, budgeting and reporting purposes and for its internal assessment of the operational performance of individual businesses.

The focus of the Annual Report is on the results of the continuing operations as the Board believes the shareholders are most interested in the performance and the potential of this part of the Group. An analysis of the results of the discontinued operations is provided in note 5 with commentary on performance on page 103.

The Group manages its finance costs and tax on a central or regional basis and therefore the Board believes the use of underlying operating profit or EBITDA is the best way of monitoring the performance of operating businesses.

The strategic report includes both statutory and adjusted measures, the latter of which, in management's view, reflects the underlying performance of the business and provides a more meaningful comparison of how the business is managed and measured on a day-to-day basis.

Our APMs and KPIs are aligned to our strategy and together are used to measure the performance of our business and form the basis of the performance measures for remuneration.

Adjusted results exclude certain items because if included, these items could distort the understanding of our performance for the year and the comparability between the periods.

Management considers non-underlying items to be:

- amortisation of acquired intangibles;
- discontinued operations;
- exceptional items, for example relating to acquisitions and disposals, restructuring costs, impairment charges and legal costs;
- gains or losses on the movement in the fair value of derivative financial instruments; and
- the tax impact of all of the above.

Our use of APMs is consistent with the prior year and we provide comparatives alongside all current year figures.

The term underlying is not defined under IFRS and may not be comparable with similarly titled measures used by other companies. All profit and earnings per share figures in this strategic report relate to underlying business performance (as defined above) unless otherwise stated.

Dividend per share

3.3p

(2017: 3.0p)

Underlying earnings per share

6.9p

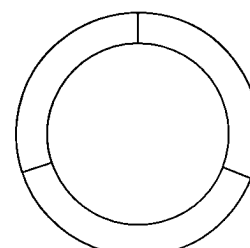
(2017: 5.9p)

Net debt/underlying EBITDA

1.64x

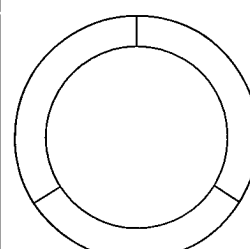
(2017: 1.46x)

2018 underlying operating profit by segment



Countermeasures £12.1m
Sensors £15.3m
Energetics £11.8m

2017 underlying operating profit by segment



Countermeasures £14.4m
Sensors £13.4m
Energetics £14.1m

A reconciliation of underlying measures to statutory measures is provided below:

	2018			2017		
	Underlying	Non-underlying	Statutory	Underlying	Non-underlying	Statutory
Group – continuing operations:						
EBITDA (£m)	50.0	(27.2)	22.8	54.9	(13.8)	41.1
Operating profit/(loss) (£m)	31.0	(46.9)	(15.9)	31.5	(26.9)	4.6
Profit/(loss) before tax (£m)	24.9	(46.9)	(22.0)	20.2	(26.9)	(6.7)
Tax (charge)/credit (£m)	(5.7)	(13.1)	(18.8)	(3.7)	6.1	2.4
Profit/(loss) after tax (£m)	19.2	(60.0)	(40.8)	16.5	(20.8)	(4.3)
Basic earnings/(loss) per share (pence)	6.9	(21.5)	(14.6)	5.9	(7.4)	(1.5)
Diluted earnings/(loss) per share (pence)	6.7	(21.3)	(14.6)	5.8	(7.3)	(1.5)
Group – discontinued operations:						
Profit/(loss) after tax (£m)	6.2	(71.2)	(65.0)	19.5	(8.6)	10.9
Sectors – continuing operations:						
Countermeasures EBITDA (£m)	23.6	(10.8)	12.8	27.5	(2.6)	24.9
Countermeasures operating profit/(loss) (£m)	12.1	(16.3)	(4.2)	14.4	(4.0)	10.4
Sensors EBITDA (£m)	18.5	(0.7)	17.8	19.3	(5.7)	13.6
Sensors operating profit (£m)	15.3	(10.1)	5.2	13.4	(12.4)	1.0
Energetics EBITDA (£m)	16.0	—	16.0	18.3	(5.6)	12.7
Energetics operating profit (£m)	11.8	(4.8)	7.0	14.1	(10.6)	3.5

Further details are provided in note 3.

The adjustments to continuing operations comprise:

- amortisation of acquired intangibles of £11.6m (2017: £12.1m);
- exceptional items of £4.1m (2017: £2.1m) relating to acquisition and disposal-related costs;
- exceptional items of £8.1m (2017: £14.0m) relating to business restructuring costs, the majority of which relates to the Tennessee site transformation;
- exceptional items of £12.8m (2017: £0.4m) relating to legal costs in relation to ongoing investigations;
- exceptional items of £7.4m (2017: £nil) relating to the impairment of product development costs;
- exceptional items of £1.7m (2017: £nil) relating to the costs associated with the change of Chief Executive;

- exceptional items of £0.8m (2017: £nil) associated with the GMP pension equalisation court ruling;
- loss on the movement in the fair value of derivative financial instruments of £0.4m (2017: £1.7m gain); and
- impact of US Tax Cuts and Jobs Act and tax credit on adjustments £13.1m (2017: £6.1m credit).

The discontinued operations profit after tax comprises:

- operating profit of £8.0m (2017: £23.9m);
- exceptional items of £69.3m (2017: £9.8m) relating to the impairment of the carrying value of discontinued businesses now held for sale to their expected realisable values less costs to sell;
- amortisation of acquired intangibles of £2.7m (2017: £2.9m);
- release of provisions in respect of previously disposed businesses of £nil (2017: £3.0m credit); and

- tax credit on the above of £1.0m (2017: £3.3m).

Auditor

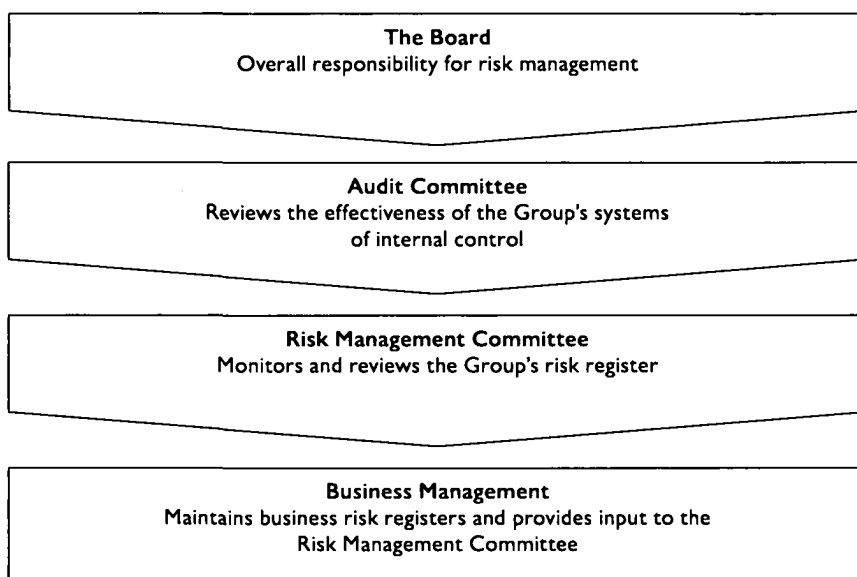
As outlined in the 2017 Annual Report and Accounts, the Group undertook a tender process for the selection and appointment of a new external auditor to replace Deloitte LLP, who had provided external audit services to the Group for more than fifteen years. The Board of Chemring appointed KPMG LLP as the Group's external auditor on 23 March 2018 and a resolution to reappoint KPMG LLP will be put to the shareholders at the 2019 Annual General Meeting.

Andrew Lewis

Group Finance Director
17 January 2019

How we manage risk

Risk management organisation structure



The Board

The Board is responsible for determining the nature and extent of risks it is willing to accept in delivering the Group's strategy and running the Group's operations, and ensuring that risks are effectively managed across the Group.

The Board reviews the Group risk register on a regular basis, and considers whether the Risk Management Committee has appropriately identified the principal risks to which the Group is exposed.

The Audit Committee

The Audit Committee is responsible for reviewing in detail the effectiveness of the Group's systems of internal control, including financial, operational and compliance controls, and its risk management systems.

The Risk Management Committee

The Risk Management Committee is responsible for identifying the principal risks to which the Group is exposed, monitoring key mitigation plans and maintaining the Group risk register. The Risk Management Committee also reviews the business unit risk

registers on a regular basis. The current members of the Risk Management Committee are:

- Michael Ord (Group Chief Executive);
- Sarah Ellard (Group Legal Director & Company Secretary);
- Andrew Lewis (Group Finance Director);
- Clancy Murphy (Chief People Officer); and
- Mark Taylor (Group Health & Safety Director).

Risk management policy and framework

The Group's Risk Management Policy sets out the Group's approach to risk management, including its risk appetite; the framework for assessing, managing and monitoring risk within the business; and the key roles and responsibilities for the oversight and implementation of the Group's risk management systems and controls.

The Group's risk management framework draws fundamentally from the "Three Lines of Defence Methodology", with the "First Line" being day-to-day management of risk and

maintenance of effective control procedures at individual businesses. The "Second Line" comprises various risk management and control functions established at the corporate management level, which are designed to enhance and monitor the First Line. The "Third Line" comprises the Group's internal audit function, utilising an external firm of auditors, who report directly to the Audit Committee.

The management of each business is responsible for the identification, management and reporting of local risks, in accordance with the Group's risk management framework. The management of each business is also responsible for the maintenance of business risk registers and the implementation of mitigation plans.

Each business is required to maintain a risk register identifying their key risks. The risk registers include an analysis of the likelihood and impact of each risk – before and after mitigation actions are taken to manage the risk, together with details of the mitigation plans and progress against them. Each risk is allocated an owner, who has responsibility for managing the risk.

The business risk registers are updated locally on a quarterly basis, and are reviewed in detail by the Group Chief Executive, the Group Finance Director and other members of the Executive Committee at quarterly business review meetings with each of the businesses.

The Risk Management Committee also reviews the business risk registers on a regular basis and, utilising the input from the businesses, the Risk Management Committee identifies those principal risks which are material to the Group as a whole. The Risk Management Committee also considers corporate-level risks. These risks are collated on the Group risk register, together with details of the applicable mitigation plans and risk owners.

The current Group risk register comprises various risks including health, safety, security and environmental risks, strategic risks, operational risks, financial risks, legal and compliance risks, people risks and reputational risks. Details of the principal risks are set out on pages 34 to 41.

Internal control and risk management systems

In addition to reviewing the Group risk register on a regular basis, the Board is also required to carry out an annual review of the effectiveness of the Group's systems of internal control and risk management systems in compliance with provision C.2.3 of the UK Corporate Governance Code (the "Code"). In the year under review, the Board considered the following key features of the Group's risk management systems and control procedures which operated during the year:

- the Board assesses the key risks associated with achievement of the Group's business objectives as part of the annual strategic planning process and on a continuing basis thereafter;
- the performance of each business against budget is reviewed on a monthly basis at both the operational management level and by the Board;
- the Group Chief Executive, the Group Finance Director and other members of the Executive Committee attend quarterly business review meetings with each of the businesses. In the case of the US businesses, formal Board meetings are also held quarterly, and these are attended by the Group Chief Executive, the Group Finance Director and external independent non-executive directors appointed in the US. The US non-executive directors are required to provide guidance and monitor governance in the US businesses throughout the year. An external independent non-executive director is also appointed to the Board of the Group's Norwegian subsidiary;
- each business is required to comply with the Group's accounting policy manual, which sets out formal procedures for incurring certain types of expenditure and making contractual commitments. Compliance with the accounting policy manual is audited by the internal auditors, who report regularly to the Audit Committee on their findings;
- the Board retains primary responsibility for acquisitions and disposals, and financing arrangements for the Group. Treasury management, IT strategy, insurance and significant legal matters are dealt with centrally from the Group head office, and the Board receives regular reports on each of these items. Reviews of the Group's pensions, insurance and physical risk management arrangements are carried out by external advisers on a periodic basis;
- the Group Health & Safety Director, supported by business-specific health and safety management committees, co-ordinates and controls the activities of each business in relation to health, safety, security and environmental matters, which are a key focus for the Board in view of the nature of the Group's operations. The Group Chief Executive is the Board member nominated with specific responsibility for health and safety;
- the Group maintains a Bribery Act Compliance Manual incorporating its anti-corruption policies and procedures; and
- the Board has established a broad internal audit function utilising the services of PwC. In addition to reviewing financial controls, the internal auditors review a wide range of non-financial processes and procedures, which provides additional assurance to the Board on the adequacy of the Group's internal controls. The internal auditors report to the Audit Committee on a quarterly basis, and progress on identified improvement actions is monitored and tracked.

The Board confirms that it has reviewed the effectiveness of the Group's systems of internal control and risk management which were in place during the financial year ended 31 October 2018, and it confirms that:

- there is an ongoing process for identifying, evaluating and managing the principal risks faced by the Company and the Group;

- systems of internal control and risk management compliant with the Code and the Turnbull Guidance were in place throughout the year and have remained in place up to the date of approval of these financial statements; and

- the Group's internal control and risk management systems are regularly reviewed by the Board, and broadly comply with the Guidance on Risk Management, Internal Control and Related Financial and Business Reporting published by the Financial Reporting Council.

The Board acknowledges, however, that the internal control systems can only provide reasonable, not absolute, assurance against material mismanagement or loss of the Group's assets. The Board will therefore continue to take steps to embed internal control and risk management further into the operations of the Group, and to deal with any areas of improvement which come to the attention of management and the Board.

Principal risks

The principal risks and uncertainties which could have a material impact on the Group's performance and could cause actual results to differ materially from expected and historical results have not changed significantly from those set out in the Group's 2017 Annual Report and Accounts and the 2018 Interim Report.

The principal risks to which the Group is exposed are set out below, together with details of their potential impact; the likelihood of occurrence (on a scale of one to three, with one being the most likely); an indication of whether the trend in the risk exposure is increasing, decreasing or broadly unchanged; and the mitigation actions taken to manage the risk.

Principal risks are identified by the Risk Management Committee based on the likelihood of occurrence and the potential impact on the Group as a whole.

All the principal risks to which the Group is exposed are linked to the Group's strategy. Details of the Group's strategy is contained on pages 14–15.

Health, safety, security and environment risks

Health and safety

Risk description	Likelihood of occurrence	Potential impacts	Mitigation actions	Trend
■ The Group's operations involve energetic materials that by their nature have inherent safety risks. ■ A process safety event involving energetic material could occur due to the ineffective management of process safety barriers. ■ Weak safety culture and individual behaviours may lead to a breach of rules and procedures.	2	■ Incidents may occur which could result in harm to employees, the temporary shutdown of facilities or other disruption to manufacturing processes. ■ The Group may be exposed to financial loss, regulatory action, and potential liabilities for workplace injuries and fatalities.	■ The Board believes that responsibility for the delivery of world-class safety standards is an integral part of operational management accountability. The Board is committed to ensuring that the Group's leadership operates with safety as a core value, and that our businesses provide a zero harm environment where all employees and visitors feel and are absolutely safe. ■ An independent review of safety culture has been completed across the Group and the findings will form a key part of a multi-year improvement programme which will establish a Generative Safety Culture within all of our businesses. ■ An updated HSE Policy has been issued throughout the business, reinforcing the accountability of leadership for safety, together with a new HSE Strategy and HSE Management System Framework Standard. These will focus on the three key areas of People, Plant and Process, with a particular focus on major accident hazard management. ■ The Group continues to invest in state-of-the-art process safety systems and equipment.	

Trend Increase No change Decrease

Environmental laws and regulations

Risk description	Likelihood of occurrence	Potential impacts	Mitigation actions	Trend
- The Group's operations and ownership or use of real property are subject to a number of federal, state and local environmental laws and regulations, including those relating to discharge of hazardous materials, remediation of contaminated sites, and restoration of damage to the environment. - At certain sites that the Group owns or operates, or formerly owned or operated, there is known or potential contamination for which there is, or may be, a requirement to remediate or provide resource restoration.	3	The Group could incur substantial costs, including remediation costs, resource restoration costs, fines and penalties, or be exposed to third party property damage or personal injury claims, as a result of liabilities associated with past practices or violations of environmental laws or non-compliance with environmental permits.	- All of the Group's businesses are certified to the environmental management system ISO 14001, which requires the setting of environmental goals and objectives focused on local aspects and impacts. - The Group has monitoring programmes at certain sites, for which appropriate financial provision has been made. In certain circumstances, the Group procures environmental liability insurance, subject to applicable insurance conditions.	

Strategic risks

Possible defence budget cuts

Risk description	Likelihood of occurrence	Potential impacts	Mitigation actions	Trend
Defence spending depends on a complex mix of political considerations, budgetary constraints and the requirements of the armed forces to address specific threats and perform certain missions. Overall defence spending may therefore be subject to significant fluctuations from year to year and there may also be downward pressure on defence budgets in certain key programme areas.	3	- The Group's financial performance may be adversely impacted by lower defence spending by its major customers, either generally or in relation to certain programmes. - Short-term trading and cash constraints may impact on the Group's ability to invest in longer-term technologies and capabilities.	- The Group continually assesses whether its planned organic growth strategies and product developments align with government priorities for future funding. Efforts are being focused, in particular, on the US Programs of Record and on next-generation technologies. We are also focusing on the development of our commercial products and services. - Actions continue to be taken to restructure and "rightsized" the businesses, and reduce overheads, to ensure the businesses are sustainable and profitable, even in difficult market conditions.	

Principal risks continued

Strategic risks continued

Timing and value of orders

Risk description	Likelihood of occurrence	Potential impacts	Mitigation actions	Trend
The Group's profits and cash flows are dependent, to a significant extent, on the timing of award of defence contracts. In general, the majority of the Group's contracts are of a relatively short duration and, with the exception of framework contracts with key customers, do not cover multi-year requirements.	2	- An unmitigated delay in the receipt of orders or cancellation of existing contracts could affect the Group's earnings and achievement of its budget in any given financial year. - If the Group's businesses are unable to continue trading profitably during periods of lower order intake, financial performance will deteriorate and assets may be impaired.	- Maximising order intake remains a key objective for the businesses, which are now well-positioned to benefit from the recovery of the US defence budget. - The businesses continue to pursue long-term, multi-year contracts with their major customers wherever possible. - Global business development capabilities have been established in the Countermeasures and Sensors segments, and will ensure better alignment of routes to market across all of our businesses.	

Political risks

Risk description	Likelihood of occurrence	Potential impacts	Mitigation actions	Trend
- The Group is active in several countries that are suffering from political, social and economic instability. - In addition, there is a significant risk of political unrest and changes in the political structure in certain non-NATO countries to which the Group currently sells.	2	- The Group's business in certain countries may be adversely affected in a way that is material to the Group's financial position and the results of its operations. - Political changes could impact future defence expenditure strategy and the Group's ability to export products to certain countries.	- The Group's businesses strive to maintain relationships at all levels within the political structure of certain key countries, in order to ensure that they are aware of and can react to proposed changes, if and when they occur. - Wherever possible, the businesses implement financing arrangements, such as letters of credit and advance payments, for contracts with high-risk customers, which are intended to mitigate the impact of a deterioration in the customer's financial position and in certain circumstances, they may also procure political risks insurance.	

Trend Increase No change Decrease

Contract-related risks

Risk description	Likelihood of occurrence	Potential impacts	Mitigation actions	Trend
■ The Group's government contracts may be terminated at any time and may contain other unfavourable provisions. ■ The Group may need to commit resources in advance of contracts becoming fully-effective, to ensure prompt fulfilment of orders or to enable conditions precedent to be met.	3	■ The Group may suffer financial loss if its contracts are terminated by customers, or a termination arising out of the Group's default may have an adverse effect on its ability to re-compete for future contracts and orders. ■ Unfavourable commercial contract terms may adversely impact the Group's working capital position, particularly if the receipt of payments by the Group is delayed.	■ The Group negotiates with customers to ensure the most favourable contractual terms are agreed. Areas of significant judgement or enhanced risk require the review and approval of the executive directors. ■ The Group has instigated a commercial and contract risk management training programme, with a view to improving future contracting practices. ■ The Group endeavours to negotiate stage payments with its customers wherever possible, in order to minimise exposure to significant cash outflows on contracts which may be terminated at short notice.	

Technology risks

Risk description	Likelihood of occurrence	Potential impacts	Mitigation actions	Trend
■ The Group may fail to maintain its position on key future programmes due to issues with capability development, technology transfer or cost-effective manufacture. ■ The Group needs to continually add new products to its current range, through innovation and continuing emphasis on research and development. New product development may be subject to delays, or may fail to achieve the requisite standards to satisfy volume manufacturing requirements and the production of products against high reliability and safety criteria to meet customer specifications.	2	■ Failure to obtain production contracts on major development programmes may significantly impact the future performance and value of individual businesses. ■ Failure to complete planned product development and upgrades successfully may have financial and reputational impacts, and may result in obsolescence or loss of future business.	■ Close relationships are maintained with customers on all key future programmes, to ensure product and capability development aligns with customer requirements. ■ A New Product Development Policy and procedures have been adopted, which align the approach to future technology investment across the Group and ensure that resources are applied appropriately across the businesses in support of the five-year plan. ■ Working groups have been established to drive and co-ordinate the Group's technology growth in certain key areas such as Countermeasures and Sensors.	

Principal risks continued

Strategic risks continued

Brexit

Risk description	Likelihood of occurrence	Potential impacts	Mitigation actions	Trend
The Group could be adversely impacted by the UK's exit from the EU, particularly in the event that the UK Government fails to approve the negotiated exit arrangement.	2	- An adverse Brexit outcome could impact the Group's relationships with its customers and suppliers in the EU, as a result of potential changes to sales tariffs and restrictions on the movement of goods. - Our UK businesses may also be impacted by restrictions on the movement of people and the potential loss of EU national workers, and may face regulatory uncertainties with regards to certain EU legislation.	Our businesses continue to review their business continuity plans to ensure the impact of Brexit, the full extent of which remains subject to a high level of uncertainty at this stage, is mitigated as far as possible.	

Financial risks

Risk description	Likelihood of occurrence	Potential impacts	Mitigation actions	Trend
- The Group is exposed to a range of financial risks. These risks may be externally driven, such as an unexpected movement in foreign exchange rates, or may be specific to the Group. Specific financial risks could arise out of a disruption to operations; failure to deliver strategic objectives, including planned investment; or customer-related events, including default on the payment of outstanding debts. The Group may also face an increased funding requirement for its legacy UK defined benefit pension scheme. - Further details of the financial risks to which the Group is potentially exposed and details of mitigating factors are set out in the financial review and note 20 of the Group financial statements.	3	- The Group may fail to comply with financing covenants and be unable to meet debt repayments, leading to withdrawal of funding or additional costs of maintaining funding. - Operational results may be impacted by unexpected financial losses or increased costs.	- The Group has committed banking facilities in place to October 2022 with options to extend duration and quantum. - Actual and forecast financing covenants are monitored on a regular basis. - A capital approval process is in place, requiring Board approval for significant projects. - A hedging policy is applied for significant foreign transactions. - Advance payments and letters of credit are required from customers with a heightened payment risk. - Close dialogue is maintained with the trustees of the pension scheme on investment and funding matters.	

Trend Increase No change Decrease

Operational risks

Manufacturing

Risk description	Likelihood of occurrence	Potential impacts	Mitigation actions	Trend
■ The Group's manufacturing activities may be exposed to business continuity risks, arising from plant failures, supplier interruptions or quality issues. ■ Planned new facility developments may be delayed as a result of operational issues.	2	■ Interruptions to production and sales could result in financial loss, reputational damage and loss of future business. ■ A delay in completing new manufacturing facilities, such as those planned in Tennessee, could constrain capacity and limit future business growth.	■ One of the key objectives of the Operational Excellence Programme is to improve the Group's "right-first-time" and on-time delivery performance. ■ The Group continues to refine its requirements for reporting of key performance indicators, in order to provide better visibility on operational performance, and to facilitate the identification of potential production and quality issues at an early stage. ■ All of the Group's businesses are required to prepare business continuity plans. ■ The Group insures certain business interruption risks where appropriate. ■ Detailed plans are developed for all restructuring and consolidation projects. Additional dedicated resource is being employed to oversee key investment projects, and progress will be closely monitored by the Group Executive Committee.	

People risks

Risk description	Likelihood of occurrence	Potential impacts	Mitigation actions	Trend
■ There is a risk that the market for talent in our key areas of expertise becomes more challenging. Allied to this there is a risk of loss of key personnel. ■ As the shape of the Group's business changes and with an increased focus in technology, the Group may fail to build and retain an appropriate skill base to enable us to compete successfully in new markets and product areas. ■ Employees may not be fully-engaged with the Chemring journey, our purpose, products, customers and values.	2	■ Failure to recruit sufficient suitably-qualified personnel in key areas of the business may result in the Group failing to achieve its future growth aspirations. ■ If key personnel are not incentivised appropriately to remain within the Group, its operations may suffer from loss of management expertise and knowledge. ■ Failure to build and retain key skills will lead to a reduction in the ability to innovate or to win and deliver new contracts.	■ A development framework is being implemented across the Group, focusing on developing management and leadership skills. ■ Our incentive arrangements are being refreshed to focus on driving collaboration and creating a Group focus at senior level. ■ Development of our Group and business unit core strategy is being enhanced to enable review of capability requirements. ■ Embedding the Chemring values is now a key area of focus and the development of a culture framework will support the evolution of a new Chemring culture.	

Principal risks continued

Legal and compliance risks

Compliance and corruption risks

Risk description	Likelihood of occurrence	Potential impacts	Mitigation actions	Trend
■ The Group operates in over fifty countries worldwide, in a highly-regulated environment, and is subject to the applicable laws and regulations of each of these jurisdictions. The Group must ensure that all of its businesses, its employees and third parties providing services on its behalf comply with all relevant legal and regulatory obligations. ■ The nature of the Group's operations could also expose it to government and regulatory investigations relating to safety and the environment, import-export controls, money laundering, false accounting, and corruption or bribery. ■ The Group requires a significant number of permits, licences and approvals to operate its business, which may be subject to non-renewal or revocation.	3	■ Non-compliance could result in administrative, civil or criminal liabilities, and could expose the Group to fines, penalties, suspension or debarment, and reputational damage. ■ Loss of key operating permits and approvals could result in temporary or permanent site closures, and loss of business.	■ The Group has a central legal and compliance function which assists and monitors all Group businesses, supported by dedicated internal legal resource in the US. ■ The Group operates under a Global Code of Business Principles, which stipulates the standard of acceptable business conduct required from all employees and third parties acting on the Group's behalf. ■ The Group has adopted a new Operational Framework, which mandates compliance with a number of new policies and enhanced procedures covering a wide range of legal and regulatory requirements. The Operational Framework also incorporates an assurance certification to be completed by every business on a half-yearly basis in future. ■ The Group has adopted a Bribery Act Compliance Manual, incorporating all of its anti-bribery policies and procedures.	

Product liability and other customer claims

Risk description	Likelihood of occurrence	Potential impacts	Mitigation actions	Trend
■ The Group may be subject to product liability and other claims from customers or third parties, in connection with (i) the non-compliance of products or services with the customer's requirements, due to faults in design or production; (ii) the delay or failed supply of the products or the services indicated in the contract; or (iii) possible malfunction or misuse of products. The Group may also be required to undertake a product recall in certain circumstances. ■ As many of the Group's products are single-use devices, it is often impossible to conduct functional testing without destroying the product, and this increases the risk of possible product failure, either in use or during customers' own sample-based functional tests.	3	■ Substantial claims could harm the Group's business and its financial position. ■ In addition, any accident, product failure, incident or liability, even if fully insured, could negatively affect the Group's reputation among customers and the public, thereby making it more difficult for the Group to compete effectively. ■ Material breaches in the performance of contractual obligations may also lead to contract termination and the calling of performance bonds.	■ The businesses maintain rigorous control of their production processes, monitoring critical parameters on a batch or unit basis. State-of-the-art techniques, including statistical process control or Six Sigma, are applied and, where appropriate, processes are automated to reduce the scope for human error. Detailed assessments of incoming components and materials are conducted to ensure compliance with specifications. ■ Product liability claims from third parties for damage to property or persons are generally covered by the Group's insurance policies, subject to applicable insurance conditions.	

Trend Increase No change Decrease

Reputational risks

Cyber-related risks

Risk description	Likelihood of occurrence	Potential impacts	Mitigation actions	Trend
■ Cyber-security and related risks are key emergent areas of critical importance for all businesses, particularly for those involved in the defence and security sector. Threats can emanate from a wide variety of sources and could target various systems for a wide range of purposes, making response particularly difficult. The data and systems which need to be protected include customer-classified or sensitive information, commercially-sensitive information, employee-related data and safety-critical manufacturing systems.	2	■ The Group may suffer from critical systems failures, or its intellectual property, or that of its customers, may fall into the hands of third parties. ■ In addition to business interruption and financial loss, the Group may suffer reputational damage, and its business of providing cyber-security services to customers may be irreparably damaged.	■ A threat assessment has been completed, and an action plan to counter the Group's identified major threats has been implemented. ■ The Group adopts a number of cyber-security defence measures, encompassing, as appropriate to the nature of the threat and sensitivity of data or systems being protected, hardware, software, system, process or people-based solutions. Where appropriate, government or commercial accreditation of networks and systems is obtained in support of the overall cyber-security programme. ■ All of the Group's UK businesses have achieved the "Cyber Essentials" accreditation as a minimum standard, and the US businesses have either achieved, or are working towards, compliance with the US DFARS standard. ■ A review of the Group's IT and security systems is included within the internal audit programme.	

Product-related risks

Risk description	Likelihood of occurrence	Potential impacts	Mitigation actions	Trend
■ There is a risk that the Group suffers negative publicity through the sale of its defence and security products to customers who use the products inappropriately or illegally.	3	■ The Group may be exposed to adverse media coverage and reputational damage.	■ The majority of the Group's products are subject to stringent export control requirements, which also require end-user certificates as part of the approval process. ■ The Group has adopted a Policy on the Sale of Goods and Services which sets out which products the Group will supply, and those it will not, and to which customers.	

Corporate responsibility review

The Group acknowledges its obligation to ensure the responsible operation of its business at all times, and is fully committed to sound and ethical business conduct.

The Group's approach

The Board has overall responsibility for establishing and maintaining the Group's policies in this area, and the Group Chief Executive is accountable to the Board for ensuring that the Group's businesses adhere to these policies.

The Board recognises that the long-term success of the Group will be enhanced by a positive interaction with all of its stakeholders, and has determined that the Group's corporate responsibility initiatives should be focused on the following key areas:

- health and safety;
- employee support and development;
- environmental protection; and
- ethical business conduct.

The Board intends that the Group's corporate responsibility approach will be fully embedded within its business units, and the senior management bonus plan incorporates specific objectives in the above areas.

Further details of the Group's approach are set out below.

In the workplace

Health and safety

Policy and practices

The Board recognises that the highest levels of safety are required in order to protect employees, product users and the general public. The Board believes that all incidents and injuries are preventable, and that all employees have the right to expect to return home safely at the end of every working day.

The Group Chief Executive has overall responsibility for health, safety and environmental matters across the Group. The Group Health and Safety Director reports directly to the Group Chief Executive, and is responsible for the effective administration and implementation of the Group's health, safety and environment strategy. The Group Health & Safety Director is a member of the Executive Committee and reports on the performance of all businesses against agreed targets and objectives. The Group Chief Executive reports monthly to the Board on all key health and safety issues.

The Board requires that all businesses systematically manage their health and safety hazards, set objectives and monitor progress by regular measurement, audit and review. Each managing director is responsible for the management of health and safety within their business, and for providing adequate resources to satisfy the Board's requirements. All managing directors have health and safety related objectives incorporated within their annual bonus plan.

Managers and supervisors in the Group's businesses are required to enforce procedures, and to provide leadership and commitment to promote and embrace a positive health and safety culture. The Board emphasises the importance of individual responsibility for health and safety at all levels of the organisation, and expects employees to report potential hazards, to be involved in implementing solutions, and to adhere to rules and procedures.

A key element in the continual improvement of health and safety management is sharing best practice and lessons learnt from incidents across the Group's businesses and the wider industry. Accidents, incidents and near misses are investigated, with actions generated to prevent recurrence.

Within the Group's Operational Excellence Programme, activities have been identified that specifically relate to health and safety, including further work on culture development, communication mechanisms, competence management and wellbeing.

It is with great regret that the Board must report a fatality at our UK Countermeasures site. The incident has been subject to an extensive investigation, the results of which have led to changes in operations across the business.

Strategy

Our goal is zero harm, this is not set as a statistical target, but as a moral imperative that will be achieved through establishing a Generative Safety Culture, with three focus areas of People, Plant and Process.

People

The Group continues to focus on behaviour and the delivery of its safety leadership programme. In line with this the Group is introducing a behavioural framework that reinforces individual accountability for safety applicable to directors, managers, front line staff and our contract partners. Safety is not just about proactive management of our physical risks, but those things which can impact the mental health and wellbeing of our colleagues; as such, we are introducing a healthy worker programme across the Group to ensure that wellbeing of our people is protected.

Plant

The Group continues to invest in engineering solutions to remove people from hazards. This includes the automation of operations, increasing the number of processes that are conducted remotely and further developing protection systems. The integrity of plant operation is not just concerned with the reliability of the system, but also the reliability of how people operate the system; as such, in the next three years a behavioural programme will be rolled out across the Group to enhance the reliability and safety of our operations.

Process

The nature of our business has inherent major hazards, especially in relation to the handling of energetic materials. As such the Group has conducted a full review of people's exposure to energetic materials that has led to the elimination of tasks and improved safe working methods. Moving forward this will be expanded to cover all major risks with an assurance process that stress tests the active monitoring and management of our process barriers.

Historically, assurance activity has been conducted internally to assess compliance of our business units against Group expectations as set out in the Group Safety Policy Manual. Following the events at our UK Countermeasures site a planned independent safety review conducted by ERM, commissioned by the Group Health & Safety Director, was brought forward. The review provided an external benchmark against other high hazard industries. The findings and recommendations, against best practice, have been captured and incorporated into the new Group HSE Strategic Plan that will identify weak signals and drive a proactive approach to the prevention of incidents, tackling the cause not the symptom.

Lost time incidents

The number of lost time incidents is one of the key performance indicators monitored by the Group. The Group collects and reports lost time incident rates using the US Occupational Safety and Health Administration rules.

In 2018, the lost time incident rate reduced from 0.59 in 2017 to 0.38 in 2018 (this includes a fatal incident).

The Group's historical lost time incident rate (number of lost time incidents per 100 employees per year) is as follows:

2018	2017	2016	2015	2014
0.38	0.59	0.35	0.57	0.43

The lost time incident rate includes the fatal incident at Chemring Countermeasures UK.

Employees

The Board recognises the valuable contribution that the Group's employees continue to make to its success, and aims to provide a working environment that reflects and rewards this.

At 31 October 2018 the Group had 2,559 (2017: 2,651) employees based in four countries.

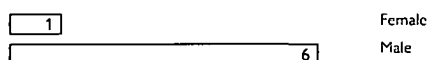
Diversity

A breakdown by gender of the number of persons who are directors of the Company, senior managers and other employees is set out below, together with an analysis of ethnic diversity.

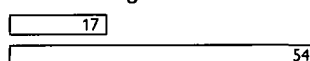
The Board currently has one female member. There is an active commitment to increase this to 25% female representation in the near future. The Board recognises the importance of promoting diversity across the Group, both in terms of gender and other diversity metrics.

Senior managers are generally directors and functional heads within head office and subsidiary companies.

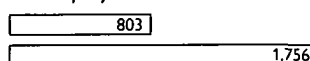
Directors



Senior managers



All employees



Ethnic diversity



Corporate responsibility review continued

In the workplace continued

Employees continued

Employment practices

The Group's policy is to provide equal opportunities for all employees, irrespective of race, nationality, gender, sexual orientation, marital status, religion or political belief, disability or age. The Group is committed to meeting, at a minimum, the labour rights and legislation requirements in each country in which it operates and, in practice, often exceeds these. The Group's employment practices policies are introduced at newly acquired businesses at the earliest opportunity after they join the Group.

Human rights

The Group does not have a stand-alone human rights policy but its practices and policies adhere to internationally recognised human rights principles.

A statement on the Group's compliance with the Modern Slavery Act 2015 can be found on the Group's website at www.chemring.co.uk.

Development and training

The Group continues to address training and development requirements for employees at all levels within the organisation. All businesses consider training needs for their employees at a local level, in order to ensure that they have the right skill base to deliver their five-year plan. The Board also reviews future management requirements and succession plans on an ongoing basis.

The inaugural Emerging Leaders Programme was launched in 2018. 22 high potential future leaders from around the Group were identified and commenced a multi-faceted programme in August 2018. The programme includes learning modules, one-to-one coaching, live business projects run by senior level sponsors and group work on specific work challenges.

Across the Group there are increasing numbers of early careers joiners, both direct from school or following degree-level study. In the UK, Roke continues to increase the number of undergraduate hires, placements and internships onto programmes which have received external recognition. An Annual Graduate Conference was established in 2018 bringing together all current graduates from the UK and Norway. A similar conference will be established for US graduates in 2019.

Benefits

The Group aims to provide all employees with an attractive and competitive benefits package. US employees receive health care and selected other benefits.

The Board is keen to encourage employees to join share schemes in order that they can share in the future success of the Group, and savings-related share plans are therefore offered to employees where appropriate.

Communications

The Group pursues a policy of employee communication through meetings (including team briefings and works councils) and in-house magazines by which employees are made aware of the progress of the Group and the businesses in which they work. The businesses also engage with their employees through representative bodies and trade unions.

A Group magazine, "Chemring-i", is published on a bi-annual basis and is distributed to all employees.

In the environment

Policy and practices

All of the Group's businesses are certified to the environmental management system ISO 14001, which requires the setting of environmental goals and objectives focused on local aspects and impacts. In addition, expectations are set for energy usage, waste generation and water utilisation, and performance is monitored across the Group.

Land quality

The Chemring Energetic Devices facility in Chicago, US, is located on a site which has "superfund" status under the US contaminated land regime. The business continues to work with consultants and the regulatory authorities to ensure that its legal obligations in relation to this matter are fully satisfied.

The Group carries a £3.2m (2017: £3.1m) provision in respect of environmental liabilities, which the Board considers to be adequate (see note 22 of the Group financial statements).

Incidents

There were no significant environmental incidents in the year.

Performance

Greenhouse gas emissions

The Group is required to report on all of the emission sources of entities that fall within its consolidated financial statements, as specified under the Companies Act 2006 (Strategic Report and Directors' Report) Regulations 2013. The Group does not have responsibility for any emission sources of entities which are not included in its consolidated financial statements.

Absolute values have been converted to carbon dioxide equivalents using the UK Government Conversion Factors for Company Reporting 2017. The reporting period covered aligns with the Group's financial year ended 31 October 2018. The Group is not required to report on its Scope 3 emissions.

Scope 1 emissions

Combustion of fuel in any premises, machinery or equipment operated, owned or controlled by the Group	Quantity (Mwh)	Conversion factor	CO ₂ e (tonnes)
Gas	34,400	0.184	6,330
Heating oil	8,461	0.268	2,268
Liquid petroleum gas	1,394	0.214	298
Fuels consumed by company-owned and leased vehicles, excluding business travel and employee commuting	Quantity (tonnes)	Conversion factor	CO ₂ e (tonnes)
Diesel	47	3.132	147
Liquid petroleum gas	112	2.937	329
Petroleum	87	3.002	261
The operation or control of any manufacturing process by the Group			CO ₂ e (tonnes)
On-site waste incineration			1,278
Total Scope 1 emissions			10,911

With reference to the six Kyoto substances, the Group does not emit hydrofluorocarbons, perfluorocarbons or sulphur hexafluoride. Values for carbon dioxide, methane and nitrous oxides are included in the above figures.

Scope 2 emissions

Electricity:	Quantity (Mwh)	Conversion factor	CO ₂ e (tonnes)
Australia	1,051	0.750	788
Norway	44,248	0.008	354
UK	15,297	0.279	4,268
US	32,796	0.435	14,266
Total Scope 2 emissions			19,678

The Group uses revenue for intensity measurement, which it considers to be the most reliable comparator.

	2018	2017
Total emissions (tonnes CO ₂)	30,589	32,543
Group revenue (£m) continuing and discontinued operations	436.0	547.5
Total CO₂ tonnes per £m of revenue	70	59

The UK businesses participate in the CRC Energy Efficiency Scheme, with the exception of Chemring Energetics UK, which operates under a Climate Change Agreement.

Corporate responsibility review continued

In the environment continued

Performance continued

Waste

	2018 (tonnes)	2017 (tonnes)	2016 (tonnes)	2015 (tonnes)	2014 (tonnes)
Recycled, non-hazardous	700	945	956	968	731
Recycled, hazardous	393	652	64	287	262
Not recycled, non-hazardous	716	1,343	782	748	659
Not recycled, hazardous	478	321	942	696	401
Total	2,287	3,261	2,744	2,699	2,053

	2018 m ³	2017 m ³	2016 m ³	2015 m ³	2014 m ³
Total water consumption	802,776	663,917	682,185	721,401	924,889

In the community

Helping others

The Board recognises that each of the Group's businesses has an important role to play in its local community.

The Board operates a community investment policy, which confirms its commitment to support selected charitable causes with a focus on the military and armed services, and those linked to the local communities in which the Group's businesses operate. Each business has its own locally held charity budget, and at a Group level, charitable donations are considered on a monthly basis by the Executive Committee. The Group continues to sponsor the British Army's Parachute Regiment display team, the Red Devils.

In addition to making cash donations, the Group also encourages and supports employees who undertake voluntary work in the local community, where appropriate. During the year, employees donated their time and services on a wide range of projects, several of which had an educational bias.

The Group is involved with a number of educational initiatives and has relationships with several universities, whereby funding is provided for students' research activities.

Local impact

With regards to the impact of the Group's manufacturing activities on the local community, at locations where operations may inconvenience neighbours through product proofing, the businesses liaise with local residents to minimise any impact. The Group is also cognisant of the potential impact of its operations on the local environment, and is addressing this through its environmental strategy.

In the marketplace

Policy on the Sale of Goods and Services

The Board has adopted a Policy on the Sale of Goods and Services, which provides guidance to all stakeholders on the products and services that the Group will supply, to which customers and to which countries, and sets out a clear definition of what the businesses will not supply. All Group businesses are required to comply with this policy, which addresses both legal and reputational considerations with regards to certain products. The policy is reviewed and updated on a regular basis.

Ethics and business conduct

The Group has adopted a Global Code of Business Principles, which requires its employees, its businesses and all third parties who act on the Group's behalf to comply with the Group's standards of acceptable business conduct and applicable laws and regulations in all of the countries in which the Group operates.

Anti-bribery and corruption

The Group's Bribery Act Compliance Manual incorporates all of its anti-corruption policies and procedures, including the following:

- requirements for bribery risk assessments to be carried out as part of normal operating procedures;
- Group-wide policies and procedures on the appointment of all sales partners and other third party advisers, stipulating due diligence and contractual requirements, approval levels, and monitoring and review processes;
- policies and procedures relating to third party service providers and suppliers;
- regular training for management and employees working within commercial, sales and marketing, finance and human resource functions; and
- policies and procedures on the giving and receiving of gifts and hospitality.

The Group's US businesses have an ethical compliance programme to satisfy US Government requirements for ethical training for employees, compliance audits, a confidential reporting line for employees, and related investigation procedures.

The Group has a whistleblowing policy and procedures in place which enable all employees to raise concerns, in confidence, about possible improprieties.

These arrangements reflect the requirements of the UK Bribery Act 2010.

Strategic report

Cautionary statement

This report contains forward-looking statements that are based on current expectations or beliefs, as well as assumptions about future events. These forward-looking statements can be identified by the fact that they do not relate only to historical or current facts. Forward-looking statements often use words such as anticipate, target, expect, estimate, intend, plan, goal, believe, will, may, should, would, could, is confident, or other words of similar meaning. Undue reliance should not be placed on any such statements because they speak only as at the date of this document and, by their very nature, they are subject to known and unknown risks and uncertainties and can be affected by other factors that could cause actual results, and Chemring's plans and objectives, to differ materially from those expressed or implied in the forward-looking statements.

There are a number of factors which could cause actual results to differ materially from those expressed or implied in forward-looking statements. Among the factors that could cause actual results to differ materially from those described in the forward-looking statements are: increased competition, the loss of or damage to one or more key customer relationships, changes to customer ordering patterns, delays in obtaining customer approvals for engineering or price level changes, the failure of one or more key suppliers, the outcome of business or industry restructuring, the outcome of any litigation, changes in economic conditions, currency fluctuations, changes in interest and tax rates, changes in raw material or energy market prices, changes in laws, regulations or regulatory policies, developments in legal or public policy doctrines, technological developments, the failure to retain key management, or the key timing and success of future acquisition opportunities or major investment projects.

Chemring is under no obligation to revise or update any forward-looking statement contained within the Annual Report and Accounts, regardless of whether those statements are affected as a result of new information, future events or otherwise, save as required by law and regulations.

The strategic report on pages 8 to 47 has been approved by the Board of directors and signed on its behalf by:

Michael Ord

Group Chief Executive
17 January 2019

Board of Directors

Chairman

Carl-Peter Forster ^{N R}
Non-Executive Chairman

Board length of service
(as at 17 January 2019):
2 years, 8 months

Length of service with the Group (as at 17 January 2019):
2 years, 8 months

Experience:

- Board experience at Chairman and Chief Executive level
- Extensive international experience within the industrial goods and engineering sectors
- Expertise in operational excellence and lean manufacturing

Carl-Peter Forster joined the Group as an independent non-executive director and Chairman-designate on 1 May 2016, and was appointed Chairman of the Board on 1 July 2016.

Carl-Peter formerly held senior leadership positions in some of the world's largest automotive manufacturers, including BMW, General Motors and Tata Motors (including Jaguar Land Rover). Carl-Peter is currently the Senior Independent Director at IMI plc and a non-executive director of Cosworth Ltd, and was previously a non-executive director of Rexam PLC and Rolls-Royce plc. He is also Chairman of The London Electric Vehicle Company Ltd, and Friedola Tech GmbH, a member of the Board of Volvo Cars Corporation, a member of the Board of Geely Automobile Holdings and a member of the Advisory Boards of Rock Tech Lithium, Inc. and PwC.

Executive directors

Michael Ord
Group Chief Executive

Board length of service
(as at 17 January 2019):
0 years, 7 months

Length of service with the Group (as at 17 January 2019):
0 years, 7 months

Experience:

- Extensive senior management experience in the defence sector
- International experience in both service and manufacturing industries

Michael Ord was appointed to the Board on 1 June 2018, and appointed as Group Chief Executive on 1 July 2018.

Michael formerly held a number of senior management roles with BAE Systems including Managing Director of their Naval Ships and F-35 Joint Strike Fighter businesses. Prior to his 1996 move to industry Michael had a successful career in the Royal Navy serving for twelve years in a number of engineering management roles.

An Aeronautical Systems Engineering graduate and a Chartered Engineer, Michael has also completed post-graduate management studies at Manchester Business School and is a graduate of Harvard Business School's Advanced Management Programme. He is a trustee of The Education & Training Foundation, and a member of the Royal Aeronautical Society.

Andrew Lewis
Group Finance Director

Board length of service
(as at 17 January 2019):
2 years

Length of service with the Group (as at 17 January 2019):
2 years

Experience:

- Extensive international experience in the defence sector
- Board experience at Finance Director level
- Chartered Accountant

Andrew Lewis joined the Group on 9 January 2017 and was appointed to the Board as Group Finance Director on 19 January 2017.

Andrew spent eight years as Group Finance Director of Avon Rubber p.l.c., where he also performed the Interim CEO role during 2015, following the retirement of the previous CEO.

Prior to joining Avon, Andrew was Group Financial Controller of Rotork plc and before that he was a Director at PricewaterhouseCoopers in Bristol and New Zealand.

Sarah Ellard
Group Legal Director
& Company Secretary

Board length of service
(as at 17 January 2019):
7 years, 4 months

Length of service with the Group (as at 17 January 2019):
24 years, 11 months

Experience:

- Legal, compliance and governance expertise
- Chartered Secretary

Sarah Ellard was appointed as Group Legal Director on 7 October 2011, having been Group Company Secretary since 1998.

Prior to joining the Group, Sarah trained and worked at Ernst & Young LLP. She is a Fellow of the Institute of Chartered Secretaries and Administrators.

Non-executive directors

Andrew Davies ^{A N R} Non-Executive Director

Board length of service
(as at 17 January 2019):
2 years, 8 months

Length of service with the Group (as at 17 January 2019):
2 years, 8 months

Experience:

- Board experience at Chief Executive level
- Extensive knowledge of the international defence industry

Andrew Davies was appointed as an independent non-executive director on 17 May 2016 and was appointed as Chairman of the Remuneration Committee on 8 August 2018.

Andrew has a wealth of relevant sector experience, having served in senior operational and strategic roles at executive committee level at BAE Systems plc for more than fourteen years. He was formerly Chief Executive of Wates Group Ltd.

Stephen King ^{A N R} Non-Executive Director

Board length of service
(as at 17 January 2019):
0 years, 2 months

Length of service with the Group (as at 17 January 2019):
0 years, 2 months

Experience:

- Executive and non-executive board experience in public and private companies
- Chartered Accountant

Stephen King was appointed as an independent non-executive director on 1 December 2018. He is the Senior Independent Director and Chairman of the Audit Committee at TT Electronics plc, and is a non-executive director of BBA Aviation plc, and Bristow Group Inc.

Stephen has a wealth of senior level experience within the industrial, engineering and manufacturing sectors, including a number of executive and non-executive roles. Stephen recently retired as Group Finance Director of Caledonia Investments plc. He was previously a non-executive director and Chairman of the Audit Committee at The Weir Group plc.

Stephen was Finance Director at De La Rue plc from 2003 to 2009, and prior to that at Midlands Electricity plc. A Chartered Accountant, Stephen has also held senior financial positions at Lucas Industries plc and Seaboard plc, and was a non-executive director of Camelot plc.

Nigel Young ^{A N R} Senior Independent Non-Executive Director

Board length of service
(as at 17 January 2019):
5 years, 9 months

Length of service with the Group (as at 17 January 2019):
6 years, 5 months

Experience:

- Previously Interim Chief Financial Officer of the Group from August 2012 to January 2013
- Finance experience from previous CFO positions
- Chartered Accountant

Nigel Young became a non-executive director and Chairman of the Audit Committee on 1 May 2013, following his appointment as Interim Chief Financial Officer in August 2012. He was appointed as Senior Independent Director in March 2016.

Nigel's previous appointments include Finance Director of ALVIS PLC, First Technology PLC, Babcock International Group PLC and Morgan Advanced Materials Plc. Nigel has also undertaken a number of interim finance roles, including one at McBride Plc. He is currently a non-executive director and Chairman of P2i Limited, a provider of liquid repellent nanotechnology, and is a trustee and Board member of Orbis UK, a leading global eye charity.

Committee membership

- A Audit Committee
- N Nomination Committee
- R Remuneration Committee
- Denote Chairman

Directors' report

The directors present their annual report, together with the audited financial statements of the Group and the Company, for the year ended 31 October 2018.

The following sections of the annual report are incorporated into the directors' report by reference:

- strategic report on pages 8 to 47;
- corporate governance report on pages 54 to 61;
- Audit Committee report on pages 62 to 65;
- directors' remuneration report on pages 66 to 91;
- directors' responsibilities statement on page 53; and
- notes to the Group financial statements as detailed in this section.

Business review

The strategic report on pages 8 to 47 provides a review of the Group's business development, performance and position during and at the end of the financial year, its strategy and likely future developments, key performance indicators, and a description of the principal risks and uncertainties facing the business. Further information regarding financial risk management policies and financial instruments is given in note 20 to the Group financial statements.

There have been no significant events since the balance sheet date.

Results and dividends

The loss attributable to the Group's shareholders for the year was £105.8m (2017: £6.6m profit).

The directors are recommending the payment of a final dividend of 2.2p per ordinary share which, together with the interim dividend of 1.1p per share paid in September 2018, gives a total for the year of 3.3p (2017: 3.0p). The final dividend is subject to approval by shareholders at the Annual General Meeting on 21 March 2019 and has not therefore been included as a liability in these financial statements.

Directors and their interests

The current directors are shown on pages 48 and 49.

Michael Flowers stepped down as Group Chief Executive on 30 June 2018 and Michael Ord was appointed as Group Chief Executive on 1 July 2018.

Daniel Dayan stepped down as a non-executive director on 30 November 2018 and Stephen King was appointed as a non-executive director on 1 December 2018.

In accordance with the Company's Articles of Association, all directors are required to submit themselves for re-election at every Annual General Meeting. All directors will therefore be seeking re-election at the Annual General Meeting on 21 March 2019.

Details of the service contracts entered into between the Company and the executive directors are set out in the directors' remuneration report on page 74. The non-executive directors do not have service contracts with the Company.

The Company has made qualifying third party indemnity provisions for the benefit of its directors, which were in effect throughout the year and remain in force at the date of this report. The directors have the benefit of a directors' and officers' liability insurance policy.

Other than in relation to their service contracts, none of the directors is or was beneficially interested in any significant contract to which the Group was a party during the year ended 31 October 2018.

Information required in relation to directors' shareholdings is set out in the directors' remuneration report on page 85.

Employees and employee consultation

Details of the Group's employment policies and employee consultation practices are set out in the corporate responsibility review on pages 43 and 44.

Political donations

No political donations were made during the year (2017: £nil).

Contractual arrangements

The Group contracts with a wide range of customers, comprising governments, armed forces, prime contractors and OEMs across the globe. The US Department of Defense is the largest single customer, and procures the Group's products under a significant number of separate contracts placed with individual Group businesses.

The Group's businesses utilise many suppliers across the world, and arrangements are in place to ensure that businesses are not totally reliant on single suppliers for key raw materials or components.

Research and development

The Group's research and development expenditure for the year is detailed in the financial review on page 29.

Change of control

Individual Group businesses have contractual arrangements with third parties, entered into in the normal course of business, which may be amended or may terminate on a change of control of the relevant business, or in certain circumstances, following a takeover of the Group.

The most significant agreements entered into by the Group which contain provisions granting the counterparties certain rights in the event of a change of control of the Company are the revolving credit facility agreements entered into with the Group's banks, and the loan note agreements, pursuant to which the Company issued notes under a series of private placements. These agreements provide that, in the event of a change of a control, the Company must repay all outstanding borrowings, together with accrued interest and other sums owing under each agreement.

Share capital and shareholder rights

General

The Company's share capital consists of ordinary shares of 1p each and preference shares of £1 each, which are fully paid up and quoted on the main market of the London Stock Exchange. Full details of the movements in the issued share capital of the Company during the financial year are provided in note 24 to the Group financial statements.

Details of the rights attaching to shares are set out in the Articles of Association (the "Articles"). All holders of ordinary shares are entitled to attend, speak and vote at any general meeting of the Company, and to appoint a proxy or proxies to exercise these rights. At a general meeting, every shareholder present in person, by proxy or (in the case of a corporate member) by corporate representative has one vote on a show of hands, and on a poll has one vote for every share held. The Notice of Annual General Meeting specifies deadlines for exercising voting rights and appointing a proxy or proxies to vote in respect of the resolutions to be passed at the Annual General Meeting.

There are no restrictions on the transfer of ordinary shares in the capital of the Company, other than certain restrictions which may from time to time be imposed by law. In accordance with the Market Abuse Regulation, certain employees are required to seek the approval of the Company to deal in its shares.

The cumulative preference shares carry an entitlement to a dividend at the rate of 7p per share per annum, payable in equal instalments on 30 April and 31 October each year. Holders of the preference shares have the right on a winding-up to receive, in priority to any other classes of shares, the sum of £1 per share together with any arrears of dividends.

The Company is not aware of any agreements between shareholders that may result in restrictions on the transfer of securities and/or voting rights.

The Company's Articles may only be amended by special resolution at a general meeting of shareholders.

Issue of shares

Under the provisions of section 551 of the Companies Act 2006 (the "Act"), the Board is prevented from exercising its powers under the Articles to allot shares without an authority contained either in the Articles or in a resolution of the shareholders passed in general meeting. The authority, when given, can last for a maximum period of five years, but the Board proposes that renewal should be sought at each Annual General Meeting. An ordinary resolution, seeking such authority, will be proposed at the forthcoming Annual General Meeting.

Section 561 of the Act requires that an allotment of shares for cash may not be made unless the shares are first offered to existing shareholders on a pre-emptive basis in accordance with the terms of the Act. In accordance with general practice, to ensure that small issues of shares can be made without the necessity of convening a general meeting, the Board proposes that advantage be taken of the provisions of section 571 of the Act not to apply the Act's pre-emptive requirements. Accordingly, a special resolution will be proposed at the forthcoming Annual General Meeting which, if passed, will have the effect of granting the directors the power to allot not more than 5% of the issued ordinary share capital at the date of the Annual General Meeting free of the requirements of section 561 of the Act. No issue of these shares will be made which would effectively alter the control of the Company without the prior approval of the shareholders in general meeting.

Purchase of own shares

The Company did not purchase any of its ordinary shares (2017: nil) during the year. At 31 October 2018, the Company held a total of 1,788,710 1p ordinary shares in treasury (representing 0.6% of the ordinary shares in issue on 31 October 2018).

A special resolution will be proposed at the forthcoming Annual General Meeting to renew the Company's authority to purchase its own shares in the market up to a limit of 10% of its issued ordinary share capital. The maximum and minimum prices will be stated in the resolution at the date of the Annual General Meeting. The directors believe that it is advantageous for the Company to have this flexibility to make market purchases of its own shares. The directors of the Company may consider holding repurchased shares pursuant to the authority conferred by this resolution as treasury shares. This will give the Company the ability to reissue treasury shares quickly and cost effectively, and will provide the Company with additional flexibility in the management of its capital base. Any issues of treasury shares for the purposes of the Company's employee share schemes will be made within the 10% anti-dilution limit set by The Investment Association. The directors will only exercise this authority if they are satisfied that a purchase would result in an increase in expected earnings per share and would be in the interests of shareholders generally.

Substantial shareholdings

At 16 January 2019, the following substantial holdings in the ordinary share capital of the Company had been notified to the Company in accordance with Chapter 5 of the Disclosure and Transparency Rules of the Financial Conduct Authority. It should be noted that these holdings may have changed since the Company was notified; however, notification of any change is not required until the next notifiable threshold is crossed.

Name	% interest
Invesco Limited	8.1
Schroders Plc	7.2
Sterling Strategic Value Fund S.A., Sicav-Raif	5.3
Old Mutual Asset Managers	5.1
FIL Limited	5.1
Thameside MBC re Greater Manchester Pension Fund	5.0
J O Hambro Capital Management Limited	5.0
Jupiter Asset Management Limited	Below 5.0
Majedie Asset Management Limited	4.9
J P Morgan Chase & Co	4.9
Neptune Investment Management Limited	4.8
Prudential Plc	4.8
Investec Asset Management Limited	4.8
Ameriprise Financial, Inc.	4.8
AXA S.A. and its group of companies	4.8
Standard Life Investments Limited	4.6
BT Pension Scheme Trustees Limited as Trustee of the BT Pension Scheme	3.8

Directors' report continued

Employee share schemes and plans

Approach to share ownership

The Group actively encourages its employees to share in the future success of the Group, and therefore operates share-based arrangements to provide incentives and rewards to employees.

The Group operated four share-based incentive plans during the year, as set out below. Further details of awards and vesting are provided in note 28 to the Group financial statements.

The Chemring Group 2008 and 2018 UK Sharesave Plans (collectively the "UK Sharesave Plan")

The UK Sharesave Plan is open to all eligible UK employees. Employees may choose between three and five-year savings periods, at the end of which the employee can choose to exercise the option or seek the return of their savings. A grant of options was made on 30 July 2018.

The Chemring Group Performance Share Plan (the "PSP")

The PSP expired on 22 March 2016 but was previously the primary long-term incentive plan for executive directors and senior employees. Discretionary awards were granted under the PSP over a fixed number of shares by reference to salary, with awards ordinarily vesting, subject to meeting performance criteria, on the third anniversary of the grant date. Awards remain outstanding under the PSP but no further awards can be made under the plan.

The Chemring Group Performance Share Plan 2016 (the "2016 PSP")

The 2016 PSP is the primary long-term incentive plan for executive directors and senior employees. Discretionary awards are granted under the PSP over a fixed number of shares by reference to salary, with awards ordinarily vesting, subject to meeting performance criteria, on the third anniversary of the grant date. Awards were granted under the plan on 19 January 2018 and 26 June 2018.

The Chemring Group Restricted Share Plan (the "RSP")

The RSP provides for the discretionary grant of deferred share awards to selected key employees. Executive directors are not eligible to participate. Awards typically vest on the second or third anniversary of the grant date, subject to meeting continuous service criteria. Awards under the RSP may only be satisfied with market-purchased shares.

Going concern

Details of the conclusions arrived at by the directors in preparing the financial statements on a going concern basis are set out in the corporate governance report on page 61.

Additional information, as required by Listing Rules Requirement 9.8.4

The annual report is required to contain certain information under Listing Rules Requirement 9.8.4. Where this information has not been cross-referenced within the Group financial statements, it can be found in the following sections:

- capitalised interest (see note 13);
- long-term incentive schemes (see directors' remuneration report);
- allocation of equity securities for cash (see note 24);
- contracts of significance (see note 34);
- election of independent directors (see corporate governance report);
- contractual arrangements (see directors' report);
- details of independent directors (see corporate governance report); and
- substantial shareholders (see directors' report).

No profit forecasts are issued by the Group and no directors have waived any current or future emoluments. Other than in relation to ordinary shares held in treasury, no shareholders have waived or agreed to waive dividends.

None of the shareholders is considered to be a Controlling Shareholder (as defined in Listing Rules 6.1.2.A) and the Group complies with the independence provisions of the Listing Rules.

Provision of information to the auditor

Each director at the date of this report confirms that, so far as they are each aware, there is no relevant audit information of which the Company's auditor is unaware, and each director has taken all the steps that he or she ought to have taken as a director to make himself or 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.

Auditor

As detailed in the Audit Committee report, KPMG were appointed as the Group's external auditor during the year, in place of Deloitte. Resolutions will be proposed at the forthcoming Annual General Meeting to reappoint KPMG and to authorise the directors to determine the external auditor's remuneration.

Annual General Meeting

The resolutions to be proposed at the Annual General Meeting to be held on 21 March 2019, together with explanatory notes, appear in the separate Notice of Annual General Meeting sent to all shareholders.

Statement of directors' responsibilities in respect of the annual report and accounts

The directors are responsible for preparing the annual report and the Group and parent company financial statements in accordance with applicable law and regulations.

Company law requires the directors to prepare Group and parent company financial statements for each financial year. Under that law they are required to prepare the Group financial statements in accordance with International Financial Reporting Standards as adopted by the European Union IFRSs as adopted by the EU and applicable law and have elected to prepare the parent company financial statements in accordance with UK accounting standards including FRS 101 *Reduced Disclosure Framework*.

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 parent company and of their profit or loss for that period. In preparing each of the Group and parent company financial statements, the directors are required to:

- select suitable accounting policies and then apply them consistently;
- make judgements and estimates that are reasonable, relevant and reliable;
- for the Group financial statements, state whether they have been prepared in accordance with IFRSs as adopted by the EU;
- for the parent company financial statements, state whether applicable UK accounting standards have been followed;
- assess the Group and parent company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern; and
- use the going concern basis of accounting unless they either intend to liquidate the Group or the parent company or to cease operations, or have no realistic alternative but to do so.

The directors are responsible for keeping adequate accounting records that are sufficient to show and explain the parent company's transactions and disclose with reasonable accuracy at any time the financial position of the parent company and enable them to ensure that its financial statements comply with the Companies Act 2006. They are 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, and have general responsibility for taking such steps as are reasonably open to them to safeguard the assets of the Group and to prevent and detect fraud and other irregularities.

Under applicable law and regulations, the directors are also responsible for preparing a strategic report, directors' report, directors' remuneration report and corporate governance statement that complies with that law and those regulations.

The directors are responsible for the maintenance and integrity of the corporate and financial information included on the company's website. Legislation in the UK governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

Responsibility statement of the directors in respect of the annual financial report

We confirm that to the best of our knowledge:

- the financial statements, prepared in accordance with the applicable set of accounting standards, give a true and fair view of the assets, liabilities, financial position and profit or loss of the company and the undertakings included in the consolidation taken as a whole; and
- the strategic report and directors' report includes a fair review of the development and performance of the business and the position of the issuer and the undertakings included in the consolidation taken as a whole, together with a description of the principal risks and uncertainties that they face.

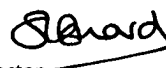
We consider the annual report and accounts, taken as a whole, is fair, balanced and understandable and provides the information necessary for shareholders to assess the Group's position and performance, business model and strategy.

The directors' report and responsibility statement was approved by the Board of directors on 17 January 2019 and is signed on its behalf by:

Michael Ord
Group Chief Executive



Sarah Ellard
Group Legal Director



Corporate governance report

The Board is committed to upholding high standards of corporate governance, protecting and growing shareholder value, and engaging in a fair and transparent manner with all of the Group's stakeholders. The Board takes responsibility for promoting the long-term sustainable success of the Group, and directs its purpose, values and strategy. The Board also provides overall financial and organisational control, and ensures that the Group's businesses have appropriate and effective internal control and risk management systems.

The consultation on the new UK Corporate Governance Code in the early part of the year and its eventual publication in July 2018 inevitably led to corporate governance being high on the Board's agenda during 2018. The new Code is applicable to accounting periods commencing on or after 1 January 2019, which means that the Company will not be required to comply with its new provisions until 1 November 2019, but the Board has already considered and started to address the actions that will need to be taken to achieve compliance in the coming year.

However, corporate governance is not just a matter for the Board and in the latter part of the year we instigated the development of a new Operational Framework, which will sit alongside our Global Code of Business Principles and will provide the requisite structure by which the Group will operate going forward. The Operational Framework, which was formally implemented on 1 January 2019, incorporates a range of both existing and new policies and procedures required to be adopted by our businesses, which will provide an enhanced governance structure to enable us to operate in a safe, consistent and accountable way. An important aspect of this enhanced governance structure will require all businesses to provide an Operational Assurance Statement on a half-yearly basis detailing their compliance with the Operational Framework. This will provide additional assurance to the Board that our internal systems and controls are operating effectively, and will become an important focus of our internal audit activities in the future.

We continued to strengthen our relationship and interactions with the Group's US Board during the year. The US Board is a requirement of our Special Security Agreement ("SSA") with the US Government and includes three independent directors approved by the US Government. The SSA imposes certain restrictions on the degree of control and influence we can exert over our US businesses and it is imperative that we maintain a strong relationship with the US Board, in order to ensure we are fulfilling our own corporate governance requirements. The membership of the US Board was refreshed during the year, and the appointment of a full-time President to oversee the US businesses and who also sits on the Executive Committee is proving very beneficial from both an operational and governance perspective.

We welcomed two new members to the Board during 2018, with the appointment of Michael Ord as Group Chief Executive in July 2018 and the appointment of Stephen King as a new independent non-executive director in December 2018. Details of the appointment processes for both directors are set out later in this report. New Board members bring fresh perspective and diverse experience, and we look forward to their further contribution to the Board as the Group moves forward. We are currently engaged in a search for another non-executive director who will complement the existing skills and experience of the Board and we hope to announce an appointment in the near future.

Compliance statement

In the year under review, the Company was required to apply the main and supporting principles of good governance set out in the UK Corporate Governance Code issued in April 2016 by the Financial Reporting Council (the "Code"). The detailed report below sets out how the Company applied these principles in practice.

The Company was in compliance with the provisions of the Code throughout the year ended 31 October 2018.

Carl-Peter Forster

Chairman
17 January 2019

The Board

Composition of the Board and independence

The Board currently comprises three executive directors and four non-executive directors (including the Chairman). The biographical details of individual directors, including details of their other business commitments, are set out on pages 48 and 49.

The roles of Chairman, Chief Executive and Senior Independent Director are separate and clearly defined, in accordance with the requirements of the Code, with the division of responsibilities set out in writing and agreed by the Board.

The Board considers all of the current non-executive directors to be independent in judgement and character, and considered

Carl-Peter Forster to be independent on his appointment as Chairman. Nigel Young was employed as the Group's Interim Chief Financial Officer for a period of six months from August 2012, prior to his appointment as a non-executive director, but the Board does not consider that this short period of employment impacted his independence, and his contribution to the Board continues to be impartial and objective. Mr Young was appointed as Senior Independent Director in March 2016.

The Board considers that the current balance of executive and non-executive influence on the Board is appropriate for the Company, taking into account its size and status, and serves to ensure that no single director or small group of directors dominate the Board's deliberations and decision making.

Matters reserved for approval of the Board

The Board has a formal schedule of matters reserved to it for consideration and approval, including:

Strategy and management	■ Approval of the Group's five-year plan and annual budget ■ Approval of acquisitions, disposals and major capital expenditure ■ Approval of changes to the Group's capital structure
Financial matters and internal controls	■ Oversight of the Group's systems of financial control and risk management ■ Determination of the nature and extent of the principal risks the Group should take in order to achieve its long-term strategic objectives ■ Approval of financial statements and results announcements ■ Recommendation and declaration of dividends
Corporate governance	■ Approval of the Group's Operational Framework, and associated policies and procedures ■ Receiving reports on the views of the Group's stakeholders ■ Undertaking performance reviews of the Board and its committees

Corporate governance report continued

Board responsibilities

The key responsibilities of the Board members are as follows:

Chairman	■ Responsible for the leadership of the Board and ensuring its overall effectiveness in directing the Group ■ Ensures that the Board is kept properly informed and is consulted in a timely manner on all decisions reserved to it ■ Promotes a culture of openness and debate, and facilitates constructive relations between the executive and non-executive directors ■ Ensures that the training and development needs of directors are identified ■ Ensures that the performance of the Board is evaluated on a regular basis ■ Engages regularly with major shareholders in order to understand their views on the Group's governance and performance against its agreed strategy, and acts as a conduit to ensure that the views of shareholders are well understood by the Board as a whole
Group Chief Executive	■ Responsible for the leadership and day-to-day management of the business ■ Develops strategy for Board approval and ensures that the agreed strategy is implemented successfully ■ Presents the annual budget and five-year plan to the Board for approval and delivers agreed objectives ■ Identifies new business opportunities, and potential acquisitions and disposals ■ Manages the Group's risk profile, including the management of health and safety ■ Ensures that the Board is fully informed of all key matters
Non-executive directors	■ Participate in the development of strategic objectives, provide constructive challenge and monitor the performance of executive management in achieving the agreed objectives ■ Monitor the Group's financial performance ■ Consider the integrity of the Group's financial information, and whether the financial controls and risk management systems are robust and defensible ■ Determine the appropriate remuneration policy for the executive directors ■ Meet periodically with the Group's senior management and visit operations ■ Meet regularly without the executive directors being present
Senior Independent Director	■ Provides support to the Chairman and acts as a trusted sounding board ■ Reviews the Chairman's performance with the other non-executive directors ■ Available to meet shareholders if they have concerns which cannot be resolved through the normal channels
Company Secretary	■ Secretary to the Board and its Committees ■ Under the direction of the Chairman, responsible for maintaining good information flows within the Board and its Committees ■ Develops Board and Committee agendas, and collates and distributes papers ■ Assists with the induction of new directors ■ Keeps directors informed about changes to their duties and responsibilities ■ Provides advice on legal, regulatory and corporate governance matters ■ Available to all directors

Operation of the Board

Board meetings and attendance

The Board meets at least eight times a year. The Board receives reports from the Group Chief Executive, the Group Finance Director, the Group Legal Director and the Group Health & Safety Director as standing agenda items at every scheduled Board meeting. Members of the senior leadership team, representatives of the US Board and external advisers attend Board meetings by invitation, as appropriate.

The following table shows the attendance of directors, who served during the year, at meetings of the Board, the Audit Committee, the Nomination Committee and the Remuneration Committee:

Board member	Board (8 scheduled meetings and 5 ad hoc meetings)	Audit Committee (4 scheduled meetings)	Nomination Committee (3 scheduled meetings)	Remuneration Committee (2 scheduled meetings and 3 ad hoc meetings)
Carl-Peter Forster	13(13)	—	3(3)	5(5)
Andrew Davies	13(13)	4(4)	3(3)	5(5)
Daniel Dayan	13(13)	4(4)	3(3)	5(5)
Sarah Ellard	13(13)	—	—	—
Michael Flowers	8(8)	—	—	—
Michael Ord	6(6)	—	—	—
Andrew Lewis	13(13)	—	—	—
Nigel Young	13(13)	4(4)	2(3)	5(5)

The maximum number of meetings which each director could have attended is shown in brackets.

In addition to the scheduled meetings, five ad hoc Board meetings and three ad hoc Remuneration Committee meetings were convened to deal with matters arising between scheduled meetings.

During the year, the Chairman met regularly with the non-executive directors without the executives being present.

Corporate governance report continued

Board activity throughout the year

In addition to its routine scheduled business, the Board also undertook the following activities during the year:

November 2017

- Review of updates to the Group strategy
- Consideration of the Group's health and safety plan
- Consideration of potential acquisition opportunity
- Review of bid defence strategy

March 2018

- Review of Group tax strategy
- Appointment of new external auditor

July 2018

- Board visit to Chemring Energetics UK
- Approval of updated Group tax strategy
- Review of proposed product development
- Consideration of the new UK Corporate Governance Code

December 2017

- Training on the Criminal Finances Act 2017 and the General Data Protection Regulation
- Review of Board performance evaluation

April 2018

- Appointment of new Group Chief Executive
- Board visit to Chemring Sensors & Electronic Systems
- Joint meeting with the US Board
- Presentations on the US Programs of Record and Kilgore capital investment plans
- Review of potential acquisition opportunities

August 2018

- Review of incident at Chemring Countermeasures UK

January 2018

- Report from the Audit Committee
- Approval of preliminary announcement and annual results
- Briefing on the proposed new UK Corporate Governance Code

June 2018

- Board visit to Chemring Countermeasures UK
- Approval of interim results
- Consideration of updated Group strategy and five-year plan
- Review of the refinancing strategy
- Review of organisational development and succession planning

September 2018

- Initial strategic review of Energetics business
- Approval of 2019 budget

Board effectiveness

Appointments to the Board

External search consultancies are generally appointed to assist with the recruitment of new directors.

The Zygos Partnership (now part of Russell Reynolds Associates) were appointed during the year to assist with the search for a new Group Chief Executive following Michael Flowers' retirement. A brief was prepared for The Zygos Partnership by the Nomination Committee, reflecting the skills and experience considered necessary for the successful appointee to lead the Group through the next stage of its development. The Nomination Committee interviewed a selection of candidates, following which Michael Ord was identified as the preferred candidate and was invited to meet the other Board members. Mr Ord was appointed to the Board on 1 June 2018 and took up the Group Chief Executive position on 1 July 2018.

Russell Reynolds Associates were also engaged to undertake the search for a new non-executive director, following the announcement by Daniel Dayan in August 2018 that he would be stepping down from the Board. The Nomination Committee considered and met with a number of potential candidates, following which three short-listed candidates were invited to meet all other members of the Board. Stephen King was appointed as a new non-executive director on 1 December 2018 as a result of this process.

Russell Reynolds Associates are currently engaged in the search for an additional non-executive director but have no other relationship with the Group.

Diversity

The Board supports the principles set out in Lord Davies' Review into Women on Boards published in February 2011, and the Board also recognises the importance of promoting diversity across the Group. The Board currently includes one female member, and remains committed to a minimum target of at least 25% female representation on the Board, amongst senior management and across the Group in general. In this regard, the Board is focusing on the requirement for increased diversity on the Board in its current search for a new non-executive director for the Group.

Re-election of directors

In accordance with the Company's Articles of Association, all directors are required to submit themselves for re-election at each Annual General Meeting.

The papers accompanying the Notice of Annual General Meeting include a statement from the Chairman confirming that the performance of each non-executive director seeking re-election at the meeting continues to be effective and that each director continues to demonstrate commitment to their role.

Induction

An internal induction programme on the Group's operations, and its strategic and business plans, is provided for newly-appointed directors. Directors are invited to meet key members of the senior management team at the earliest opportunity, and site visits are arranged to facilitate their understanding of the Group's operations.

The Company Secretary also provides detailed information on the operation of the Board and its committees, directors' legal duties, and responsibilities on appointment.

Training and development

The Company meets the cost of appropriate external training for directors, the requirement for which is kept under review by the Chairman.

Directors are continually updated on the Group's businesses and the matters affecting the markets in which they operate. The Company Secretary updates the Board on a regular basis with regards to regulatory changes affecting the directors and the Group's operations generally, and briefings are provided by the Group's advisers on key developments in areas such as financial reporting and executive remuneration practice.

Independent advice

All directors are entitled to take independent professional advice in furtherance of their duties at the Company's expense, should the need arise. No director had reason to seek such advice during the year.

Conflicts of interest

All directors have a duty under the Companies Act 2006 (the "2006 Act") to avoid a situation in which he or she has or can have a direct or indirect interest that conflicts or may possibly conflict with the interests of the Company. The Company's Articles of Association include provisions for dealing with directors' conflicts of interest in accordance with the 2006 Act.

The Company has procedures in place to deal with situations where directors may have any such conflicts, which require the Board to:

- consider each conflict situation separately on its particular facts;
- consider the conflict situation in conjunction with the rest of their duties under the 2006 Act;
- keep records and Board minutes as to authorisations granted by directors and the scope of any approvals given; and
- regularly review conflict authorisation.

Performance evaluation

The Board engaged in an externally-facilitated review of its performance in late 2017, utilising the services of Lintstock Limited. The evaluation considered topics under the following headings:

- Board composition and expertise;
- Board dynamics;
- management and focus of meetings;
- Board support;
- strategic and operational oversight;
- risk management and internal control;
- succession planning and people management; and
- priorities for change.

The evaluation generated a number of recommendations, which are being addressed on an ongoing basis.

The Chairman and non-executive directors also reviewed the individual performance of the executive directors as part of the annual remuneration review.

Board committees

The terms of reference of the Audit Committee, the Nomination Committee and the Remuneration Committee are published on the Company's website (www.chemring.co.uk/investors/corporate-governance) and copies are available on request from the Company Secretary.

Audit Committee

The Audit Committee comprises three independent non-executive directors. At the date of this report, the Audit Committee members were Nigel Young (Chairman), Andrew Davies and Stephen King.

Nigel Young acted as Interim Chief Financial Officer for the Group between August 2012 and January 2013, and was formerly the finance director of several public companies. The remaining members of the Committee have previously served as executive directors of substantial companies, and have extensive business and financial management experience. In addition, Mr King serves as Chair of the Audit Committee at another public company. The Board therefore considers that each member of the Audit Committee has the requisite recent and relevant financial experience to satisfy the requirements of the Code.

The Audit Committee convened for four scheduled meetings during the year.

The Audit Committee report is set out on pages 62 to 65.

Corporate governance report continued

Board committees continued

Remuneration Committee

The Remuneration Committee comprises four independent non-executive directors. At the date of this report, the Remuneration Committee members were Andrew Davies (Chairman), Carl-Peter Forster, Stephen King and Nigel Young.

Two scheduled Remuneration Committee meetings were held during the year, together with three ad hoc meetings. Further details on the Remuneration Committee and its activities, and the Company's policies on directors' remuneration are set out in the directors' remuneration report on pages 66 to 91.

Nomination Committee

The Nomination Committee comprises four independent non-executive directors. At the date of this report, the Nomination Committee members were Carl-Peter Forster (Chairman), Andrew Davies, Stephen King and Nigel Young. Mr Forster is Chairman of the Nomination Committee but, in accordance with the Committee's terms of reference, is not permitted to chair meetings when the Committee is dealing with the appointment of his successor.

The Nomination Committee held three scheduled meetings during the year.

Executive Committee

The Executive Committee is responsible for the executive day-to-day running of the Group, submission to the Board of strategic plans and budgets for the Group's operations, and monitoring the trading performance of the Group as a whole.

The current members of the Executive Committee are:

- Michael Ord (Group Chief Executive)
- Stuart Cameron (Managing Director – Chemring Energetics)
- David Cole (Managing Director – Roke)
- Bill Currer (President – CHG Group, Inc.)
- Sarah Ellard (Group Legal Director & Company Secretary)
- Andy Hogben (Managing Director – Chemring Countermeasures UK)
- Ian Johns (Group Manufacturing Director)
- Andrew Lewis (Group Finance Director)
- Clancy Murphy (Chief People Officer)
- Rupert Pittman (Group Director of Corporate Affairs)
- Mark Taylor (Group Health & Safety Director)

Michael Ord chairs the Executive Committee, which meets monthly.

Key responsibilities delegated to the Executive Committee by the Board

- Implementation of the Group's strategies and policies as determined by the Board.
- Monitoring of operational and financial results against budget.
- Allocation of resources across the Group within the overall plan approved by the Board.
- Approval of R&D and capital expenditure within limits imposed by the Board.
- Developing and implementing risk management systems.

Relations with shareholders and other providers of capital Shareholder engagement

The Company maintains an active dialogue with institutional shareholders through regular briefing meetings and formal presentations following the release of interim and annual results. Meetings are usually attended by the Group Chief Executive and the Group Finance Director, although the Chairman and the Senior Independent Director also meet with shareholders to discuss specific matters. The other non-executive directors are also offered the opportunity to meet with major shareholders and attend meetings if so requested by shareholders.

Communication with private investors is achieved largely through the medium of the interim results statement and the annual report.

The Company's website (www.chemring.co.uk) provides financial, business and governance information on the Group.

The directors are provided with reports and other written briefings from the Company's brokers, and are regularly informed by the Company Secretary about changes to significant shareholdings.

It is the Company's policy that all directors should attend and make themselves available to take questions from shareholders or address any concerns at the Annual General Meeting. At other times of the year, the directors can be contacted via the Company's head office.

Annual General Meeting

All substantial issues, including the adoption of the annual report and financial statements, are proposed on separate resolutions at the Annual General Meeting. In line with best practice guidelines, voting at the Annual General Meeting is conducted by way of a poll. This allows all votes to be counted, not just those of shareholders who attend the meeting. Poll results are published on the Company's website as soon as practicable following the conclusion of the meeting. The Notice of the Annual General Meeting is sent to shareholders at least twenty working days before the meeting.

Engagement with other providers of capital

In addition to issuing shares, the Company also finances its activities through external bank loans and by the issue of loan notes. The Board recognises the importance of maintaining good relationships with the providers of this capital, and the Group Chief Executive and the Group Finance Director brief the banks and note holders on a regular basis on the Company and its performance. The Board receives regular reports on any issues impacting these relationships.

Accountability

Financial and business reporting

The statement of directors' responsibilities in respect of the financial statements and accounting records maintained by the Company is set out on page 53.

Having taken all the matters considered by the Board and brought to the attention of the Board during the year into account, the Board is satisfied that the annual report and accounts for the year ended 31 October 2018, taken as a whole, is fair, balanced and understandable. Furthermore, the Board believes that the disclosures set out on pages 8 to 47 provide the information necessary to assess the Company's performance, business model and strategy.

Risk management and internal control

The Board is responsible for determining the nature and extent of the risks that it is willing to take to achieve its strategic objectives. The Board is also responsible for ensuring that the Group's risk management and internal control systems are effective across the businesses, and that appropriate risk mitigation plans are in place.

The Board undertakes an annual review of the effectiveness of the Group's systems of internal control, including financial, operational and compliance controls, and risk management systems. Further details of the review undertaken during the financial year ended 31 October 2018 are set out on page 33.

Going concern

The Group's business activities, key performance indicators, and principal risks and uncertainties are set out within the strategic report on pages 8 to 47. As part of a regular assessment of the Group's working capital and financing position, the directors have prepared a detailed bottom-up two-year trading budget and cash flow forecast for the period through to October 2020, being at least twelve months after the date of approval of the financial statements. This is in addition to the Group's longer-term strategic planning process. In assessing the forecast, the directors have considered:

- trading risks presented by economic conditions in the defence market, particularly in relation to government budgets and spends;
- the timing of delivery of key contracts;
- the impact of macroeconomic factors, particularly interest rates and foreign exchange rates;
- the status of the Group's existing financial arrangements and associated covenant requirements; and
- the availability of mitigating actions should business activities fall behind current expectations including the deferral of discretionary overheads and restricting cash flows.

Additional detailed sensitivity analysis has been performed on the forecasts to consider the impact of severe, but plausible, reasonable worse case scenarios on the covenant requirements. These scenarios, which sensitised the forecasts for specific identified risks, modelled the reduction in anticipated levels of underlying EBITDA and the associated increase in net debt. These scenarios included significant delays to major contracts and new product launches. These sensitised scenarios show headroom on all covenant test dates for the foreseeable future.

The directors have acknowledged the latest guidance on 'going concern'. They have made appropriate enquiries and taken into account factors which are detailed in the strategic report on pages 8 to 47. As a consequence, the directors believe that the Company is well placed to manage its risks.

The directors, having considered the forecasts, the risks, and associated mitigating actions, have a reasonable expectation that adequate financial resources will continue to be available for the foreseeable future.

Thus, they continue to support the going concern basis in preparing the financial statements.

Long-term viability statement

The directors have assessed the Group's viability over a three-year period to October 2021 based on the above assessment, combined with the Group's strategic planning process, which gives greater certainty over the forecasting assumptions used. Based on this assessment, the directors have a reasonable expectation that the Group will be able to continue in operation and meet all its liabilities as they fall due up to October 2021.

In considering our viability statements we have considered the principal risks and uncertainties discussed in the strategic report and assessed the impact.

Sensitivity analyses were run to model the financial and operational impact of plausible downside scenarios of these risk events occurring individually or in combination. These included the impacts of a further deterioration in the macroeconomic environment, underperformance in executing the Group's strategy, failure to derive targeted benefits from the Group's Operational Excellence Programme, material movements in foreign exchange rates and a change in regulations impacting the Group's internal financing structure. Consideration was also given to the plausibility of the occurrence of other individual events that in their own right could have a material impact on the Group's viability.

Based on the consolidated financial impact of the sensitivity analyses and associated mitigating internal controls and risk management actions that are either now in place or could be implemented, the Board has been able to conclude that the Group will be able to maintain sufficient bank facilities to meet its funding needs over the three-year period.

Insurance

The Company maintains directors' and officers' liability insurance in respect of legal action against its directors and officers.

Audit Committee report

Annual statement by the Chairman of the Audit Committee

Nigel Young

Chairman of the Audit Committee

Key responsibilities of the Audit Committee

- Making recommendations on the appointment, reappointment and remuneration of the internal and external auditor
- Ensuring that an appropriate relationship between the Group and the external auditor is maintained, and overseeing the provision of non-audit services
- Reviewing and monitoring the external auditor's independence and objectivity
- Reviewing the effectiveness of the Group's internal controls and risk management systems
- Considering the effectiveness of the Group's internal audit function and monitoring internal audit activities
- Reviewing arrangements by which the Group's employees may confidentially raise concerns about possible improprieties
- Providing guidance to the Board in its consideration of whether the annual report and accounts are fair, balanced and understandable

The Audit Committee continues to play a very important role in the governance of the Group's financial affairs, both through monitoring the integrity of the Group's financial reporting and reviewing material financial reporting judgements.

It was a year of significant activity for the Audit Committee, with changes to both our external and our internal auditors. I am pleased to report that KPMG and PwC are now fully engaged in their new roles as external and internal auditors respectively and their fresh perspective is proving very beneficial. Further details of both appointment processes are set out later in the report.

The Committee also reviewed several other key matters during the year:

The enactment of The US Tax Cuts and Jobs Act 2017 (the "TCJA") in December 2017 was of significance to the Group, given its substantial US operations. The TCJA impacted the Group in two aspects, as a result of the reduction in the main rate of US federal corporate income tax and the introduction of restrictions on the future availability of interest deductions, both of which necessitated a partial write-off of our deferred tax asset. The Committee initially reviewed the impact of the TCJA at the half year and again at the year end.

The Committee reviewed the revenue recognition policies and procedures ensuring they remained appropriate and that the Group's internal controls were operating effectively in this area.

A number of impairments have been recognised in the 2018 financial statements in respect of the goodwill associated with certain businesses and the related acquired intangibles. In addition, following the Board's strategic decision to exit the commodity Energetics businesses, the accounting treatment in respect of treating those businesses as discontinued and held for sale was considered, along with their carrying value.

The Committee considered the appropriateness and sufficiency of the use of Alternative Performance Measures and those items classified as non-underlying during the preparation of the 2018 results.

Further details of the Committee's activities during the year are set out on the following pages.

Nigel Young

Chairman of the Audit Committee
17 January 2019

Operation of the Audit Committee

The Audit Committee monitors the integrity of the Group's financial statements and the effectiveness of the internal and external audit processes.

The Committee is authorised to seek any information it requires from any employee of the Group in order to perform its duties, and to obtain any outside legal or other professional advice it requires at the Company's expense.

The Committee reviews its terms of reference and its effectiveness annually, and recommends to the Board any changes required as the result of the review.

Meetings

Meetings of the Committee are attended, at the invitation of the Chairman, by the external auditor, the Chairman of the Board, the Group Chief Executive, the Group Finance Director, the internal auditors and representatives from the Group finance function. The Committee meets with the external and internal auditors on a regular basis without the executive directors being present. The Company Secretary acts as secretary to the Committee and minutes of meetings are circulated to all Board members.

A verbal report on key issues discussed by the Committee is provided to the Board after every meeting.

The Committee plans to meet four times in the current financial year.

The Chairman of the Committee meets regularly with the Group Finance Director, the external audit lead partner and the internal audit lead partner outside of scheduled meetings.

Principal activities of the Audit Committee during the year

January 2018

- Review of the status of the Group's significant research and development projects, and associated capitalised development costs
- Consideration of the auditor's report on the results of the full year audit
- Review of the Group's preliminary announcement and annual results for the year ended 31 October 2017, including the Group's going concern status and the viability statement
- Initial consideration of the potential impact of the TCJA
- Consideration of KPMG's internal audit report

March 2018

- Selection and appointment of new external auditor
- Approval of the interim review and full year audit plans
- Review of future internal audit requirements

June 2018

- Updated status review of the Group's significant research and development projects, and associated capitalised development costs
- Review of the Group's half year results, including the going concern status
- Consideration of the auditor's report on the results of the interim review
- Selection and appointment of new internal auditors
- Approval of PwC's internal audit plan for 2018

September 2018

- Annual review of the Committee's terms of reference
- Review of audit services for the year ended 31 October 2018
- Annual review of policy on the provision of non-audit services by the external auditor
- Consideration of PwC's internal audit report

Audit Committee report continued

Significant issues considered by the Audit Committee in relation to the financial statements

Revenue recognition policies and procedures	The Committee reviews the Group's revenue recognition policies and procedures on an ongoing basis, to ensure that they remain appropriate and that the Group's internal controls are operating effectively in this area. The Committee considered the key assumptions underlying the accounting treatment of any material contract with a customer where judgement on revenue recognition was required.
Impairment of goodwill and other intangible assets	The Committee considered the recognised impairment losses in respect of Chemring Ordnance, Chemring Defence UK, Chemring EOD and Leafield Engineering and management's review of the carrying value of goodwill and intangible assets held on the Group's balance sheet as at 30 April 2018 and 31 October 2018, against the latest forecasts for each of the businesses concerned and the future strategic plan for the Group.
Capitalised development costs	The Committee continued to monitor the level of development costs capitalised during the year and the periods over which such costs are to be amortised. Detailed reviews of the Group's ten most significant research and development projects, and their associated capitalised development costs, were undertaken by the Committee in January 2018 and June 2018. The Committee reviewed the impairment charges in respect of certain capitalised development charges reflected in the 2018 financial statements.
Deferred tax assets on tax losses and US interest deductions	The Committee considered the management's review of the recoverability of US interest deductions and tax losses carried forward following the enactment of the TCJA. A review of management's projections of future taxable profits that will be available to utilise tax losses and interest carried forward, and the assumptions made, was undertaken by the Committee, and the appropriate adjustment to be made to the value of the Group's deferred tax asset was considered accordingly.
Going concern and long-term viability	In order to satisfy itself that the Group has sufficient financial resources to enable it to continue trading for the foreseeable future, the Committee regularly reviews the adequacy of the Group's financing facilities against future funding requirements and working capital projections. Based on its review of the Group's forecasts and discussions with the external auditor, the Committee recommended to the Board the adoption of the going concern basis for the preparation of both the 2017 financial statements and the 2018 interim results. The Group was also required to make a statement on its long-term viability in the 2017 financial statements. The Committee considered the period over which the Group's viability would be assessed and having concluded that a three-year period was appropriate, the Committee undertook a review of the analysis and projections which supported the viability assessment prior to submission to the Board.

External audit

The Audit Committee is responsible for making recommendations to the Board on the appointment, reappointment and removal of the Company's external auditor. The Committee also undertakes an annual assessment of the auditor's independence and objectivity, taking into account relevant professional and regulatory requirements and the relationship with the auditor as a whole, including the provision of any non-audit services.

Audit effectiveness and tendering

As indicated in last year's report, the Committee commenced a tender process for the appointment of a new external auditor following the release of the 2017 results in January 2018. A tender review committee was established, including the Chairman of the Committee, the Group Finance Director and key members of the head office finance function, to establish and oversee the initial stages of the tender process and to brief the firms involved on the Group's requirements. Five firms were initially invited to tender, two of whom subsequently withdrew from the tender process. The three remaining firms were invited to present their detailed proposals to the Committee in March 2018, following which the Committee recommended to the Board the appointment

of KPMG as the new external auditor. KPMG proceeded to undertake the half year review of the Group.

The Committee assesses the effectiveness of the external auditor on an ongoing basis, with particular reference to:

- the arrangements for ensuring the external auditor's independence and objectivity;
- the external auditor's fulfilment of the agreed audit plan and any variations from the plan;
- the robustness and perceptiveness of the auditor in their handling of the key accounting and audit judgements;
- the content of the external auditor's reports and internal control recommendations; and
- the feedback received on the conduct of the external audits from key people involved in the audit process.

There are no contractual or similar obligations to restrict the choice of external auditor.

Auditor independence

The Committee keeps under review the level of any non-audit services which are provided by the external auditor, to ensure that this does not impair their independence and objectivity.

The Committee has adopted a policy which states that the external auditor should not be appointed to provide any non-audit services to the Group, unless the Committee agrees that their appointment would be in the best interests of the Company's shareholders in particular circumstances and would not create any direct conflict with their role as external auditor. In approving any such appointment, the Committee is also required to consider:

- whether the provision of the proposed services might compromise the auditor's independence or objectivity;
- whether the non-audit services will have a direct or material effect on the Group's audited financial statements;
- whether the skills and experience of the external auditor make it the most suitable supplier of the non-audit services; and
- the level of fees proposed for the non-audit services relative to the audit fees.

The external auditor is required to provide the Committee with a written confirmation of independence for all duly-approved engagements for non-audit services.

The policy adopted by the Committee expressly prohibits the provision of certain non-audit services by the external auditor, in line with regulatory requirements and UK ethical guidance.

Deloitte did not provide any additional services to the Group during the year under review. Prior to appointment as external auditor, KPMG provided internal audit services to the Group but has provided no other additional services since 1 November 2017.

Details of the amounts paid to the external auditor during the year for audit are set out in note 4 to the Group financial statements.

The Committee, in conjunction with the Group Finance Director, ensures that the Group maintains relationships with a sufficient choice of appropriately-qualified alternative audit firms for the provision of non-audit services.

Internal audit

The Audit Committee is responsible for reviewing the work undertaken by the Group's internal auditors, assessing the adequacy of the internal audit resource, and recommending changes for increasing the scope of the internal audit activities.

The Group's internal audit programme incorporates an annual rolling review of all businesses, and focuses on both financial and non-financial controls and procedures. The Committee approves the annual internal audit plan and receives regular reports from the internal auditors.

Prior to appointment as external auditor in March 2018, KPMG was appointed by the Committee to provide internal audit services for the Group. The Committee undertook a tender process for the appointment of new internal auditors in April 2018 and appointed PwC as a result.

The PwC internal audit programme covers financial and commercial processes, governance issues, and key corporate risks. The internal audit plan for 2018 included specific focus on:

- IT and cyber-security risk management and controls;
- adherence to the Group's Bribery Act Compliance Manual; and
- the key financial and operating controls at each business.

PwC presents its internal audit reports to the Committee on a quarterly basis. The management of each business is responsible for implementing the recommendations made by the internal auditors, and the Committee reviews progress on a regular basis.

Having undertaken a review of the effectiveness of PwC in fulfilling the internal audit function, the Committee is satisfied that the quality, experience and expertise of PwC meets the Company's requirements, and PwC has therefore been reappointed to provide internal audit services for the Group in 2019. In 2019 the work programme for internal audit will continue on a site rotation basis, where every site will be covered on a two or three-year rotational basis, and PwC will create bespoke risk-based testing plans for each site.

Directors' remuneration report

Annual statement by the Chairman of the Remuneration Committee

Andrew Davies

Chairman of the Remuneration Committee

Dear Shareholder

This year's directors' remuneration report covers what has been a busy year for the Remuneration Committee as well as a challenging year for the business. The tragic incident at the Chemring Countermeasures UK facility in August fatally injured one of our employees and badly injured another. We continue to work with the regulator on the investigation into the incident.

Policy review

The current directors' remuneration policy was approved at the 2016 Annual General Meeting and is therefore due to expire at the 2019 Annual General Meeting. In preparation for approval of a new policy, the Remuneration Committee spent time during 2018 considering the approach to remuneration that would best support the business in the next stage of its development.

The updated UK Corporate Governance Code and recent investor and voting guidance was considered as part of this overall review process. In particular, the Committee considered how the directors' remuneration policy currently fits with the Group's overall strategy and culture, as well as the associated risks with its operation. Our aim has always been to ensure transparency in our approach, with simple to understand incentives clearly aligned to the delivery of the strategy and which emphasise the long-term sustainability of the business. This continued to be our focus during a thorough review process, which incorporated internal and external engagement with the Group's largest investors and the voting guidance services. Taking into account all these factors, as well as the current business performance and the recent appointment of Michael Ord as Chief Executive, the Remuneration Committee believes that material changes to the policy are not currently required. The existing policy is now considered to be embedded into the business, is well understood by participants, is generally aligned with our approach for other employees and is fulfilling its purpose and supports our values as a business. Therefore, the directors' remuneration policy which will be put forward for shareholder approval at the 2019 Annual General Meeting is

essentially the same as the current policy but with some updates to keep pace with the current views of shareholders and to align to the new UK Corporate Governance Code, although the Code does not yet apply to the Group.

The key policy changes are as follows:

- **Pensions** – the pension allowance for new joiners will be reduced to 10% of salary (20% under the current policy) which is directionally more in line with the pension allowance for all other UK employees. The range of contributions in the UK is currently 4% to 20% of salary and Michael Ord was appointed with a pension allowance of 10% of salary.
- **Annual bonus** – no change aside from strengthening and broadening the malus and clawback provisions.
- **Performance Share Plan ("PSP")** – no changes to award levels, but we are introducing a two-year holding period following the three-year performance period which will continue to apply post cessation of employment.
- **Share ownership guidelines** – increased to 200% of salary for all executive directors (currently 100% of salary) and the retention policy remains unchanged. The treatment of good leavers under the annual bonus deferral and the operation of the new holding period attached to PSP awards maintain a link between the Group's performance even after employment has ceased.

We will also be making changes to the administration and operation of our incentive plans to ensure malus and clawback provisions are consistently applied across all plans and will cover events which are deemed to cause serious reputational damage to the Group. Also, the default treatment for good leavers in respect of the PSP will be amended so that any time pro-rating is applied, awards will be rounded up to the next complete month (rather than the next complete financial year as is currently the case).

Major shareholders with whom we spoke during the consultation process were generally supportive of the developments in respect of the directors' remuneration policy.

UK Corporate Governance Code and Regulations update

The Remuneration Committee welcomed the revised UK Corporate Governance Code which was published by the Financial Reporting Council during 2018. While the Code will not formally apply to the Company until the financial year commencing 1 November 2019, the Remuneration Committee has adopted a number of the provisions early on a voluntary basis. These include the addition of a two-year holding period in addition to the three-year performance period for the PSP, the strengthening of malus and clawback provisions, and the phased alignment of pensions with the wider workforce. The Committee already has responsibility for setting remuneration for senior management and is informed of pay-related matters throughout the Group. During this year, we will be looking at other aspects of the Code and the new disclosure regulations. We shall in particular look at how we can build upon our existing engagement mechanisms to help develop the interaction with our workforce and the Board, and how this can be used by the Remuneration Committee.

The new reporting regulations do not apply to the Group until the next financial year. We have, however, shown the impact of share price growth on potential pay outcomes on page 73. The Committee considered publishing a CEO pay ratio for 2018 but given the change in incumbents during the year it is unlikely to provide meaningful analysis in isolation. We will therefore take time during the current financial year to determine the best way to calculate and present this information so that it can be useful to the reader. We plan to publish for the year ending 31 October 2019, which will still be earlier than required under the regulations.

The Remuneration Committee's activities during the year

The Committee was heavily involved in the recruitment of the new Chief Executive, Michael Ord, and in determining the arrangements for Michael Flowers, following his retirement as Chief Executive. Mr Flowers' terms are in line with our approved directors' remuneration policy. In line with investors' expectations, the Committee applied time pro-rating and the performance criteria continue in force. The Committee exercised its discretion to adapt the application of the time pro-rating criteria to Mr Flowers' outstanding 2017 PSP award and to ensure that any outstanding shares awarded in 2018 would be forfeited. This took account of his service to the Group which amounted to two-thirds of the performance period in respect of the 2017 award. It was intended to be effectively value-neutral for Mr Flowers, although the vesting outcome remains entirely dependent on the performance of the Company against the performance conditions for the award. The details of Mr Flowers' retirement terms are set out on page 86 and are as already disclosed on 1 May 2018.

As noted at the time of his appointment, Mr Ord was granted a PSP award of 200% of salary on joining the Group. This award was in line with our recruitment policy and was, in part, to compensate for remuneration he forfeited from his previous employer. The Committee believed that this one-off enhancement (of 50% of salary) was the most effective way to ensure the timely appointment of the talented new Chief Executive and to provide some compensation for forfeited remuneration on a performance-linked and long-term basis. The PSP award made to Mr Ord is subject to a two-year holding period post-vesting, in line with the proposed new policy. The full details of the awards to the executive directors granted during the year are set out on pages 81 and 82.

The Committee itself was refreshed during the year, with Daniel Dayan stepping down as Chairman of the Remuneration Committee and my appointment as Chairman in August 2018. I want to thank Daniel for his leadership of the Committee over the last two years.

Performance outcomes

Following the post-incident closure of the Chemring Countermeasures UK facility, the Group failed to meet its financial targets for the year.

- The earnings per share ("EPS") and operating cash targets within the annual bonus plan for 2018 were not achieved, and hence no bonus is payable to the executive directors in respect of either financial performance or personal objectives.
- The PSP awards granted to the executive directors who were in post on 25 January 2016 were subject to performance conditions based on two measures – EPS and total shareholder return ("TSR"). The performance conditions were not met and the awards will lapse on 25 January 2019.

The Committee did not apply any discretion when determining the outcomes.

Implementation for 2018/19

The Committee proposes a very minor change to the implementation of the remuneration policy for the 2019 financial year, namely a small alteration to the weightings of annual bonus performance measures so 40% is based on EPS, 40% on operating cash and 20% on personal objectives (2018 financial year: 37.5%:37.5%:25% weightings). The Committee had considered further rebalancing of measures in the PSP, but following shareholder feedback and based on our business strategy following the appointment of our new Chief Executive, we decided against any changes to the mix of measures at this stage. With regards to the EPS performance condition, the Committee has decided to maintain the growth range of 5% to 10% a year, which is in line with the business plan and brokers' forecasts. The Committee will, however, be making an adjustment to the reported underlying EPS for 2018 to set an adjusted baseline EPS for 2018 which reflects the estimated EPS which would have been achieved by the Group had the August incident not occurred. This means that the base year EPS for the 2019 PSP awards will be 11.3p instead of the reported 8.9p. We have also made some minor changes to the TSR comparator group. For completeness, there are no intended changes to other elements of the policy.

Over the coming year the Committee will be focused on the effective implementation of the new directors' remuneration policy, and will undertake further work to embed the new Code into the operation of the Committee and the Board.

Conclusion

I hope you will find this report helpful and informative and look forward to receiving your support for the two remuneration-related resolutions to be tabled at our forthcoming Annual General Meeting.

Please do not hesitate to contact me on executive directors' remuneration matters via Sarah Ellard, Group Legal Director & Company Secretary at sarahe@chemring.co.uk.

Andrew Davies

Chairman of the Remuneration Committee
17 January 2019

Directors' remuneration report continued

Part A – remuneration policy

This report sets out the information required by Part 4 of Schedule 8 to the Large and Medium-Sized Companies and Groups (Accounts and Reports) Regulations 2008 (as amended) (the "Regulations"). The report also satisfies the relevant requirements of the Listing Rules of the Financial Conduct Authority, and describes how the Board has applied the principles and complied with the provisions relating to directors' remuneration in the UK Corporate Governance Code.

Part A of this report represents the directors' remuneration policy. Part B constitutes the implementation sections of the report (the "annual report on remuneration"). The auditors have reported on certain sections of Part B and stated whether, in their opinion, those parts have been properly prepared in accordance with the Companies Act 2006. Those sections of Part B subject to audit are clearly indicated.

The Remuneration Committee has been established by the Board and is responsible for the remuneration of the executive directors, the Chairman and for the leadership team at the next level. The Committee's terms of reference are available in full on the Company's website or from the Company Secretary on request.

In determining remuneration for the executive directors, the Remuneration Committee seeks to maintain a competitive package of rewards required to promote the long-term success of the Company, without (i) being excessive by reference to market rates across comparator companies and (ii) either encouraging or rewarding inappropriate risk-taking. Performance-related elements should be transparent, stretching and rigorously applied, form a significant proportion of the total remuneration package of each executive director, and align the interests of executives with those of shareholders, by ensuring that a significant proportion of remuneration is performance-related and delivered in shares. Remuneration is set in the context of the core values of the business and aim to be aligned with our culture.

The table below summarises the Committee's future policy on the remuneration of executive directors which, if approved by shareholders at the forthcoming Annual General Meeting on 21 March 2019, will replace the existing policy for which shareholder approval was obtained at the 2016 Annual General Meeting, and will become binding immediately thereafter. The material differences between the existing and proposed new policy (which has also been designed with due account taken of the UK Corporate Governance Code) are explained in the statement by the Committee Chairman and in the table below. It is currently intended that the policy will remain valid until the 2022 Annual General Meeting.

Further details of the full policy are set out on pages 70 to 75.

Element	Purpose and link to strategy
Salary	■ Reflects the performance of the individual, their skills and experience over time, and the responsibilities of the role ■ Provides an appropriate level of basic fixed income, avoiding excessive risk arising from over-reliance on variable income
Bonus	■ Incentivises annual delivery of financial, strategic and personal goals ■ Maximum bonus only payable for achieving demanding targets ■ Delivery of a proportion of bonus in deferred shares plus the ability to receive dividend equivalents provides alignment with shareholders' interests and assists with retention
Long-term incentive plan (performance share plan – "PSP")	■ Incentivises executives to achieve targets aligned to the Group's main strategic objectives of delivering sustainable growth and shareholder returns ■ Delivery of awards in shares plus the ability to receive dividend equivalents helps align executives' rewards with shareholders' interests

Operation

- Normally reviewed annually with effect from 1 January
- Benchmarked periodically against companies with similar characteristics and companies within the same sector
- Salaries take account of complexity of the role, market competitiveness, Group performance and the increases awarded to the wider workforce

Maximum

- Salary increases will normally be in line with those received by the wider workforce
- More significant increases may be awarded at the discretion of the Committee, for example where there is a change in responsibilities, to reflect individual development and performance in the role

Performance assessment

- None, although overall individual and company performance is a factor considered when setting and reviewing salaries

- Paid in cash, with up to 40% deferred as a conditional award of deferred shares
- Vesting of deferred shares is subject to continued employment (save in "good leaver" scenarios) at the end of three years from the award of the bonus
- The payment of any earned bonus remains ultimately at the discretion of the Committee
- Non-pensionable
- Executives are entitled to receive, on vesting of deferred share awards, the value of dividend payments that would otherwise have been paid on the deferred shares during the deferral period

- Chief Executive – 125% of salary
- Other executive directors – 100% of salary

- Mix of Group financial and non-financial objectives; financial objectives will determine the majority of the award and will typically include a measure of profitability and cash flow, although the Committee has discretion to select other metrics
- Non-financial objectives will be measurable and linked to goals that are consistent with the Group's longer-term goals
- Payment of the non-financial objectives element will be subject to an underpin based on the Committee's assessment of underlying business performance, including *inter alia* levels of profitability and cash flow, as well as health and safety performance
- Performance below the threshold for each financial target results in zero payment in respect of that element. Payment rises from 0% to 100% of the maximum opportunity for levels of performance between threshold and maximum with 50% of the maximum normally payable for on-target performance
- Includes a malus and clawback mechanism⁸

- Annual grants of shares, which vest subject to the Group's performance measured over at least three years
- Any shares vesting must be held by the executives for a further period of two years
- Executives are entitled to receive the value of dividend payments that would otherwise have been paid on vested awards
- All awards are subject to the discretions given to the Committee in the plan rules during the vesting period

- Normally 150% of base salary (although grants of up to 200% of base salary may be made in exceptional circumstances such as on recruitment)

- Awards will be subject to a combination of long-term measures which are aligned to the shareholder experience and may include financial metrics (such as EPS), shareholder value metrics (such as TSR), capital efficiency measures (such as ROCE) and/or other strategic measures. The Committee will have discretion to set different measures and weightings for awards in future years to best support the strategy of the business at that time
- Targets for each performance measure are set by the Remuneration Committee prior to each grant. Targets will be based on a sliding scale where appropriate
- For each measure, performance below threshold results in zero payment. Payment rises from 25% to 100% of the maximum opportunity for that measure for levels of performance between threshold and maximum
- Includes a malus and clawback mechanism⁸

Directors' remuneration report continued

Part A – remuneration policy continued

Element	Purpose and link to strategy	Operation	Maximum
All-employee share scheme	UK employees, including executive directors, are encouraged to acquire shares by participating in the Group's all-employee share plan – the UK Sharesave Plan	The UK Sharesave Plan has standard terms	Participation limits are those set by HM Revenue & Customs from time-to-time
Pension	Provides retirement benefits that reward sustained contribution	- Ongoing pension provision is in the form of a cash supplement, subject to auto-enrolment in the Group's defined contribution scheme - Longer-serving employees have accrued benefits under the Group's defined benefit scheme, which was closed to future accrual for the executive directors on 6 April 2010	- Legacy arrangements: 20% of base salary cash supplement contribution paid in lieu of occupational pension scheme membership - New appointments: 10% of base salary cash supplement contribution paid in lieu of occupational pension scheme membership - All UK employees, including the executive directors, are subject to auto-enrolment into the Group's defined contribution scheme, with an employer contribution of 4% of base salary. If executives do not opt out of this scheme, their cash supplement will be reduced by 4%
Other benefits	Provides a competitive package of benefits that assists with recruitment and retention	- Main benefits currently provided to UK executives are a car allowance, life assurance and private medical insurance - Executive directors are eligible for other benefits which may also be introduced for the wider workforce on broadly similar terms	- Cash allowance in lieu of company car of up to £25,000 per annum - Other benefits will be in line with market. The value of each benefit is based on the cost to the Company and is not pre-determined - Any reasonable business-related expenses (including tax thereon) can be reimbursed if determined to be a taxable benefit

Committee discretions

The Committee operates the Group's variable incentive plans according to their respective rules and in accordance with governing legislation and HM Revenue & Customs rules where relevant. To ensure the efficient administration of these plans, the Committee will apply certain operational discretions. These include the following:

- selecting the participants in the plans on an annual basis;
- determining the timing of grants of awards and/or payment;
- determining the quantum of awards and/or payments (within the limits set out in the policy table above);
- determining the extent of vesting based on the assessment of performance;
- making the appropriate adjustments required in certain circumstances (e.g. change of control, rights issues, corporate restructuring events and special dividends); determining "good leaver" status for incentive plan purposes and applying the appropriate treatment; and
- undertaking the annual review of weighting of performance measures, and setting targets for the annual bonus plan and the PSP from year to year.

If an event occurs which results in the annual bonus plan or PSP performance conditions and/or targets being deemed no longer appropriate by the Committee (e.g. a material acquisition or divestment), the Committee will have the ability to adjust appropriately the measures and/or targets and alter weightings, provided that the revised conditions or targets are not materially less difficult to satisfy (taking account of the relevant circumstances).

Performance assessment

■ N/A

■ N/A

■ N/A

Notes:

1. A description of how the Company intends to implement the policy set out in this table for the forthcoming year is set out in the annual report on remuneration on pages 89 to 91.
2. The remuneration policy for the executive directors and other senior executives is designed with regard to the policy for employees across the Group as a whole. However, there are some differences in the structure of the remuneration policy for executive directors and other senior executives. In general, these differences arise from the development of remuneration arrangements that are market-competitive for the various categories of individuals. They also reflect the fact that, in the case of the executive directors and other senior executives, a greater emphasis tends to be placed on performance-related pay in the market.
3. The all-employee share plan does not have performance conditions. UK-based executive directors are eligible to participate in the UK Sharesave Plan on the same terms as other employees.
4. As described on page 85, the Company operates share ownership guidelines requiring executive directors to acquire and hold a specified level of shareholding.
5. The Committee may make minor amendments to the policy set out above for regulatory, exchange control, tax or administrative purposes or to take account of a change in legislation, without obtaining shareholder approval for that amendment.
6. The Regulations and related investor guidance encourages companies to disclose a cap within which each element of the directors' remuneration policy will operate. Where maximum amounts for elements of remuneration have been set within the policy, these will operate simply as caps and are not indicative of any aspiration.
7. While the Committee does not consider it to form part of benefits in the normal usage of that term, it has been advised that corporate hospitality, whether paid for by the Company or another, and business travel for directors and in exceptional circumstances their families, may technically come within the applicable rules, and so the Committee expressly reserves the right for the Committee to authorise such activities within its agreed policies (and to discharge any related tax liability).
8. The annual bonus and PSP are subject to malus and clawback provisions in the event of misconduct, error in calculation of performance, material misstatement of results, serious reputational damage to the Group and in the case of insolvency.

Ultimately, the payment of any bonus is entirely at the discretion of the Committee. In conjunction with malus and clawback provisions, the Committee has the flexibility to override formulaic outcomes and recover and/or withhold sums. In choosing to use this discretion, the Committee will consider the specific circumstances at the time. Where such action is considered necessary, this will be clearly stated in the relevant directors' remuneration report.

Selection of performance metrics and targets

The performance-related elements of remuneration will take into account the Group's risk policies and systems, and will be designed to align the senior executives' interests with those of shareholders. The Committee reviews the metrics used and targets set for all of the Group's senior executives (not just the executive directors) every year, in order to ensure that they are aligned with the Group's strategy and to ensure an appropriate level of consistency of arrangements

amongst the senior executive team. All financial targets will (where appropriate) be set on a sliding scale. Non-financial targets are set based on individual and management team responsibilities.

The annual bonus plan performance metrics include a mix of financial targets and non-financial objectives, reflecting the key annual priorities of the Group. The financial metrics determine the majority of the bonus and normally include operating cash flow – a key measure of the Group's ability to invest in the business, and a measure of profitability, which together reflect the Group's financial performance and are key measures for shareholders. For the 2019 financial year, the measure of profitability will be underlying earnings per share. The non-financial objectives agreed on an annual basis will be measurable and based on individual and/or team performance, and will be consistent with the achievement of the Group's longer-term goals.

Directors' remuneration report continued

Part A – remuneration policy continued

Selection of performance metrics and targets continued

The Committee has previously applied total shareholder return ("TSR") and earnings per share ("EPS") performance conditions to awards made under the PSP. EPS is a measure of the Group's overall financial success and TSR provides an external assessment of the Company's performance against a peer group. TSR also aligns the rewards received by executives with the returns received by shareholders. Other performance measures, such as capital efficiency, are also considered important within the business and may be considered appropriate for inclusion in the PSP by the Committee. Details of the specific targets applied to 2018 awards and those to be made in 2019 are set out on pages 82 and 90-91 respectively.

The Committee will review the choice and relative balance of performance measures and the appropriateness of performance targets prior to each grant of awards under the PSP. Financial targets are reset prior to each grant, following a review of internal and external expectations of growth for the Group, and are based on underlying performance assessment. Any TSR comparator group is reviewed prior to each grant to ensure it remains as appropriate as possible, recognising the small size of the UK-listed defence company sector and the individual characteristics of each company. The Committee retains discretion to set different targets for future awards, providing that, in the opinion of the Committee, the new targets are no less challenging in light of the prevailing circumstances than those set previously. If substantially different targets to those used previously are proposed, major shareholders will be consulted.

How the executive directors' remuneration policy relates to the wider Group

In addition to determining the remuneration arrangements for the executive directors, the Committee considers and approves the base salaries for nine other non-US senior executives, and reviews salaries for four US-based senior executives. The Committee also receives information on general pay levels and policies across the Group. The Committee, therefore, has due regard to salary levels across the Group in applying its remuneration policy. However, reflecting standard industry practice, the Committee has not previously consulted directly with employees in relation to the design and operation of the executive remuneration policy, although this is something the Committee will revisit during the 2019 financial year in accordance with the UK Corporate Governance Code.

The remuneration policy described above provides an overview of the structure that operates for the most senior executives in the Group. Lower aggregate incentive quanta are applied at below executive level, with levels driven by market comparatives and the impact of the role.

Employees are provided with a competitive package of benefits, which typically includes participation in the Group's defined contribution pension arrangements.

Long-term incentives are provided to the most senior executives and those identified as having the greatest potential to influence performance within the Group. However, in order to encourage wider employee share ownership, the Company also operates a Sharesave Plan in the UK, in which all UK employees are eligible to participate on completion of six months' service. At the end of the financial year, 12% of our employees participated in one of our share incentives schemes.

How shareholders' views are taken into account

The Remuneration Committee considers shareholder feedback received on the directors' remuneration report each year and guidance from shareholder representative bodies more generally. Shareholders' views are key inputs when shaping remuneration policy, with the Company's major shareholders being consulted in advance in connection with proposed changes to policy.

In relation to the formulation of this proposed pay policy, shareholders' views were sought at an early opportunity. Feedback was supportive of the changes being made and no substantial changes were considered necessary as a result. More general comments on the policy structure and implementation were considered by the Remuneration Committee and will be kept under review.

Legacy arrangements

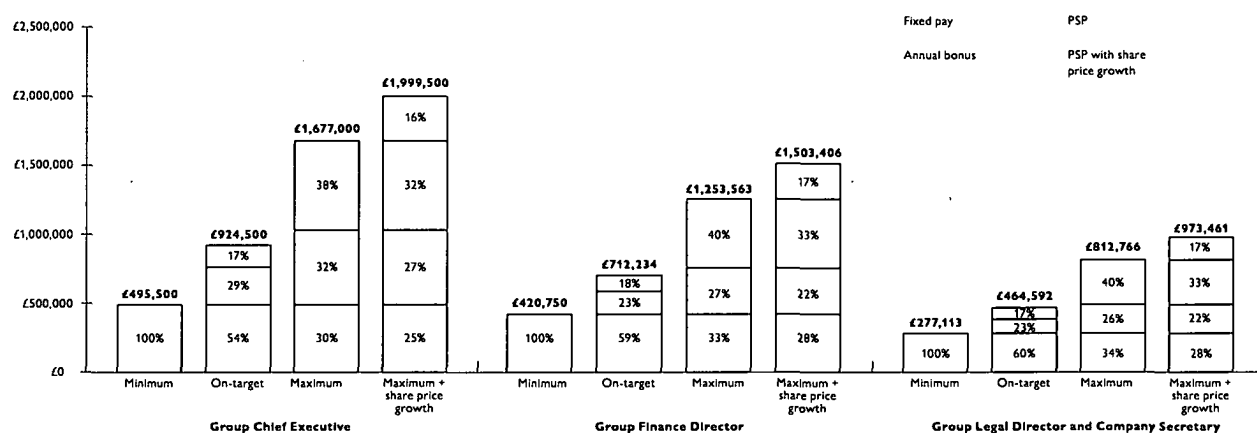
For the avoidance of doubt, authority is given to the Company to honour any commitments entered into with current or former directors (such as the payment of a pension or the unwinding of legacy share schemes) permitted under the current policy or which have been disclosed to shareholders in previous directors' remuneration reports. Details of any payments to former directors will be set out in the annual report on remuneration as they arise.

External appointments

The Company's policy is to permit an executive director to serve as a non-executive director elsewhere when this does not conflict with the individual's duties to the Company, and where an executive director takes such a role they may be entitled to retain any fees which they earn from that appointment. The executive directors do not currently have any external appointments for which they receive fees.

Potential remuneration scenarios for executive directors

The chart below details the hypothetical composition of each executive director's remuneration package and how it could vary at different levels of performance under the policy set out above.



Assumptions:

- Minimum = fixed pay only (2018 salary as at 1 November 2018 plus benefits plus pension cash supplement).
On target = fixed pay plus target annual bonus of 62.5% of salary for the Group Chief Executive and 50% for the other executive directors plus target PSP awards of 37.5% of salary for the Group Chief Executive and the other executive directors.
Maximum = fixed pay plus maximum annual bonus of 125% of salary for the Group Chief Executive and 100% for the other executive directors plus maximum PSP awards of 150% of salary for the Group Chief Executive and the other executive directors.
Maximum + share price growth = as maximum above, but with the value of the PSP awards increased by 50% to reflect potential share price growth.
- The PSP awards section of the bars is shaded, as these awards are subject to performance in future years and cannot ordinarily vest until three years after grant.
- Salary levels (on which other elements of the packages are calculated) are based on those applying from 1 January 2019. Note that Sarah Ellard's remuneration reflects her current contractual office-based hours, and may be increased or decreased pro-rata should these change in future.
- The value of taxable benefits is based on an estimated cost of £21,500 for Michael Ord, £21,000 for Andrew Lewis and £20,000 for Sarah Ellard.
- Pension provision is 10% of salary for Michael Ord and 20% of salary for Andrew Lewis and Sarah Ellard.
- The executive directors may participate in all-employee share schemes on the same basis as other employees. The value that may be received under these schemes is subject to tax-approved limits. For simplicity, the value that may be received from participating in these schemes has been excluded from the above chart.

Policy on payments for loss of office

All new executive directors appointed will have service contracts which are terminable on a maximum of twelve months' notice. Provisions permitting the Company to make any termination payments by instalments, and requiring directors to mitigate their loss in such circumstances, will be included in each contract. The Remuneration Committee will exercise discretion in determining whether termination payments should be paid by instalments, taking account of the reason for the departure of the director and their prior performance. Other than in gross misconduct situations, the Company would expect to honour the contractual entitlements of terminated directors.

Other than in certain "good leaver" circumstances (including, but not limited to, redundancy, ill-health or retirement), no bonus would be payable under the annual bonus plan unless the individual remains employed and is not under notice at the payment date. Any bonus paid to a "good leaver" would be based on an assessment of their individual and the Company's performance over the period, and would normally be pro-rated for the proportion of the year worked.

Deferred bonus share awards will also normally lapse on cessation of employment, unless the executive director is deemed to be a "good leaver" by the Remuneration Committee, as referred to above, in which case they would vest in full.

With regards to long-term incentive awards, the PSP rules provide that other than in certain "good leaver" circumstances, awards lapse on cessation of employment. Where an individual is a "good leaver", the Remuneration Committee's policy for PSP awards is normally to permit awards to remain outstanding until the end of the original performance period, when a pro-rata reduction will be made to take account of the proportion of the vesting period that lapsed prior to termination of employment, although the Committee has the discretion to partly or completely disapply pro-rating in exceptional circumstances. The Committee has discretion to deem an individual to be a "good leaver". In doing so, it will take account of the reason for their departure and the performance of the individual. The holding period which will apply to awards made from 2019 will normally apply even for "good leavers."

The Committee will have authority to pay any statutory entitlements and settle claims against the Company (e.g. for unfair dismissal, discrimination or whistleblowing) that arise on termination. The Committee may also authorise the provision of outplacement services and settle legal fees where considered appropriate.

Directors' remuneration report continued

Part A – remuneration policy continued

Executive directors' service agreements and loss of office payments

The current executive directors have rolling service contracts, details of which are summarised in the table below:

Provision	Detailed terms
Contract dates	Michael Ord – 30 April 2018 (effective 1 June 2018) Andrew Lewis – 12 December 2016 (effective 9 January 2017) Sarah Ellard – 2 November 2011 (effective 7 October 2011)
Notice period	Twelve months from both the Company and from the executive
Termination payments	Contracts may be terminated without notice by the payment of a sum equal to the sum of salary due for the unexpired notice period plus the fair value of any contractual benefits (including pension) Payments may be made in instalments and in these circumstances, there is a requirement to mitigate loss

The Company's policy on service agreements reflects the approach described above (e.g. notice periods will normally be twelve months or less).

The executive directors' service contracts are available for inspection at the Company's registered office.

Recruitment of executive directors

Salaries for new hires (including internal promotions) will be set to reflect their skills and experience, the Company's intended pay positioning, and the market rate for the applicable role.

Where it is appropriate to offer a below-market salary initially, the Committee has the discretion to allow higher phased salary increases over a period of time for newly-appointed directors, even though this may involve increases in excess of the rate for the wider workforce and inflation.

Benefits will be provided in line with those offered to other executive directors, taking account of local market practice, with relocation expenses or arrangements provided if necessary. Tax equalisation may also be considered if an executive is adversely affected by taxation due to their employment with the Company. Legal fees and other costs incurred by the individual may also be paid by the Company.

The aggregate incentive opportunity offered to new recruits will normally be no higher than that offered under the existing incentive plans to the incumbent executive directors. Different performance measures and targets may be set initially for the annual bonus plan, taking into account the responsibilities of the individual and the point of the financial year at which they join. A Performance Share Plan award may be granted shortly following appointment (assuming the Company is not in a close period). Any incentive quantum offered above the limits set out in the existing incentive plans and policy will (save as set out below) be contingent on the Company receiving shareholder approval for an amendment to its approved policy at its next general meeting.

Current entitlements of a new joiner from their previous employer that are forfeited (e.g. benefits, bonus and share schemes) may be bought out on terms that take due account of the nature of the entitlements in terms of (for example) time horizon, fair value and performance conditions. The Group's existing incentive arrangements will be used to the extent possible, although awards may also be granted outside of these arrangements if necessary, and as permitted under the Listing Rules, reflecting the above parameters. Such awards will not, in accordance with the Regulations, be subject to the limits of the remuneration policy for incentive pay.

In the case of an internal hire, any outstanding variable pay awarded in relation to the previous role will be allowed to pay out according to its terms of grant (adjusted as relevant to take into account the Board appointment).

Policy in respect of the Chairman and non-executive directors

Element	Purpose and link to strategy	Operation	Maximum	Performance assessment
The Chairman's and non-executive directors' fees	Takes account of recognised practice and set at a level that is sufficient to attract and retain high-calibre non-executive directors	■ The Chairman is paid a single fee for all his responsibilities. The non-executives directors are paid a basic fee. The Chairs of the Remuneration Committee and the Audit Committee each receive additional fees to reflect their extra responsibilities ■ When reviewing fee levels, account is taken of market movements in non-executive director fees, Board Committee responsibilities, ongoing time commitments, the general economic environment and the level of increases awarded to the wider workforce ■ Fee increases, if applicable, are normally effective from April of each year ■ Non-executive directors do not participate in any pension, bonus or share incentive plans ■ Non-executive directors may be compensated for travel, accommodation or hospitality-related expenses in connection with their roles and any tax thereon ■ In exceptional circumstances, additional fees may be paid where there is a substantial increase in the temporary time commitment required of non-executive directors	■ N/A	■ N/A

The Chairman's and non-executive directors' letters of appointment

Non-executive directors do not receive compensation for loss of office but are appointed for a fixed term of three years, renewable for further three-year terms if both parties agree and subject to annual re-election by shareholders. The Chairman's appointment may be terminated on six months' notice by either party and the other non-executive directors' appointments may be terminated on three months' notice by either party. The non-executive directors' letters of appointment are available for inspection at the Company's registered office.

The following table provides further details of the terms of appointment for the Chairman and the non-executive directors who served during the year:

Name	Date original term commenced	Date current term commenced	Expected expiry date of current term
Carl-Peter Forster	1 May 2016	1 May 2016	30 April 2019
Andrew Davies	17 May 2016	17 May 2016	16 May 2019
Nigel Young	1 May 2013	1 May 2016	30 April 2019

Daniel Dayan also served as a non-executive director of the Company throughout the year but stepped down from the Board on 30 November 2018. His original term commenced on 7 March 2016.

Stephen King joined the Board as a non-executive director on 1 December 2018. His initial three-year term is expected to expire on 30 November 2021.

Directors' remuneration report continued

Part B – annual report on remuneration

This part of the report has been prepared in accordance with Part 3 of Schedule 8 to The Large and Medium-sized Companies and Groups (Accounts and Reports) Regulations 2008 (as amended), and 9.8.6R of the Listing Rules. The annual report on remuneration will be put to an advisory shareholder vote at the 2019 Annual General Meeting. The information on pages 77 to 86 has been audited.

The Remuneration Committee and its advisers

Members of the Remuneration Committee

The following individuals were members of the Remuneration Committee during the year:

Name	From	To
Andrew Davies (Chairman)	17 May 2016	Present
Carl-Peter Forster	1 May 2016	Present
Daniel Dayan	7 March 2016	30 November 2018
Nigel Young	1 May 2013	Present

Daniel Dayan stepped down as Chairman of the Remuneration Committee on 7 August 2018 and Andrew Davies was appointed Chairman on 8 August 2018.

Stephen King became a member of the Remuneration Committee on 1 December 2018.

The Group Legal Director & Company Secretary acts as secretary to the Committee, and the Group Chief Executive and the Group Finance Director attend meetings by invitation, but no executive director or other employee is present during discussions relating directly to their own remuneration.

Meetings

The Remuneration Committee met for two scheduled meetings during the year. In addition, three additional ad hoc meetings were convened to deal with matters arising between scheduled meetings. Details of the attendance of the Committee members at meetings are set out on page 57 of the corporate governance report.

Principal activities of the Remuneration Committee during the year

November 2017

- Review of 2018 incentive arrangements
- Consideration of salary levels for the executive directors and the senior management team
- Approval of financial targets and personal objectives for the 2018 annual bonus plan

January 2018

- Consideration of bonus outturn for the 2017 financial year
- Approval of vesting of deferred share awards and Performance Share Plan awards
- Grant of 2018 awards under the Performance Share Plan
- Approval of the directors' remuneration report for 2017

March 2018

- Market update and initial consideration of future policy

April 2018

- Approval of retirement arrangements for Michael Flowers and remuneration package for Michael Ord

July 2018

- Initial shareholder consultation on proposed new directors' remuneration policy

Advisers

During the year, FIT Remuneration Consultants LLP ("FIT") were retained by the Committee to advise on remuneration and incentive plan related matters. FIT is a signatory to the Remuneration Consultants' Group Code of Conduct. The Committee has reviewed the nature of the services provided by FIT and is satisfied that no conflict of interest exists in the provision of these services. The Company received no other services from FIT during the year. The total fees paid to FIT in respect of services to the Committee during the year were £36,903 (2017: £45,562). Fees were determined based on the scope and nature of the projects undertaken for the Committee. The Company also received advice from FIT on the renewal of the UK Sharesave Plan during the year.

The Committee reviews the performance and independence of its advisers on an annual basis.

The Committee consults internally with the Group Chief Executive (Michael Ord) and the Group Legal Director & Company Secretary (Sarah Ellard).

Audited

Directors' emoluments

The emoluments of all the directors who served during the year are shown below:

	Year	Salaries/ fees £'000	Taxable benefits ¹ £'000	Bonus (cash and deferred shares) ² £'000	PSP ³ £'000	Deferred share awards ⁴ £'000	Pension benefits ⁵ £'000	Total £'000
Executives								
Michael Flowers ⁶	2018	455	23	—	209	33	85	805
	2017	415	23	310	—	—	83	831
Michael Ord ⁷	2018	143	7	—	—	—	14	164
	2017	—	—	—	—	—	—	—
Andrew Lewis ⁸	2018	332	21	—	—	—	66	419
	2017	265	16	193	—	—	53	527
Sarah Ellard	2018	213	20	—	115	43	43	434
	2017	208	20	121	—	—	42	391
Non-executives								
Carl-Peter Forster	2018	200	—	—	—	—	—	200
	2017	200	—	—	—	—	—	200
Andrew Davies ⁹	2018	57	—	—	—	—	—	57
	2017	55	—	—	—	—	—	55
Daniel Dayan ¹⁰	2018	63	—	—	—	—	—	63
	2017	65	—	—	—	—	—	65
Nigel Young ¹¹	2018	65	—	—	—	—	—	65
	2017	66	—	—	—	—	—	66
Total remuneration	2018	1,528	71	—	324	76	208	2,207
	2017	1,274	59	624	—	—	178	2,135

Notes:

1. Comprises an annual cash allowance of £21,500 for Michael Flowers, £20,000 for Michael Ord and £19,350 for each of Andrew Lewis and Sarah Ellard; plus private medical insurance for each of the executive directors.
2. 40% of any bonus is delivered as an award of deferred shares.
3. PSP awards granted in January 2015 vested on 26 January 2018, as reported on pages 80 and 81, and have been included in the 2018 emoluments.
4. Deferred share awards granted in part satisfaction of bonuses paid in respect of the 2014 financial year vested on 27 January 2018 and have been included in the 2018 emoluments.
5. Michael Ord receives a cash supplement of 10% of salary in lieu of occupational pension scheme membership; the other executive directors receive a cash supplement of 20% of salary.
6. Michael Flowers stepped down from the Board on 30 June 2018 but remained an employee until 31 October 2018 and continued to receive his normal salary and benefits until that date.
7. Michael Ord joined the Board on 1 June 2018 and was appointed as Group Chief Executive on 1 July 2017.
8. Andrew Lewis joined the Company on 9 January 2017 and was appointed to the Board on 19 January 2017.
9. Andrew Davies was appointed as Chairman of the Remuneration Committee on 8 August 2018 and received an additional fee of £10,000 per annum, included in the above figures on a pro-rated basis, with effect from that date.
10. Daniel Dayan received an additional fee of £10,000 per annum, included in the above figures on a pro-rated basis, in respect of his Chairmanship of the Remuneration Committee up until 7 August 2018.
11. Nigel Young receives an additional fee of £10,000 per annum, included in the figures above, in respect of his Chairmanship of the Audit Committee. This fee was increased from £8,000 to £10,000 per annum with effect from 7 March 2016. However, the increased payment was not processed until January 2017 and the back-dated sum paid is therefore included in the 2017 figures.

Amounts shown above in the salaries and fees column relate to base salary in the case of executive directors and fees in the case of non-executive directors.

Directors' remuneration report continued

Part B – annual report on remuneration continued

Appointment of Michael Ord as Chief Executive

As noted at the time of his appointment, Michael Ord will receive the following remuneration as Chief Executive:

- base salary of £430,000 (with the next normal salary review effective from 1 January 2020);
- pension allowance of 10% of salary;
- annual bonus maximum of 125% of salary (with any bonus for 2018 pro-rated for period of service); and
- an annual PSP award of up to 150% of salary (with a one-off award of 200% of salary on joining, details of which are set out on pages 81 and 82).

Base salary and benefits paid during the year

Salaries for Michael Flowers, Andrew Lewis and Sarah Ellard were reviewed in November 2017 and a 2.5% increase, with effect from 1 January 2018, was approved by the Committee. The salaries of the executive directors during the year were therefore as follows:

Executive	Annual salary from 1 November 2017 to 31 December 2017	Annual salary from 1 January 2018 to 31 October 2018
Michael Flowers ¹	£416,962	£427,386
Michael Ord ²	—	£430,000
Andrew Lewis	£325,000	£333,125
Sarah Ellard	£209,035	£214,261

Notes:

1. Michael Flowers stepped down from the Board on 30 June 2018 but remained an employee until 31 October 2018 and continued to receive his normal salary and benefits until that date.
2. Michael Ord joined the Board on 1 June 2018 and was appointed as Group Chief Executive on 1 July 2018.

Michael Flowers received a cash allowance of £21,500 per annum in lieu of a company car and Michael Ord receives a cash allowance of £20,000 per annum. The other executive directors receive a cash allowance of £19,350 per annum. The cash allowances are reviewed every three years and will next be reviewed in 2019.

Details of variable pay opportunity in the year

Annual bonus

In accordance with previous practice, 75% of the annual bonus opportunity for 2018 was based on financial targets (namely earnings per share and operating cash flow), with 25% based on personal objectives. No bonus is payable in respect of the personal objectives unless the Committee is satisfied that this is justified by the Group's underlying performance, including *inter alia* levels of profitability and cash flow, as well as health and safety performance.

The Committee has consistently set challenging targets for the achievement of maximum bonuses. The financial targets for the 2018 bonus plan, compared with actual performance, were as follows:

Metric	Weighting (75% of overall bonus)	Performance	Target	Actual
Earnings per share	50%	Threshold	12.3p	8.9p
		Target	12.9p	
		Maximum	14.2p	
Operating cash flow	50%	Threshold	£64.3m	£56.9m
		Target	£71.5m	
		Maximum	£75.0m	

The personal objectives set in respect of the 2018 bonus plan (25% of overall bonus) are set out below:

Executive	Personal objectives	Key aspects of performance against individual objectives	Payout (as % of salary)
Michael Ord	■ Health and safety performance ■ Operational performance improvement ■ Organisational performance improvement ■ Strategy and business development: Countermeasures ■ Strategy and business development: Sensors and Electronics ■ Strategy and business development: Energetics	■ Fatal incident during the year negated all performance targets ■ Group-wide safety culture review instigated, and new health and safety strategy formulated ■ Operating margin and inventory improvements not achieved following the Chemring Countermeasures UK incident ■ ERP system upgrade plan established and commenced Group-wide roll-out ■ Completed integration of Group-wide customer relationship management system ■ Leadership development and cultural change programme initiated ■ Succession plans under development for all leadership positions ■ Management teams strengthened within key businesses ■ Commenced implementation of Kilgore site transformation project ■ Progressed development of F-35 flare supply strategy, with receipt of critical orders by Kilgore and Alloy Surfaces ■ Down-selected on AVCAD programme ■ Transferred wire detection technology to the US and secured HMDS contracts ■ Commenced development of next-generation electronic warfare technology ■ Substantially completed closure of Torrance facility ■ Implemented strategic plan for Chemring Nobel site	0%
Andrew Lewis	■ Health and safety performance ■ Operational performance improvement ■ Organisational performance improvement ■ Strategy development: financial and corporate management ■ Strategy and business development	■ Fatal incident during the year negated all performance targets ■ Group-wide safety culture review instigated, and new health and safety strategy formulated ■ Operating margin and inventory improvements not achieved following the Chemring Countermeasures UK incident ■ ERP system upgrade plan established and commenced Group-wide roll-out ■ New cyber-security standards adopted in the UK and the US ■ Established new Group intranet ■ Leadership development and cultural change programme initiated ■ Succession plans under development for all leadership positions ■ Management teams strengthened within key businesses ■ Refinanced Group bank facilities ■ Completed external audit tender process ■ Incorporated updated financial policies and procedures within the new Operational Framework ■ Commenced implementation of Kilgore site transformation project ■ Down-selected on AVCAD programme ■ Transferred wire detection technology to the US and secured HMDS contracts ■ Implemented plan for closure of Santa Clarita site ■ Progressed divestment process for Chemring Defence UK ■ Implemented strategic plan for Chemring Nobel site	0%

Directors' remuneration report continued

Part B – annual report on remuneration continued

Details of variable pay opportunity in the year continued

Annual bonus continued

Executive	Personal objectives	Key aspects of performance against individual objectives	Payout (as % of salary)
Sarah Ellard	- Health and safety performance - Operational performance improvement - Organisational performance improvement - Strategy development: financial and corporate management - Strategy and business development	- Fatal incident during the year negated all performance targets - Group-wide safety culture review instigated, and new health and safety strategy formulated - Legal and commercial improvement plan adopted - Contract risk management training programme established - Extensive new legal and compliance policies and procedures incorporated within the Operational Framework - Updated online training programmes established for anti-corruption, data protection and competition law compliance - Leadership development and cultural change programme initiated - Succession plans under development for all leadership positions - Management teams strengthened within key businesses - Refinanced Group bank facilities - Adopted de-risking strategy for UK legacy defined benefit pension scheme - Introduced salary sacrifice for UK pension arrangements - Implemented GDPR compliance regime - Commenced implementation of Kilgore site transformation project - Down-selected on AVCAD programme - Transferred wire detection technology to the US and secured HMDS contracts - Implemented plan for closure of Santa Clarita site - Progressed divestment process for Chemring Defence UK - Implemented strategic plan for Chemring Nobel site	0%

No bonuses are payable to the executive directors under the 2018 bonus plan, as the financial targets were not met.

Performance Share Plan

Vesting of 2015 PSP awards

The PSP awards granted on 26 January 2015 were made subject to the following performance conditions:

Measure	Threshold vesting	Full vesting
Total compound earnings per share growth per annum over three financial years (50% of award)	5% p.a. (25% vests)	10% p.a. (100% vests)
Rank of the Company's total shareholder return against the total shareholder return of the members of the comparator group (50% of award)	Median ranking (25% vests)	Upper quartile ranking (100% vests)

The Group's compound earnings per share growth over the three financial years ended 31 October 2017 was 8.01% p.a., and 70.15% of the part of the awards subject to the earnings per share measure therefore vested. The Company's total shareholder return over the performance period was below the median ranking of the comparator group, and no part of this element of the award vested. In total therefore, 35.075% of the awards granted on 26 January 2015 vested on 26 January 2018.

Details of the awards granted to the executive directors on 26 January 2015 are provided below:

Executive	Vesting date	Number of shares at grant	Rights issue adjustment during 2016	Number of shares vested	Number of shares lapsed
Michael Flowers	26 January 2018	261,935	37,096	104,885	194,146
Sarah Ellard	26 January 2018	143,867	20,374	57,607	106,634

Executive	Value of shares vested ¹	Value of accrued dividends	Total value of vested awards
Michael Flowers	£201,379	£6,179	£207,558
Sarah Ellard	£110,605	£3,394	£113,999

Note:

1. Value based on the closing share price of 192p on 26 January 2018, which is slightly lower than the share price used to calculate the taxable value of the vested awards shown in the directors' emoluments table on page 77.

Vesting of 2016 PSP awards

The PSP awards granted on 25 January 2016 were made subject to the following performance conditions:

Measure	Threshold vesting	Full vesting
Total compound earnings per share growth per annum over four financial years commencing 1 November 2014 (50% of award)	5% p.a. (25% vests)	10% p.a. (100% vests)
Rank of the Company's total shareholder return against the total shareholder return of the members of the comparator group over three financial years commencing 1 November 2015 (50% of award)	Median ranking (25% vests)	Upper quartile ranking (100% vests)

The Group's compound earnings per share growth over the four financial years ended 31 October 2018 was negative and no part of the awards subject to the earnings per share measure will therefore vest. The Company's total shareholder return over the performance period was below the median ranking of the comparator group, and no part of this element of the award will vest. All awards will therefore lapse on 25 January 2019.

Details of the awards granted to the executive directors on 25 January 2016 are provided below:

Executive	Vesting date	Number of shares at grant	Rights issue adjustment during 2016	Number of shares to vest	Number of shares to lapse	Value of dividends
Michael Flowers	25 January 2019	388,516	55,022	Nil	443,538	Nil
Sarah Ellard	25 January 2019	194,774	27,584	Nil	222,358	Nil

PSP awards granted in the year

The following conditional awards of shares were granted to the executive directors under the PSP during the year:

Executive	Date of grant	Value of award	Closing share price on date of grant	Number of conditional shares awarded	Face value	% that vests at threshold	Vesting determined by
Michael Flowers	19 January 2018 ¹	150% of salary	190.8p	340,999	£650,626	25%	EPS growth (50%) and relative TSR performance (50%), as detailed below
Michael Ord	26 June 2018 ²	200% of salary	218.0p	394,495	£860,000	25%	
Andrew Lewis	19 January 2018	150% of salary	190.8p	265,791	£507,129	25%	
Sarah Ellard	19 January 2018	150% of salary	190.8p	170,952	£326,176	25%	

Notes:

1. The award granted to Michael Flowers lapsed during the year in accordance with the agreement reached with Mr Flowers on his retirement as Group Chief Executive.
2. Michael Ord was granted a one-off award on appointment of 200% of salary. This represents a "normal" award of 150% of salary and an additional 50% of salary which takes into account the value of remuneration he forfeited from his previous employer. The whole award is subject to the same stretching performance conditions and vesting period (i.e. three years). The Committee believes that such an award was appropriate to secure the services of a high-calibre executive. Mr Ord's award is subject to a two-year holding period post-vesting.

Directors' remuneration report continued

Part B – annual report on remuneration continued

Details of variable pay opportunity in the year continued

Performance Share Plan continued

PSP awards granted in the year continued

Awards under the PSP are normally granted in January of each year, following the release of the results for the preceding financial year, and award levels are calculated based on the closing share price on the trading day immediately preceding the date of grant. Michael Ord's award was granted following the release of the interim results.

The performance conditions applying to the awards made in January 2018 are based as to one half of each award on the Company's compound earnings per share growth over three financial years commencing 1 November 2017, and as to the other half of each award on the Company's total shareholder return performance over the same three-year performance period. The award made to Mr Ord in June 2018 is also subject to the same performance conditions, save that compound earnings per share growth and total shareholder return performance will be measured over the three-year performance period commencing 1 May 2018 and ending on 30 April 2021.

The earnings per share performance condition will be measured as follows:

Total compound earnings per share growth over the three-year performance period	% of earnings per share part that may vest
Less than 5% p.a.	0%
5% p.a.	25%
Between 5% p.a. and 10% p.a.	On a straight-line basis between 25% and 100%
10% p.a. or more	100%

Note:

1. Earnings per share is calculated on an underlying, fully-diluted and normalised basis, as specified by the Committee prior to grant.

The total shareholder return performance condition will be measured as follows:

Rank of the Company's total shareholder return against the total shareholder return of the members of the comparator group	% of total shareholder return part that may vest
Below median	0%
Median	25%
Between median and upper quartile	On a straight-line basis between 25% and 100%
Upper quartile or above	100%

The comparator group for the 2018 awards comprises BAE Systems, Cobham, Cohort, Esterline Technologies, FLIR Systems, L3 Technologies, Leonardo Finmeccanica, QinetiQ Group, Raytheon, Rheinmetall and Ultra Electronics.

Performance conditions for outstanding awards

	Measure	Director	Awards to executive directors	Threshold vesting	Full vesting
Awards made on 24 March 2017	Total compound earnings per share growth per annum over three financial years (50% of award) ¹	Michael Flowers Andrew Lewis Sarah Ellard	150% of salary	5% p.a. (25% vests)	10% p.a. (100% vests)
	Rank of the Company's total shareholder return against the total shareholder return of the members of the comparator group over three financial years (50% of award)			Median ranking (25% vests)	Upper quartile ranking (100% vests)

Note:

1. Earnings per share is calculated on an underlying, fully-diluted and normalised basis, as specified by the Committee prior to grant.

Summary of outstanding PSP awards

Executive	Number of shares under award					Date of vesting	Closing share price on date of grant (p) ⁴
	At 1 November 2017	Awarded during the year	Lapsed during the year	Vested during the year ¹	At 31 October 2018		
Michael Flowers	299,031	—	(194,146)	(104,885)	—	26 January 2018	230.5
	443,538	—	—	—	443,538 ²	25 January 2019	138.4
	363,629	—	—	—	363,629	24 March 2020	195.7
	—	340,999	(340,999) ³	—	—	19 January 2021	190.8
	1,106,198	340,999	(535,145)	(104,885)	807,167		
Michael Ord	—	394,495	—	—	394,495	26 June 2021	218.0
	—	394,495	—	—	394,495		
Andrew Lewis	283,430	—	—	—	283,430	24 March 2020	195.7
	—	265,791	—	—	265,791	19 January 2021	190.8
	283,430	265,791	—	—	549,221		
Sarah Ellard	164,241	—	(106,634)	(57,607)	—	26 January 2018	230.5
	222,358	—	—	—	222,358 ²	25 January 2019	138.4
	182,297	—	—	—	182,297	24 March 2020	195.7
	—	170,952	—	—	170,952	19 January 2021	190.8
	568,896	170,952	(106,634)	(57,607)	575,607		

Notes:

1. Awards partially vested on 26 January 2018, as detailed above.
2. As explained above, these awards will lapse on 25 January 2019 due to the performance conditions not being met.
3. The award granted to Michael Flowers lapsed during the year in accordance with the agreement reached with Mr Flowers on his retirement as Group Chief Executive.
4. Pre rights issue grant share price, where applicable.

Sharesave awards

Summary of outstanding Sharesave awards

Executive	Number of shares under award					Exercise price	Exercise date
	At 1 November 2017	Awarded during the year	Lapsed during the year	Exercised during the year	At 31 October 2018		
Michael Flowers	17,142	—	—	—	17,142	105p	1 October 2019–31 March 2020
	17,142	—	—	—	17,142		
Michael Ord	—	16,853	—	—	16,853	178p	1 October 2023–31 March 2024
	—	16,853	—	—	16,853		
Andrew Lewis	12,162	—	—	—	12,162	148p	1 October 2020–31 March 2021
	12,162	—	—	—	12,162		
Sarah Ellard	7,297	—	—	—	7,297	148p	1 October 2020–31 March 2021
	7,297	—	—	—	7,297		

Directors' remuneration report continued

Part B – annual report on remuneration continued

Details of variable pay opportunity in the year continued

Deferred share awards

Vesting of deferred share awards

The deferred share awards granted to the executive directors in part satisfaction of their annual bonuses for the year ended 31 October 2014 vested in full on 27 January 2018 as detailed below:

Executive	Vesting date	Number of shares subject to deferred award at grant	Rights issue adjustment during 2016	Number of shares vested	Number of shares lapsed	Value of accrued dividends paid on vested shares
Michael Flowers	27 January 2018	14,606	2,068	16,674	—	£982
Sarah Ellard	27 January 2018	18,973	2,687	21,660	—	£1,276

Summary of outstanding deferred share awards

Executive	Number of shares under award					Date of vesting	Closing share price on date of grant (p) ²
	At 1 November 2017 ¹	Awarded during the year	Lapsed during the year	Vested during the year	At 31 October 2018		
Michael Flowers	16,674	—	—	(16,674)	—	27 January 2018	226.5
	80,633	—	—	—	80,633	19 January 2020	172.0
	—	65,981	—	—	65,981	18 January 2021	188.0
	97,307	65,981	—	(16,674)	146,614		
Andrew Lewis	—	41,143	—	—	41,143	18 January 2021	188.0
	—	41,143	—	—	41,143		
Sarah Ellard	21,660	—	—	(21,660)	—	27 January 2018	226.5
	32,944	—	—	—	32,944	19 January 2020	172.0
	—	25,795	—	—	25,795	18 January 2021	188.0
	54,604	25,795	—	(21,660)	58,739		

Notes:

1. Number of shares subject to awards, after 2016 rights issue adjustment.
2. Pre-rights issue grant share price, where applicable.

Directors' shareholdings

Shareholding guidelines apply to executive directors and other participants in the PSP. Executive directors are expected to build-up and maintain a shareholding in the Company equivalent to 200% of basic salary, by retaining at least 50% of the after-tax gain on vested PSP awards until such time as the guidelines have been met. Other participants in the PSP are expected to retain a shareholding equivalent to 25% to 50% of their basic salary.

The interests of the directors in the ordinary shares of the Company at 31 October 2018 are shown below. All are beneficial holdings.

Executive	Legally owned (number of shares)	Value of legally owned shares as % of salary ¹	Guideline met	Unvested and subject to performance conditions under the PSP			Total at 31 October 2018	Deferred bonus share awards	Sharesave options
				2016 award	2017 award	2018 award			
Michael Ord	—	—	No	—	—	394,495	394,495	—	16,853
Andrew Lewis	8,720	5%	No	—	283,430	265,791	549,221	41,143	12,162
Sarah Ellard	77,658	66%	No	222,358	182,297	170,952	575,607	58,739	7,297
Carl-Peter Forster	20,000	—	—	—	—	—	—	—	—
Andrew Davies	—	—	—	—	—	—	—	—	—
Daniel Dayan	60,500	—	—	—	—	—	—	—	—
Nigel Young	—	—	—	—	—	—	—	—	—

Note:

1. Based on the number of shares legally owned, prevailing base salary and share price of 182.4p at 31 October 2018.

The directors' share interests at 31 October 2018 include shares held by the directors' connected persons, if any, as required by the Regulations.

There have been no changes to the directors' interests in shares since 31 October 2018.

Pension

The following table sets out the pension benefits earned by the executive directors. Only Sarah Ellard previously accrued benefits during her former membership of the Chemring Group Staff Pension Scheme.

Executive	Cash in lieu of pension contributions £'000	Total benefit accrued at 31 October 2017		Transfer value of accrued benefit at 31 October 2017 £'000	Total benefit accrued at 31 October 2018		Transfer value of accrued benefit at 31 October 2018 £'000	Increase in transfer value during year (less members' contributions) £'000	Value of benefit for single figure £'000
		Pension £'000 p.a.	Cash £'000		Pension £'000 p.a.	Cash £'000			
Michael Flowers	85	—	—	—	—	—	—	—	85
Michael Ord	14	—	—	—	—	—	—	—	14
Andrew Lewis	66	—	—	—	—	—	—	—	66
Sarah Ellard	43	24	72	461	24	72	461	—	43

Notes:

1. Michael Ord receives a 10% cash supplement in lieu of pension and the other executive directors receive a 20% cash supplement.
2. Transfer values represent liabilities of the applicable scheme, and do not represent sums paid to individuals.
3. Transfer values have been calculated in accordance with the Occupational Pension Scheme (Transfer Value) Regulations 1996.
4. Sarah Ellard left pensionable service on 6 April 2010 and therefore has not accrued additional pension over the year. The accrued benefits shown are the benefits at the date of exit.
5. The scheme provided pension at a rate of 1/80th of final pensionable salary plus a cash lump sum of 3/80ths for each year of membership. Final pensionable salary was capped at the HMRC notional earnings cap, and the scheme assumed a normal retirement age of 65. Early retirement is permissible from age 55 but accrued benefits are reduced accordingly using the early retirement factors in force at the date of early retirement.

Directors' remuneration report continued

Part B – annual report on remuneration continued

Loss of office payments

The principles governing compensation for loss of office are set out on page 73.

Payments to past directors

As announced in May 2018, Michael Flowers stepped down as Chief Executive and as a director on 30 June 2018, although remained an employee until 31 October 2018 to provide transition support to the incoming Chief Executive.

Mr Flowers continued to receive his salary and benefits in the usual way until 31 October 2018 and was eligible for a bonus for the full financial year ended 31 October 2018, subject to the Remuneration Committee's assessment of his performance against the relevant performance measures and targets made at the same time as for other senior executives, after the end of the 2018 financial year. No bonuses are payable in respect of the 2018 financial year.

Mr Flowers' notice period started on 1 May 2018. Following cessation of his employment with the Company as of 31 October 2018, he was paid a lump sum equivalent to his salary-in-lieu and the fair value for contractual benefits for the balance of his remaining six months' notice period. Further, although Mr Flowers has been released from his obligation to mitigate his loss given that he has retired, he will be required to repay any sums earned from equivalent employment during what would have been the remainder of his notice period to 30 April 2019.

Mr Flowers is being treated as a good leaver for the purposes of the Group's incentive schemes. Deferred bonuses that are payable in shares will be released in line with the normal vesting timetable. Further, in respect of the PSP, it was agreed, in accordance with the rules of the plan, that Mr Flowers would remain eligible to receive the outstanding PSP shares awarded in 2016 and in 2017 but awards made in 2018 would lapse. As a result of the performance conditions not being met, the PSP awards made in 2016 will now lapse.

The Remuneration Committee chose to exercise limited discretion to disapply time pro-rating in respect of Mr Flowers' 2017 PSP award but instead applied a more stringent approach to his 2018 award which resulted in its lapsing in full. The table below shows that the overall impact of such action was not intended to benefit Mr Flowers:

Award	Default formulaic approach ¹	Following Remuneration Committee discretion
2016 PSP	Time pro-rating = 3/3 No impact as performance criteria have not been met and award will lapse	Time pro-rating = 3/3 No impact as performance criteria have not been met and award will lapse
2017 PSP	Time pro-rating = 2/3	Time pro-rating = 3/3
2018 PSP	Time pro-rating = 1/3	Time pro-rating = 0/3 i.e. the shares lapsed
Total	Time pro-rating = 6/9	Time pro-rating = 6/9

Note:

1. The default treatment under the existing plan rules is to round up time pro-rating to the next anniversary of grant.

The Committee took the view that this approach was appropriate in the circumstances as it takes account of the fact that Mr Flowers had greater influence on the 2017 performance period compared to his contribution to the 2018 performance period (i.e. eighteen months as Chief Executive for the 2017 award versus six months for the 2018 award). Furthermore, the decision is not expected to result in a material benefit or loss for Mr Flowers. For the avoidance of doubt, the 2017 award remains subject to a performance assessment at the end of the original performance period and therefore it is not certain any value will be delivered on vesting.

The post-termination restrictions set out in Mr Flowers' service agreement remain in force.

Consistent with the arrangement reached with Mr Flowers on his initial relocation to the UK in 2012, it was agreed that he would be reimbursed for relocation expenses of up to £10,000, assessed against receipts, on relocation from the UK.

The Group paid a contribution of £5,000 plus VAT toward Mr Flowers' legal fees incurred in connection with the cessation of his employment, as is permitted under the remuneration policy.

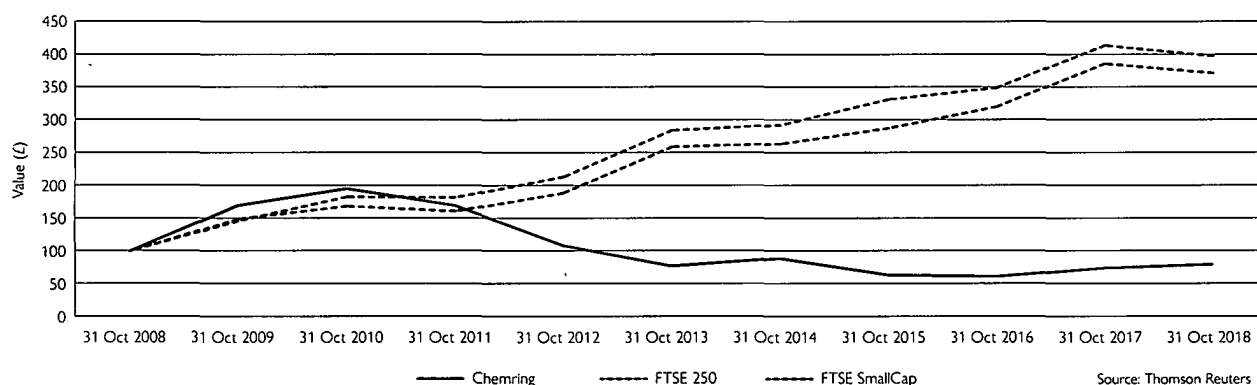
Unaudited

Total shareholder return performance graph and Chief Executive remuneration table

The following graph shows the Company's cumulative total shareholder return over the last ten financial years relative to the FTSE 250 and FTSE Small Cap Indexes. The FTSE Small Cap has been selected by the Committee for this comparison because it provides the most appropriate measure of performance of listed companies of a similar size to the Company. The FTSE 250 has been shown in previous years and has been included this year for the purpose of continuity.

TSR graph

This graph shows the value, by 31 October 2018, of £100 invested in Chemring Group PLC on 31 October 2008 compared with the value of £100 invested in the FTSE 250 and FTSE SmallCap. The other points are the values at intervening financial year ends.



Chief Executive's remuneration table

The total remuneration figures for the Group Chief Executive during each of the last ten financial years are shown in the table below. Mark Papworth replaced David Price as Group Chief Executive on 5 November 2012, Michael Flowers replaced Mark Papworth on 24 June 2014 and Michael Ord replaced Michael Flowers on 1 July 2018.

The total remuneration figures for 2012 and 2014 include the payments for loss of office made to David Price and Mark Papworth respectively. The figures for 2018 include a full year's salary and benefits for Michael Flowers.

The total remuneration figure for each year includes the annual bonus based on that year's performance and, where applicable, vested PSP awards based on the three-year performance period ending in the relevant year. The annual bonus payout and PSP award vesting level as a percentage of the maximum opportunity are also shown for each of these years.

	David Price				Mark Papworth	Mark Papworth/ Michael Flowers	Michael Flowers			Michael Flowers/ Michael Ord
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Total remuneration £'000	1,309	1,391	1,239	1,325	785	841	507	855	831	969
Annual bonus (% of maximum)	94%	62%	0%	0%	40%	50%	0%	68.3%	59.5%	0%
PSP awards vesting (% of maximum)	100%	100%	100%	54.1%	0%	0%	0%	0%	0%	35%

Directors' remuneration report continued

Part B – annual report on remuneration continued

Percentage change in the Group Chief Executive's remuneration

The table below shows the percentage change in the Group Chief Executive's total remuneration (excluding the value of any PSP awards and pension benefits receivable in the year) between the 2017 and 2018 financial years, compared to that of the average for all eligible employees of the Group.

	% change from 2017 to 2018		
	Salary	Benefits	Annual bonus
Group Chief Executive	2.4	0.0	(100)
Average of other employees	(3.7)	1.5	(15.6)

The Committee is cognisant of the new reporting regulations, which do not come into effect for the Group until the financial year commencing 1 November 2019, which will require companies to publish ratios comparing Chief Executive pay to employee pay. Due to the change in Chief Executive during the year, the Committee does not believe that such a number in isolation would provide meaningful analysis for the reader. The Committee will therefore spend time during the current financial year finalising the most appropriate calculation approach and deciding what additional information can be disclosed to provide additional context. On this basis, the Committee has agreed to publish such ratios on a voluntary basis, commencing with the financial year ending 31 October 2019, which would still be a year earlier than is required by the regulations.

Relative importance of spend on pay

The following table shows the Company's actual spend on pay (for all employees) relative to dividends and retained profits:

	2018 £m	2017 £m	% change
Staff costs	129.2	130.4	(0.9)
Dividends	8.7	6.4	35.9
Retained profits	7.1	113.5	(93.7)

The dividends figures relate to amounts payable in respect of the relevant financial year.

Shareholder voting on the directors' remuneration report at the 2018 Annual General Meeting

At the Annual General Meeting held on 20 March 2018, the resolution relating to the directors' remuneration report received the following votes from shareholders:

	Total number of votes	% of votes cast
Directors' remuneration report		
For	188,620,861	76.71%
Against	57,273,331	23.29%
Total votes cast (for and against excluding withheld votes)	245,894,192	100.0%
Votes withheld ¹	9,078	0.004%
Total votes cast (including withheld votes)	245,903,270	100.0%

Note:

1. A vote withheld is not a vote in law and is not counted in the calculation of the proportion of votes cast "for" and "against" a resolution.

Shareholder voting on the directors' remuneration policy at the 2016 Annual General Meeting

At the Annual General Meeting held on 21 March 2016, the resolution relating to the directors' remuneration policy received the following votes from shareholders:

	Total number of votes	% of votes cast
Directors' remuneration policy		
For	215,625,426	91.12%
Against	21,014,549	8.88%
Total votes cast (for and against excluding withheld votes)	236,639,975	100.0%
Votes withheld ¹	2,094,082	0.88%
Total votes cast (including withheld votes)	238,734,057	100.0%

Note:

1. A vote withheld is not a vote in law and is not counted in the calculation of the proportion of votes cast "for" and "against" a resolution.

Application of the remuneration policy for 2019

Base salary

The executive directors' salaries were reviewed in November 2018. The salary increases, which took effect from 1 January 2019, are set out below. The percentage increase applied to the executive directors' salaries was in line with the average budgeted salary increase for UK employees. Given Michael Ord's relatively recent appointment his salary was not increased.

Executive	Salary as at 1 January 2019	Percentage increase
Michael Ord	£430,000	0%
Andrew Lewis	£343,119	3%
Sarah Ellard	£220,689	3%

Pension/benefits

No changes are proposed to the structure of pension and benefits provision for 2019.

Fees for the Chairman and non-executive directors

As detailed in the remuneration policy, the Company's approach to setting the non-executive directors' remuneration takes account of recognised practice, and is set at a level that is sufficient to attract and retain high-calibre non-executives. Details of the fees that will apply for 2019 are set out below:

	Fee as at 1 January 2019	Percentage increase
Chairman's fee	£200,000	0%
Other non-executive directors' base fee	£55,000	0%
Audit Committee Chair fee	£10,000	0%
Remuneration Committee Chair fee	£10,000	0%

Directors' remuneration report continued

Part B – annual report on remuneration continued

Application of the remuneration policy for 2019 continued

Annual bonus plan

The annual bonus plan for 2019 will operate on a similar basis to 2018. The performance measures and weightings for the annual bonus plan will therefore be as follows:

Measure	As a percentage of maximum bonus opportunity
Earnings per share	40%
Operating cash flow	40%
Personal objectives	20%

The slightly altered performance weightings are intended to place a greater emphasis on financial performance.

Personal objectives have been set to reflect performance in the following key areas:

- Safety, including implementation of the new Group HSE Management System Framework Standard and delivery of an agreed reduction in the Group's Total Recordable Injury Frequency (TRIF) rate.
- Operational improvement, including the establishment of continuous improvement initiatives under the Operational Excellence Programme.
- People management, including talent management, succession planning and leadership/management development.
- Development of an innovation framework to align with the Group's strategy.
- Implementation of the new Operational Framework and associated assurance processes.
- Mobilisation across the US Programs of Record.
- Delivery of the Kilgore transformation project.
- Completion of divestment of commoditised Energetics businesses.

The Committee does not believe that it would be in shareholders' interests to prospectively disclose the financial targets under the annual bonus plan due to issues of commercial sensitivity. However, detailed retrospective disclosure of both the financial targets and the personal objectives, and performance against them, will be included in next year's annual report on remuneration.

No bonus will be payable in respect of the personal objectives unless the Committee is satisfied that this is justified by the Group's underlying performance, including *inter alia* levels of profitability and cash flow.

The 2019 bonus plan is consistent with the remuneration policy detailed on pages 68 to 75, in terms of maximum bonus opportunity, deferred share arrangements and clawback.

Performance Share Plan

It is intended that the performance condition for the annual awards granted to the executive directors under the PSP in 2019 will incorporate two equally weighted metrics, namely growth in adjusted EPS and relative TSR measured against an international peer group of defence sector companies.

25% of each part of the award will vest for threshold or median performance, with full vesting of each part of the award for stretch or upper quartile performance.

The EPS performance condition for the 2019 awards will be measured as follows:

Total compound earnings per share growth over the three-year performance period	% of earnings per share part that may vest
Less than 5% p.a.	0%
5% p.a.	25%
Between 5% p.a. and 10% p.a.	On a straight-line basis between 25% and 100%
10% p.a. or more	100%

The Committee will be making an adjustment to the reported underlying EPS for 2018 to set a baseline EPS for 2018 which reflects the EPS which would have been achieved by the Group had the August incident not occurred. The EPS growth over the three-year performance period will be measured against this adjusted baseline EPS. The adjusted baseline EPS is 11.3p instead of the reported 8.9p.

The TSR performance condition for the 2019 awards will be measured as follows:

Rank of the Company's total shareholder return against the total shareholder return of the members of the comparator group	% of total shareholder return part that may vest
Below median	0%
Median	25%
Between median and upper quartile	On a straight-line basis between 25% and 100%
Upper quartile or above	100%

The Committee has reviewed the TSR peer group and decided to make some changes to make the overall group more relevant and robust. The sector peer group for the 2019 awards therefore comprises: AB Dynamics, Avon Rubber, Babcock, BAE Systems, Bodycote, Cobham, Cohort, Gooch & Housego, Hill & Smith, Leonardo, Meggitt, Morgan Advanced Materials, Oxford Instruments, QinetiQ Rheinmetall, Ricardo, Senior, TT Electronics, Ultra Electronics and XP Power.

Approval of the directors' remuneration report

The directors' remuneration report was approved by the Board on 17 January 2019.

Signed on behalf of the Board

Andrew Davies

Chairman of the Remuneration Committee
17 January 2019

Consolidated income statement

For the year ended 31 October 2018

		2018			2017		
	Note	Underlying performance £m	Non-underlying items ¹ £m	Total £m	Underlying performance £m	Non-underlying items ¹ £m	Total £m
Continuing operations							
Revenue	1,2	297.4	—	297.4	307.1	—	307.1
Operating profit/(loss)	2,4	31.0	(46.9)	(15.9)	31.5	(26.9)	4.6
Finance expense	7	(6.1)	—	(6.1)	(11.3)	—	(11.3)
Profit/(loss) before tax		24.9	(46.9)	(22.0)	20.2	(26.9)	(6.7)
Taxation	8	(5.7)	(13.1)	(18.8)	(3.7)	6.1	2.4
Profit/(loss) after tax		19.2	(60.0)	(40.8)	16.5	(20.8)	(4.3)
Discontinued operations							
Profit/(loss) after tax from discontinued operations	5	6.2	(71.2)	(65.0)	19.5	(8.6)	10.9
Profit/(loss) after tax		25.4	(131.2)	(105.8)	36.0	(29.4)	6.6
		2018			2017		
	Note	Underlying performance	Total		Underlying performance	Total	
Earnings/(loss) per ordinary share							
Continuing operations							
Basic	10	6.9p	(14.6)p		5.9p	(1.5)p	
Diluted	10	6.7p	(14.6)p		5.8p	(1.5)p	
Continuing and discontinued operations							
Basic	10	9.1p	(37.8)p		12.9p	2.4p	
Diluted	10	8.9p	(37.8)p		12.6p	2.3p	

1. Further information about non-underlying items is set out in note 3.

Consolidated statement of comprehensive income

For the year ended 31 October 2018

	Note	2018 £m	2017 £m
(Loss)/profit after tax attributable to equity holders of the parent as reported		(105.8)	6.6
Items that will not be reclassified subsequently to profit and loss			
Actuarial gains on defined benefit pension schemes	30	0.9	11.9
Movement on deferred tax relating to pension schemes	23	(0.1)	(2.0)
		0.8	9.9
Items that may be reclassified subsequently to profit and loss			
Exchange differences on translation of foreign operations		5.2	(11.6)
Current tax on items taken directly to equity		—	(3.1)
Deferred tax on exchange differences on translation of foreign operations	23	(0.5)	0.8
		4.7	(13.9)
Total comprehensive (loss)/income attributable to equity holders of the parent		(100.3)	2.6

Consolidated statement of changes in equity

For the year ended 31 October 2018

	Share capital £m	Share premium account £m	Special capital reserve £m	Revaluation reserve £m	Translation reserve £m	Retained earnings £m	Own shares £m	Total £m
At 1 November 2017	2.8	305.3	12.9	1.1	(24.8)	113.5	(9.6)	401.2
Loss after tax	—	—	—	—	—	(105.8)	—	(105.8)
Other comprehensive (loss)/income	—	—	—	—	(2.4)	8.5	—	6.1
Tax relating to components of other comprehensive income	—	—	—	—	—	(0.6)	—	(0.6)
Total comprehensive loss	—	—	—	—	(2.4)	(97.9)	—	(100.3)
Ordinary shares issued	—	0.1	—	—	—	—	—	0.1
Share-based payments (net of settlement)	—	—	—	—	—	0.1	—	0.1
Dividends paid	—	—	—	—	—	(8.7)	—	(8.7)
Transactions in own shares	—	—	—	—	—	—	1.8	1.8
Transfers between reserves	—	—	—	(0.1)	—	0.1	—	—
At 31 October 2018	2.8	305.4	12.9	1.0	(27.2)	7.1	(7.8)	294.2

	Share capital £m	Share premium account £m	Special capital reserve £m	Revaluation reserve £m	Translation reserve £m	Retained earnings £m	Own shares £m	Total £m
At 1 November 2016	2.8	305.1	12.9	1.1	(20.7)	121.8	(9.6)	413.4
Impact of IFRS 15	—	—	—	—	—	(10.2)	—	(10.2)
Profit after tax	—	—	—	—	—	6.6	—	6.6
Other comprehensive (loss)/income	—	—	—	—	(4.1)	4.4	—	0.3
Tax relating to components of other comprehensive income	—	—	—	—	—	(4.3)	—	(4.3)
Total comprehensive income	—	—	—	—	(4.1)	6.7	—	2.6
Ordinary shares issued	—	0.2	—	—	—	—	—	0.2
Share-based payments (net of settlement)	—	—	—	—	—	1.6	—	1.6
Dividends paid	—	—	—	—	—	(6.4)	—	(6.4)
At 31 October 2017	2.8	305.3	12.9	1.1	(24.8)	113.5	(9.6)	401.2

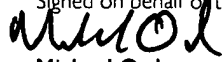
Consolidated balance sheet

As at 31 October 2018

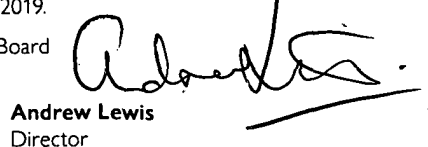
	Note	2018		2017	
		£m	£m	£m	£m
Non-current assets					
Goodwill	11	109.2		125.4	
Development costs	12	24.0		33.7	
Other intangible assets	12	37.6		57.0	
Property, plant and equipment	13	148.1		160.1	
Retirement benefit surplus	30	7.5		—	
Deferred tax	23	36.8		63.2	
			363.2		439.4
Current assets					
Inventories	15	71.4		97.6	
Trade and other receivables	16	62.2		131.0	
Cash and cash equivalents	17	9.6		33.6	
Derivative financial instruments	21	0.1		0.4	
			143.3		262.6
Assets classified as held for sale	29		43.7		—
Total assets			550.2		702.0
Current liabilities					
Borrowings	18	—		(51.6)	
Trade and other payables	19	(68.6)		(111.9)	
Provisions	22	(6.7)		(6.5)	
Current tax		(0.8)		(5.5)	
Derivative financial instruments	21	(0.3)		(0.4)	
			(76.4)		(175.9)
Liabilities directly associated with assets classified as held for sale	29		(26.9)		—
Non-current liabilities					
Borrowings	18,33	(91.3)		(61.9)	
Provisions	22	(14.0)		(8.8)	
Deferred tax	23	(47.1)		(53.5)	
Preference shares	18,24	(0.1)		(0.1)	
Retirement benefit obligations	30	—		(0.6)	
Derivative financial instruments	21	(0.2)		—	
			(152.7)		(124.9)
Total liabilities			(256.0)		(300.8)
Net assets			294.2		401.2
Equity					
Share capital	24	2.8		2.8	
Share premium account	25	305.4		305.3	
Special capital reserve	25	12.9		12.9	
Revaluation reserve	25	1.0		1.1	
Translation reserve		(27.2)		(24.8)	
Retained earnings		7.1		113.5	
		302.0		410.8	
Own shares	26	(7.8)		(9.6)	
Total equity			294.2		401.2

These financial statements of Chemring Group PLC (registered number 86662) were approved and authorised for issue by the Board of directors on 17 January 2019.

Signed on behalf of the Board



Michael Ord
Director



Andrew Lewis
Director

Consolidated cash flow statement

For the year ended 31 October 2018

	Note	2018 £m	2017 £m
Cash flows from operating activities			
Cash generated from continuing underlying operations	31	44.7	41.6
Cash generated from discontinued underlying operations		12.2	5.5
Cash impact of non-underlying items		(7.6)	(6.3)
Cash flows from operating activities		49.3	40.8
Retirement benefit deficit recovery contributions		(7.9)	(5.0)
Tax paid		(5.5)	(3.6)
Net cash inflow from operating activities		35.9	32.2
Cash flows from investing activities			
Purchases of intangible assets		(3.2)	(3.9)
Purchases of property, plant and equipment		(18.8)	(12.6)
Acquisition – deferred consideration		(0.7)	—
Customer funding for capital programmes		2.6	—
Proceeds on disposal of property, plant and equipment		0.4	—
Net cash outflow from investing activities		(19.7)	(16.5)
Cash flows from financing activities			
Dividends paid	9	(8.7)	(6.4)
Finance expense paid		(6.0)	(9.3)
Capitalised facility fees paid		(0.6)	(0.5)
Drawdown of borrowings		26.5	—
Repayments of borrowings		(51.9)	(28.8)
Repayments of obligations under finance leases		—	(0.1)
Net cash outflow from financing activities		(40.7)	(45.1)
Decrease in cash and cash equivalents	32	(24.5)	(29.4)
Cash and cash equivalents at beginning of year		33.6	63.1
Effect of foreign exchange rate changes		0.5	(0.1)
Cash and cash equivalents at end of year	17,33	9.6	33.6

Notes to the Group financial statements

1. Revenue

All of the Group's revenue is derived from the sale of goods and the provision of services. The following table provides an analysis of the Group's revenue by destination:

	Countermeasures £m	Sensors £m	Energetics £m	2018 £m
UK	15.0	46.7	20.5	82.2
US	69.9	25.6	42.1	137.6
Europe	12.7	3.8	18.6	35.1
Asia Pacific	28.1	7.3	2.6	38.0
Middle East	—	3.9	0.2	4.1
Rest of the world	0.3	—	0.1	0.4
	126.0	87.3	84.1	297.4
	Countermeasures £m	Sensors £m	Energetics £m	2017 £m
UK	17.8	43.0	21.8	82.6
US	45.3	29.5	48.5	123.3
Europe	15.9	5.8	18.1	39.8
Asia Pacific	45.8	4.6	0.3	50.7
Middle East	—	8.0	1.1	9.1
Rest of the world	0.5	0.3	0.8	1.6
	125.3	91.2	90.6	307.1

The directors consider that the only countries that are significant in accordance with IFRS 8 *Operating Segments* are the US and the UK.

The following table discloses the split of the Group's revenue between goods and services:

	Countermeasures £m	Sensors £m	Energetics £m	2018 £m
Goods	124.3	22.6	81.1	228.0
Services	1.7	64.7	3.0	69.4
	126.0	87.3	84.1	297.4
	Countermeasures £m	Sensors £m	Energetics £m	2017 £m
Goods	120.8	27.0	87.8	235.6
Services	4.5	64.2	2.8	71.5
	125.3	91.2	90.6	307.1

All revenues recognised arose from contracts with customers.

In 2018 £nil (2017: £0.6m) of revenue was recognised in respect of performance obligations satisfied in previous periods.

As at 31 October 2018 £393.7m (2017: £325.2m) of revenue was outstanding in respect of obligations that were unfulfilled or only partially fulfilled as at the year end. £241.9m (2017: £215.1m) of this revenue is expected to be recognised in the next financial year and £151.8m (2017: £110.1m) in future periods.

Notes to the Group financial statements continued

2. Business segments

IFRS 8 *Operating Segments* requires operating segments to be identified on the basis of internal reports about components of the Group that are regularly reviewed by the Group Chief Executive and the Board to allocate resources to the segments and to assess their performance. For management purposes, the Group's operating and reporting structure clusters similar businesses together within the following three operating segments – Countermeasures, Sensors and Energetics. These segments are the basis on which the Group reports its segmental information. The principal activities of each segment are as follows:

Countermeasures	Development and manufacture of expendable countermeasures for air, sea and land platforms, and land-based electronic warfare equipment.
Sensors	Development and manufacture of IED detection equipment, chemical and biological threat detection equipment, IED electronic countermeasures and network protection technologies.
Energetics	Development, procurement and manufacture of cartridge/propellant actuated devices, pyrotechnic devices for satellite launch and deployment, missile components, propellants, separation sub-systems, actuators and energetic materials.

A segmental analysis of revenue and operating (loss)/profit is set out below:

Year ended 31 October 2018	Countermeasures £m	Sensors £m	Energetics £m	Unallocated £m	Total £m
Revenue	126.0	87.3	84.1	—	297.4
Segment result before depreciation, amortisation, non-underlying items and discontinued operations	23.6	18.5	16.0	(8.1)	50.0
Depreciation	(9.7)	(1.7)	(3.8)	(0.1)	(15.3)
Amortisation	(1.8)	(1.5)	(0.4)	—	(3.7)
Segmental underlying operating profit	12.1	15.3	11.8	(8.2)	31.0
Amortisation of acquired intangibles (note 3)	(0.4)	(6.4)	(4.8)	—	(11.6)
Non-underlying items (note 3)	(15.9)	(3.7)	—	(15.7)	(35.3)
Impact of non-underlying items on profit before tax (note 3)	(16.3)	(10.1)	(4.8)	(15.7)	(46.9)
Segmental operating (loss)/profit	(4.2)	5.2	7.0	(23.9)	(15.9)
Finance expense				(6.1)	(6.1)
Loss before tax				(30.0)	(22.0)
Tax				(18.8)	(18.8)
Loss for the year from continuing operations				(48.8)	(40.8)
Discontinued operations				(65.0)	(65.0)
Loss for the year				(113.8)	(105.8)

2. Business segments continued

Year ended 31 October 2017

	Countermeasures £m	Sensors £m	Energetics £m	Unallocated £m	Total £m
Revenue	125.3	91.2	90.6	—	307.1
Segment result before depreciation, amortisation, non-underlying items and discontinued operations	27.5	19.3	18.3	(10.2)	54.9
Depreciation	(10.8)	(1.8)	(3.7)	(0.1)	(16.4)
Amortisation	(2.3)	(4.1)	(0.5)	(0.1)	(7.0)
Segmental underlying operating profit	14.4	13.4	14.1	(10.4)	31.5
Amortisation of acquired intangibles (note 3)	(0.4)	(6.7)	(5.0)	—	(12.1)
Non-underlying items (note 3)	(3.6)	(5.7)	(5.6)	0.1	(14.8)
Impact of non-underlying items on profit before tax (note 3)	(4.0)	(12.4)	(10.6)	0.1	(26.9)
Segmental operating profit/(loss)	10.4	1.0	3.5	(10.3)	4.6
Finance expense				(11.3)	(11.3)
Loss before tax				(21.6)	(6.7)
Tax				2.4	2.4
Loss for the year from continuing operations				(19.2)	(4.3)
Discontinued operations				10.9	10.9
Profit for the year				(8.3)	6.6

Assets and liabilities by segment are not reported to the Group Chief Executive on a monthly basis, therefore are not used as a key decision making tool and are not disclosed here. A disclosure of non-current assets by location is shown below:

Non-current assets by location	2018 £m	2017 £m
UK	175.8	224.8
US	160.8	186.9
Norway	7.7	5.0
Australia	18.9	22.7
	363.2	439.4

Information on major customers

Included in segmental revenues for continuing operations are revenues of £92.4m (2017: £74.5m), which arose from sales to the Group's largest customer. The largest customer had sales reported in all of the Group's business segments. This was the only individual customer where direct sales accounted for more than 10% of Group revenue from continuing and discontinued operations for the year.

Notes to the Group financial statements continued

3. Alternative performance measures

In accordance with our accounting policy we have presented the following reconciliation of Alternative Performance Measures used throughout this report to their IFRS equivalent measures as follows:

	2018 £m	2017 £m
Non-underlying items and non-underlying measures		
Acquisition and disposal-related costs	(4.1)	(2.1)
Business restructuring costs	(8.1)	(14.0)
Less non-underlying depreciation in business restructuring costs	0.7	1.0
Legal costs	(12.8)	(0.4)
Change of Chief Executive	(1.7)	—
Pension scheme charge in respect of GMP equalisation court ruling	(0.8)	—
(Loss)/gain on the movement in the fair value of derivative financial instruments (note 21)	(0.4)	1.7
Impact of non-underlying items on EBITDA	(27.2)	(13.8)
Non-underlying depreciation in business restructuring costs	(0.7)	(1.0)
Impairment of capitalised development costs	(7.4)	—
Intangible amortisation arising from business combinations (note 12)	(11.6)	(12.1)
Impact of non-underlying items on profit before tax	(46.9)	(26.9)
Tax impact of non-underlying items	(13.1)	6.1
Impact of non-underlying items on continuing profit after tax	(60.0)	(20.8)
Discontinued operations after tax	(71.2)	(8.6)
Impact of non-underlying items on profit after tax	(131.2)	(29.4)
Underlying profit after tax	25.4	36.0
Statutory (loss)/profit after tax	(105.8)	6.6

The impact of non-underlying items on statutory basic and diluted EPS, as well as a reconciliation to the IFRS equivalent, is presented in note 10. The impact of non-underlying items on cash generated from operating activities, as well as a reconciliation to the IFRS equivalent, is presented in note 31.

Acquisition and disposal-related costs

Acquisition and disposal-related costs of £4.1m (2017: £2.1m) relate to transaction costs and an earnout payment on the acquisition of Wallop Defence Systems' assets for which no provision was made at the time of acquisition. Additional payments of up to £4m, although not probable and considered remote, conditional upon the receipt of specific orders, may also be made over the next year and have not been provided for in these accounts.

Business restructuring costs

In 2018, business restructuring costs of £8.1m (2017: £14.0m) relate to the non-capital costs/asset write offs and demolition element of the Tennessee site transformation.

Legal costs

In 2018, legal costs of £12.8m (2017: £0.4m) were in relation to ongoing investigations. This includes a provision for estimated future committed costs of £5.0m.

Change of Chief Executive

The costs associated with the change of Chief Executive were £1.7m (2017: £nil). As disclosed in the directors' report, Michael Flowers stepped down as Group Chief Executive on 30 June 2018 and Michael Ord was appointed as Group Chief Executive on 1 July 2018.

Pension scheme charge in respect of GMP equalisation court ruling

On 26 October 2018, the High Court handed down a judgement involving the Lloyds Banking Group's defined benefit pension schemes. The judgement concluded that pension schemes should be amended to equalise pension benefits for men and women in relation to guaranteed minimum pension benefits. We are working with our actuarial advisers to understand the extent to which the judgement crystallises any additional liabilities for the Group UK defined benefit pension scheme. We are early in the evaluation process, but we estimate that the additional liability could be in the region of £0.4m and £1.2m, therefore we have recognised £0.8m in our 2018 results. Subsequent to further assessment with our advisers, any necessary further adjustment is expected to be recognised in the first half of our 2019 financial year.

3. Alternative performance measures continued

Derivative financial instruments

Included in non-underlying items is a £0.4m loss (2017: £1.7m gain) on the movement in fair value of derivative financial instruments. This is excluded from underlying earnings to ensure the recognition of the gain or loss on the derivative matches the timing of the underlying transaction.

Impairment of capitalised development costs

In 2018, an impairment of capitalised product development costs of £7.4m (2017: £nil) was recognised following the appointment of a new Chief Executive who conducted a strategic review of the Group's product portfolio to rationalise future resources on areas where the Group had a niche position and competitive advantage. The carrying value of the products for which an impairment charge was recognised exceeded the expected future value, hence an impairment charge was recognised in the year.

Amortisation of acquired intangibles

Also included is the amortisation charge arising from business combinations of £11.6m (2017: £12.1m). The total amortisation charge arising from business combinations for the year ended 31 October 2018 was £14.4m, of which £11.6m relates to continuing operations and £2.8m relates to discontinued operations. Amortisation of acquired intangibles arising from business combinations is associated with acquisition costs under IFRS 3 *Business Combinations*. As such, these costs are not reflective of the underlying activities of the Group and therefore have been excluded from the underlying measures.

Tax

The tax impact of non-underlying items comprises a £17.4m charge in respect of the enactment of the US Tax Cuts and Jobs Act on 22 December 2017, and a £4.3m tax credit on the above non-underlying items.

These significant one-off tax charges/credits have arisen from a change in legislation, and as such have been removed from underlying results to aid comparability and understanding of the Group's performance.

The items above are all removed from underlying measures in line with our accounting policy. The removal of these items allows for improved comparability between reporting periods.

Discontinued operations

Further details on the results of discontinued operations is presented in note 5.

Net debt

An analysis and reconciliation of net debt is presented in notes 32 and 33.

EBITDA

In our financial review we present measures of continuing EBITDA which is calculated as follows:

	2018 £m	2017 £m
Operating (loss)/profit	(15.9)	4.6
Amortisation arising from business combinations (note 4)	11.6	12.1
Amortisation arising from development costs (note 4)	3.6	6.9
Amortisation arising from patents and licences (note 4)	0.1	0.1
Impairment of capitalised development costs	7.4	—
Depreciation – continuing	16.0	17.4
EBITDA	22.8	41.1
Non-underlying items	27.2	13.8
Underlying EBITDA	50.0	54.9

Constant currency revenue and operating profit

In our financial review we present a measure of constant currency revenue and operating profit. This is calculated by translating our results for the year ended 31 October 2018 at the average exchange rates for the comparative year ended 31 October 2017.

Notes to the Group financial statements continued

4. Operating profit

Operating profit from continuing operations is stated after charging/(crediting):

		2018 £m	2017 £m
Research and development costs	– customer-funded	36.2	41.1
	– internally-funded	4.6	6.8
Amortisation	– arising from business combinations	11.6	12.1
	– development costs	3.6	6.9
	– patents and licences	0.1	0.1
Depreciation of property, plant and equipment	– owned assets	14.9	16.3
	– leased assets	0.4	0.1
Loss on disposal of non-current assets		0.2	0.2
Operating lease rentals	– plant and machinery	1.0	1.2
	– other	0.4	0.5
Government grants		—	(0.1)
Foreign exchange (gains)/losses		(0.7)	1.2
Staff costs (note 6)		112.3	115.2
Cost of inventories recognised as an expense		79.9	95.0

A detailed analysis of the auditor's remuneration on a worldwide basis is set out below:

	2018 £m	2017 £m
Auditor's remuneration		
Fees payable to the Company's auditor and its associates for:		
– the audit of the Company's annual accounts	0.2	0.3
– the audit of the Company's subsidiaries, pursuant to legislation	0.3	0.5
	0.5	0.8
Other services		
Audit-related assurance services	0.1	0.1
	0.6	0.9

Included in the fees for the audit of the Company's annual accounts is £0.1m (2017: £0.1m) in respect of the parent company.

A description of the work of the Audit Committee is set out in the Audit Committee report on pages 62 to 65, and includes an explanation of how auditor objectivity and independence is safeguarded when non-audit services are provided by the auditor. No services were provided by the auditor pursuant to contingent fee arrangements.

As detailed in the Audit Committee report, KPMG was appointed as the Group's external auditor during the year, in place of Deloitte, thus 2018 fees relate to KPMG and 2017 fees relate to Deloitte.

5. Results from discontinued operations

As disclosed in the Chairman's statement on page 6, a strategic review of the Group's Energetics portfolio was conducted during the year. The Board concluded that the future focus within the Energetics segment should be on the Energetic Devices businesses. It therefore made the decision to exit the commodity Energetics businesses.

	2018 £m	2017 £m
Revenue	138.6	240.4
Underlying operating profit from discontinued operations	8.0	23.9
Tax on the underlying operating profit from discontinued operations	(1.8)	(4.4)
Underlying profit after tax	6.2	19.5
Profit after tax is analysed as:		
Before exceptional items	6.2	19.5
Exceptional items	(72.0)	(9.7)
Tax on exceptional items	0.8	1.1
	(71.2)	(8.6)
(Loss)/profit for the year from discontinued operations	(65.0)	10.9

In 2018 the exceptional items include the amortisation of acquired intangibles of £2.7m and an impairment loss of £69.3m in respect of the carrying values of Chemring Defence UK Limited, Chemring Ordnance Inc., B.D.L. Systems Limited and Richmond Electronics & Engineering Limited. Amortisation of acquired intangibles arising from business combinations is associated with acquisition costs under IFRS 3 *Business Combinations*. As such, these costs are not reflective of the underlying activities of the discontinued operations and therefore have been treated as exceptional items. Impairment losses have been removed from underlying measures to allow for improved comparability between reporting periods. This is in line with the Group's accounting policy.

In 2017 the exceptional items included a total impairment loss of £9.8m in respect of the Chemring Defence UK business and the amortisation of acquired intangibles of £2.9m, offset by the release of provisions in respect of previously disposed businesses.

The cash flow from discontinued operations is as follows:

	2018 £m	2017 £m
Discontinued operations		
Operating cash flow from discontinued operations	12.2	5.5
Cash impact of non-underlying items from discontinued operations	(0.1)	(0.7)
Net cash inflow from discontinued operating activities	12.1	4.8
Net cash outflow from discontinued investing activities	(1.2)	(2.8)
Net cash inflow from discontinued operations	10.9	2.0

6. Staff costs

The average monthly number of employees, including executive directors, was:

	2018 Number	2017 Number
Direct	1,323	1,223
Indirect	882	853
Continuing operations	2,205	2,076
Discontinued operations	418	434
	2,623	2,510

Notes to the Group financial statements continued

6. Staff costs continued

At the year end, the number of employees was 2,559 of which 353 are at discontinued operations (2017: 2,651 of which 476 were at discontinued operations). The costs incurred in respect of employees at continuing operations, including share-based payments, were:

	2018 £m	2017 £m
Wages and salaries	94.8	97.0
Social security costs	10.6	11.0
Other pension costs	5.8	5.5
Share-based payment charge	1.1	1.7
Staff costs	112.3	115.2

7. Finance expense

	2018 £m	2017 £m
Bank overdraft and loan interest	1.2	1.1
Loan notes interest	3.5	7.4
Amortisation of debt finance costs	1.3	2.4
Interest cost of retirement benefit obligations (note 30)	0.1	0.4
Finance expense	6.1	11.3

There are future contractual cash flows for finance expenses as at 31 October 2018 of £5.8m (2017: £10.8m) of which £3.7m (2017: £5.2m) is due within one year and the remainder in future years.

8. Taxation

	2018 £m	2017 £m
Current tax (charge)/credit – current year	(9.1)	(8.8)
Current tax (charge)/credit – prior year	7.6	1.5
Deferred tax (charge)/credit – current year (note 23)	(14.7)	11.4
Deferred tax (charge)/credit – prior year (note 23)	(2.6)	(1.7)
Tax (charge)/credit for continuing operations	(18.8)	2.4

Income tax in the UK is calculated at 19.0% (2017: 19.4%) of the taxable profit for the year. Tax for other jurisdictions is calculated at the rates prevailing in those jurisdictions. The deferred tax charge of £17.3m above differs to the deferred tax charged to income disclosed in note 23 by £0.8m. This amount relates to deferred tax charged on discontinued operations.

The tax (charge)/credit for continuing operations can be reconciled to the income statement as follows:

	2018 £m	2017 £m
Loss before tax from continuing operations	(22.0)	(6.7)
Tax at the UK corporation tax rate of 19.0% (2017: 19.4%)	4.2	1.3
Expenses not deductible for tax purposes	(7.4)	(2.3)
Changes in tax rates	(4.7)	(0.3)
Tax losses not recognised/carried forward	0.6	(0.7)
Prior period adjustments	5.0	(0.2)
Adjustment to provision for interest restriction (note 23)	(14.8)	2.4
Overseas profits taxed at rates different to the UK standard rate	(1.7)	2.2
Tax (charge)/credit for continuing operations	(18.8)	2.4

In addition to the tax (charge)/credit in the income statement, a tax charge of £0.6m (2017: £4.3m) has been recognised in equity in the year.

The effective rate of tax on the profit before tax of the Group is 85.5% (2017: 35.8%), and the effective rate of tax on the underlying profit before tax of the Group is 22.9% (2017: 18.3%). The increase in the effective rate of tax on the results of the Group is primarily due to the increased proportion of US profits which are taxed at a higher rate, changes to the amounts of deferred tax assets considered recoverable in respect of US interest limitations, the non-deductibility of certain non-underlying items, and prior year adjustments.

8. Taxation continued

Factors affecting the tax charge in future years

The Group's future tax charge and effective tax rate could be affected by several factors including: tax reform in countries around the world, including any arising from the implementation of the OECD's BEPS actions and European Commission initiatives such as the proposed tax and financial reporting directive or as a consequence of state aid investigations, future corporate acquisitions and disposals and any restructuring of our business.

See note 23 for detail on the impact of the US Tax Cuts and Jobs Act.

9. Dividends

	2018 £m	2017 £m
Dividends paid on ordinary shares of 1p each		
Final dividend of 2.0p per share for the year ended 31 October 2017 (1.3p per share for the year ended 31 October 2016)	5.6	3.6
Interim dividend of 1.1p per share for the year ended 31 October 2018 (1.0p per share for the year ended 31 October 2017)	3.1	2.8
Total dividends	8.7	6.4

Subject to approval at the Annual General Meeting, the final dividend of 2.2p per ordinary share will be paid on 18 April 2019 to all shareholders registered at the close of business on 5 April 2019. The total dividend for the year will therefore be 3.3p (2017: 3.0p) per ordinary share. As the final dividend is subject to approval by the shareholders at the Annual General Meeting, it has not been included as a liability in the financial statements for the year ended 31 October 2018.

The cumulative preference shares carry an entitlement to a dividend at the rate of 7p per share per annum which was paid in equal instalments on 30 April 2018 and 31 October 2018.

10. Earnings/(loss) per ordinary share

Earnings per share is based on the average number of shares in issue, excluding own shares held, of 279,768,360 (2017: 279,244,616).

Diluted earnings per share has been calculated using a diluted average number of shares in issue, excluding own shares held, of 285,993,316 (2017: 285,023,906).

The number of shares used in the calculations are as follows:

	2018 Ordinary shares Number millions	2017 Ordinary shares Number millions
Weighted average number of shares used to calculate basic earnings per share	279.8	279.2
Additional shares issuable other than at fair value in respect of options outstanding	6.2	5.8
Weighted average number of shares used to calculate diluted earnings per share	286.0	285.0

The earnings used in the calculations of the various measures of earnings per share are as follows:

	2018			2017		
	£m	Basic EPS (pence)	Diluted EPS (pence)	£m	Basic EPS (pence)	Diluted EPS (pence)
Underlying profit after tax	19.2	6.9	6.7	16.5	5.9	5.8
Non-underlying items (note 3)	(60.0)			(20.8)		
Loss from continuing operations	(40.8)	(14.6)	(14.6)	(4.3)	(1.5)	(1.5)
(Loss)/profit from discontinued operations	(65.0)	(23.2)	(23.2)	10.9	3.9	3.8
Total (loss)/profit after tax	(105.8)	(37.8)	(37.8)	6.6	2.4	2.3

Notes to the Group financial statements continued

11. Goodwill

	£m
Cost	
At 1 November 2016	206.5
Foreign exchange adjustments	(10.4)
At 31 October 2017	196.1
Foreign exchange adjustments	4.7
At 31 October 2018	200.8
Accumulated impairment losses	
At 1 November 2016	(73.6)
Impairment	(3.0)
Foreign exchange adjustments	5.9
At 31 October 2017	(70.7)
Impairment	(18.2)
Foreign exchange adjustments	(2.7)
At 31 October 2018	(91.6)
Carrying amount	
At 31 October 2018	109.2
At 31 October 2017	125.4

Goodwill acquired in a business combination is allocated at acquisition to the cash-generating units ("CGUs") that are expected to benefit from that business combination. The carrying amount of the goodwill has been allocated to the Group's principal CGUs, being the individual operating companies described in the operating segment descriptions on pages 20 to 25.

The Group tests goodwill at least annually for impairment. Tests are conducted more frequently if there are indications that goodwill might be impaired. The recoverable amounts of the CGUs are determined from value-in-use calculations. The key assumptions for the value-in-use calculations have been individually estimated for each CGU and include the discount rates and expected changes to cash flows during the period for which management has detailed plans, which are underpinned by the winning and execution of key contracts.

Management estimates discount rates using pre-tax rates that reflect current market assessments of the time value of money and the risks specific to each of the CGUs. Pre-tax discount rates, derived from the Group's post-tax weighted average cost of capital of 7.3% (2017: 6.9%) which have been adjusted for a premium specific to each of the CGUs to account for differences in currency risk, country risk and other factors affecting specific CGUs, have been used to discount projected cash flows. These premiums range from 2% to 4% (2017: 2% to 4%).

Expected changes to cash flows during the period for which management has detailed plans relate to revenue forecasts, expected contract outcomes and forecast operating margins in each of the operating companies. The relative value ascribed to each varies between CGUs as the budgets are built up from the underlying operating companies within each CGU, but the key assumption for each CGU is that demand from the US and UK Governments and customers in our other principal markets for the product offering in each company will recover from its current low base. In the case of Chemring Sensors & Electronic Systems, Inc. CGU, this will be to a level seen historically and in the case of the Roke Manor Research Limited and Chemring Energetic Devices, Inc. CGUs it will continue at a similar or slightly enhanced level.

The calculations have used the Group's forecast figures for the next five years. This is based on data derived from the five-year plan that has been approved by the Board. At the end of five years, the calculations assume the performance of the CGUs will grow at a nominal annual rate of 0.5% in perpetuity. Growth rates are based on management's view of industry growth forecasts. Changes in selling prices and direct costs are based on past practices and expectations of future changes.

The weighted average cost of capital is derived using beta values of a comparator group of defence companies adjusted for funding structures as appropriate.

11. Goodwill continued

The pre-tax discount rates used for value-in-use calculations and the carrying value of goodwill by the principal CGUs are:

	2018 %	2017 %	2018 £m	2017 £m
Roke Manor Research Limited	11.9	11.5	28.4	28.4
Chemring Energetics UK Limited	10.6	10.4	14.6	18.1
Chemring Sensors & Electronic Systems, Inc.	10.9	13.9	36.8	35.4
Chemring Energetic Devices, Inc.	13.3	13.7	16.3	15.6
Other			13.1	27.9
			109.2	125.4

The pre-tax discount rates used for other CGUs ranged from 11.5% to 14.7% (2017: 11.7% to 19.3%).

In 2018 the Board has concluded that the goodwill relating to B.D.L. Systems Limited and Richmond Electronics & Engineering Limited was fully impaired and a charge of £14.7m was recorded. This assessment was based on current market conditions. B.D.L. Systems Limited and Richmond Electronics & Engineering Limited, which manufacture explosive ordnance disposal products, are part of the Sensors segment and were included in the CGUs classified as "Other" in the above table.

In addition, the Board has concluded that the goodwill relating to the maintenance and repair business at Chemring Energetics UK Limited was fully impaired and a charge of £3.5m was recorded. This assessment was based on current market conditions. Chemring Energetics UK Limited is part of the Energetics segment.

In 2017 the Board concluded that the goodwill relating to Chemring Defence UK Limited was impaired and a charge of £3.0m was recorded. This assessment was based on current market conditions in the military and law enforcement pyrotechnics market.

Following a detailed review, no other impairment losses were recognised in the years ended 31 October 2018 and 31 October 2017 for continuing operations.

Stress testing was performed on the forecasts to consider the impact of reasonably possible worst case scenarios in the first two years, including significant delays to major contracts and new product launches followed by a 10% fall in the forecast cash flows. Even under these circumstances, no other CGUs would require an impairment against goodwill.

A 1% addition to the discount rate for each CGU was also separately modelled, and would not result in any CGUs requiring any further impairment.

Setting long-term growth rates beyond the five-year forecast period to zero would not result in any CGUs requiring any further impairment.

Notes to the Group financial statements continued

12. Development costs and other intangible assets

	Development costs £m	Acquired technology £m	Acquired customer relationships £m	Patents and licences £m	Total £m
Cost					
At 1 November 2016	64.4	101.1	87.5	1.0	189.6
Additions	3.9	—	—	0.1	0.1
Disposals	(3.6)	—	(4.3)	(0.5)	(4.8)
Foreign exchange adjustments	(3.0)	(7.4)	(5.9)	(0.1)	(13.4)
At 31 October 2017	61.7	93.7	77.3	0.5	171.5
Additions	3.0	—	—	—	—
Disposals	(3.1)	(1.1)	—	(0.2)	(1.3)
Foreign exchange adjustments	1.1	3.3	2.5	0.1	5.9
At 31 October 2018	62.7	95.9	79.8	0.4	176.1
Amortisation					
At 1 November 2016	(23.5)	(60.8)	(51.2)	(0.5)	(112.5)
Charge	(6.9)	(8.6)	(6.4)	(0.2)	(15.2)
Disposals	1.6	—	4.3	0.5	4.8
Foreign exchange adjustments	0.8	4.7	3.6	0.1	8.4
At 31 October 2017	(28.0)	(64.7)	(49.7)	(0.1)	(114.5)
Charge	(3.6)	(8.2)	(6.1)	(0.1)	(14.4)
Disposals	2.8	0.8	—	0.1	0.9
Impairment	(9.5)	(0.7)	(5.4)	—	(6.1)
Foreign exchange adjustments	(0.4)	(2.5)	(1.8)	(0.1)	(4.4)
At 31 October 2018	(38.7)	(75.3)	(63.0)	(0.2)	(138.5)
Carrying amount					
At 31 October 2018	24.0	20.6	16.8	0.2	37.6
At 31 October 2017	33.7	29.0	27.6	0.4	57.0

Acquired intangibles are recognised at fair value on acquisition and are amortised over their estimated useful lives. Fair values for acquired intangibles are assessed by reference to future estimated cash flows, discounted at an appropriate rate to present value, or by reference to the amount that would have been paid in an arm's length transaction between two knowledgeable and willing parties. Other intangible assets are recognised at cost and are amortised over their estimated useful economic lives, which are set out in the accounting policies section.

During the year ended 31 October 2018, the Group recognised an impairment of capitalised development costs of £9.5m (2017: £nil) following the appointment of a new Chief Executive who conducted a strategic review of the Group's product portfolio. This review was performed to rationalise the future resources on areas where the Group has a niche position and competitive advantage. Of the total impairment charge, £0.9m of the impairment charge relates to discontinued operations. The £7.4m impairment charge, as disclosed in note 3, relates to continuing operations, net of the release of an associated government grant.

Included within the development costs of £24.0m, individually material balances relate to Joint Biological Tactical Detection System £8.9m (2017: £8.1m) and Next Generation Chemical Detector £9.8m (2017: £8.4m). Development costs are amortised over their useful economic lives, estimated to be between three and ten years, with the remaining amortisation periods for these assets ranging up to eight years.

Acquired technology of £20.6m includes individually material balances relating to Chemring Sensors & Electronic Systems £12.6m (2017: £16.1m), Chemring Energetic Devices £5.6m (2017: £8.7m) and Roke £2.1m (2017: £2.6m). The remaining amortisation periods for these assets are five years, nine years and four years respectively.

Acquired customer relationships of £16.8m include individually material balances relating to Chemring Energetic Devices £10.5m (2017: £11.6m), Chemring Ordnance £nil (2017: £7.1m), Chemring Sensors & Electronic Systems £3.4m (2017: £4.0m) and Roke £2.1m (2017: £3.3m). The remaining amortisation periods for these assets are eight years, nil years, five years and two years respectively.

An impairment charge against acquired technology (£0.7m) and acquired customer relationships (£5.4m) has been recognised in respect of the disposal group in 2018, and forms part of the overall impairment loss of £69.3m as disclosed in note 29.

13. Property, plant and equipment

	Land and buildings £m	Plant and equipment £m	Total £m
Cost or valuation			
At 1 November 2016	121.9	132.3	254.2
Additions	1.5	10.9	12.4
Disposals	(0.7)	(6.0)	(6.7)
Foreign exchange adjustments	(5.5)	(8.3)	(13.8)
At 31 October 2017	117.2	128.9	246.1
Additions	7.1	14.0	21.1
Disposals	(1.2)	(7.4)	(8.6)
Foreign exchange adjustments	1.8	2.3	4.1
At 31 October 2018	124.9	137.8	262.7
Depreciation			
At 1 November 2016	(16.2)	(58.1)	(74.3)
Charge	(3.9)	(15.6)	(19.5)
Impairment	(3.1)	(2.3)	(5.4)
Disposals	0.6	5.7	6.3
Foreign exchange adjustments	1.6	5.3	6.9
At 31 October 2017	(21.0)	(65.0)	(86.0)
Charge	(3.6)	(14.1)	(17.7)
Impairment	(10.9)	(4.8)	(15.7)
Disposals	0.6	6.6	7.2
Foreign exchange adjustments	(0.7)	(1.7)	(2.4)
At 31 October 2018	(35.6)	(79.0)	(114.6)
Carrying amount			
At 31 October 2018	89.3	58.8	148.1
At 31 October 2017	96.2	63.9	160.1

In 2018, there was no interest capitalised in the year (2017: £nil). £1.1m (2017: £1.2m) of capitalised interest was charged as depreciation and £0.4m (2017: £nil) was disposed of. This results in a net book value for capitalised interest of £10.8m (2017: £12.3m).

In 2018, impairment losses were recognised in respect of Chemring Ordnance Inc. following assessment of its carrying value.

Land and buildings were revalued at 30 September 1997 by Chestertons Chartered Surveyors, independent valuers not connected with the Group, on the basis of depreciated replacement cost for two pyrotechnic sites and on open market for the remainder, which represent Level 2 measurements in the fair value hierarchy.

	2018 £m	2017 £m
30 September 1997 depreciated replacement cost	5.8	5.8
Freehold at cost	119.1	111.4
Cost of land and buildings as at 31 October 2018	124.9	117.2

If stated under historical cost principles, the comparable amounts for the total of land and buildings would be:

	2018 £m	2017 £m
Cost	122.9	115.2
Accumulated depreciation	(34.7)	(20.3)
Historical cost value	88.2	94.9

All other tangible fixed assets are stated at historical cost.

At 31 October 2018, the Group had entered into contractual commitments for the acquisition of property, plant and equipment amounting to £10.8m (2017: £2.8m).

Notes to the Group financial statements continued

14. Subsidiary undertakings

All subsidiary undertakings have been reflected in these financial statements. The subsidiary undertakings held at 31 October 2018, all 100% owned by the Group, are shown below. All of these subsidiary undertakings are wholly controlled by Chemring Group PLC.

Subsidiary undertaking	Country of incorporation (or registration) and operation	Operating segment
Chemring Australia Pty Limited	Australia	Countermeasures
B.D.L. Systems Limited	England	Dormant
Celco Industries (USA) Limited	England	Dormant
Chemring Countermeasures Limited	England	Countermeasures
Chemring Defence UK Limited	England	Energetics
Chemring Energetics Limited	England	Dormant
Chemring Europe Limited	England	Non-trading
Chemring Finance Europe Investments Limited	England	Non-trading
Chemring Finance Europe Limited	England	Non-trading
Chemring International Limited	England	Dormant
Chemring Investments Limited	England	Non-trading
Chemring Limited	England	Dormant
Chemring North America Unlimited	England	Holding company
Chemring Prime Contracts Limited	England	Energetics
Chemring Technology Solutions Limited	England	Sensors
CHG Design Limited	England	Dormant
CHG Overseas Investments Limited	England	Non-trading
CHG Overseas Limited	England	Holding company
Chemring UAE Limited	England	Non-trading
Coated Electrodes UK Limited	England	Dormant
Greys Exports Limited	England	Dormant
Haley and Weller Limited	England	Dormant
Karma Industries No 1 Limited	England	Dormant
Karma Industries No 2 Limited	England	Dormant
Kembrey Corporate Trustee Limited	England	Dormant
Kembrey Electronics Limited	England	Dormant
Kembrey Engineering Limited	England	Dormant
Kembrey Group Limited	England	Dormant
Kembrey Industries Limited	England	Dormant
Kembrey Limited	England	Dormant
Kembrey Technologies Limited	England	Dormant
Leaffield Engineering Limited	England	Dormant
Nobel Energetics Limited	England	Dormant
Parkway No 3 Limited	England	Dormant
Parkway No 7 Limited	England	Dormant
Parkway No 8 Limited	England	Dormant
Parkway No 9 Limited	England	Dormant
Parkway No 10 Limited	England	Non-trading
Protox Environmental Systems Limited	England	Dormant
PW Defence Limited	England	Dormant
Richmond EEI Limited	England	Dormant
Richmond Electronics & Engineering Limited	England	Dormant
Ripault Drivex Limited	England	Dormant
Roke Manor Research Limited	England	Sensors
Sarclad Rolltex Limited	England	Dormant
Schermuly Limited	England	Dormant
Chemring Luxembourg Finance SARL	Luxembourg	Holding company

14. Subsidiary undertakings continued

	Country of incorporation (or registration) and operation	Operating segment
Subsidiary undertaking continued		
Chemring Luxembourg Holding SARL	Luxembourg	Holding company
Chemring Nobel AS	Norway	Energetics
Chemring Energetics UK Limited	Scotland	Energetics
Alloy Surfaces Company, Inc.	US	Countermeasures
ASC Realty LLC	US	Property holding company
Chemring Energetic Devices, Inc.	US	Energetics
Chemring Military Products, Inc.	US	Energetics
Chemring North America Administration, Inc.	US	Dormant
Chemring North America Group, Inc.	US	Holding company
Chemring Ordnance, Inc.	US	Energetics
CHG Flares, Inc.	US	Holding company
CHG Group, Inc.	US	Head office
Kilgore Flares Company LLC	US	Countermeasures
Chemring Sensors & Electronic Systems, Inc.	US	Sensors
Tactical Systems and Ordnance, Inc.	US	Sensors

During the year the Group disposed of one of its Norwegian subsidiaries, 3d-Radar AS (note 29), and disposed of its only associated undertaking, Chemring Aasia Services Pvt Limited. The Group owed 49% of the associated undertaking, which did not trade during the period.

CHG Overseas Limited, Chemring North America Unlimited, Parkway No 10 Limited, Chemring Investments Limited, Chemring Energetics Limited and CHG Overseas Investments Limited are exempt from the requirement to file audited accounts for the year ended 31 October 2018 by virtue of section 479A of the Companies Act 2006. See page 150 for the registered offices of the subsidiary undertakings.

15. Inventories

	2018 £m	2017 £m
Raw materials	30.9	45.7
Work in progress	21.9	30.6
Finished goods	18.6	21.3
	71.4	97.6

There are no significant differences between the replacement cost of inventory and the carrying amount shown above. The Group recognised £9.6m (2017: £8.8m) as a write down of inventories to net realisable value for continuing operations. See note 4 for details of cost of inventories recognised as an expense.

16. Trade and other receivables

	2018 £m	2017 £m
Trade receivables	45.8	92.9
Allowance for doubtful debts	(0.4)	(0.9)
	45.4	92.0
Contract receivables	—	0.7
Advance payments to suppliers	0.7	25.8
Other receivables	3.5	1.2
Prepayments and accrued income	12.6	11.3
	62.2	131.0

All amounts shown above are due within one year.

The average credit period taken by customers on sales of goods, calculated using a countback basis, is 30 days (2017: 34 days). No interest is charged on receivables from the date of invoice to payment.

Notes to the Group financial statements continued

16. Trade and other receivables continued

The Group's policy is to provide in full for trade receivables outstanding for more than 120 days beyond agreed terms, unless there are facts and circumstances that support recoverability.

The directors consider that the carrying amount of trade and other receivables approximates to their fair values.

17. Cash and cash equivalents

Bank balances and cash comprise cash held by the Group and short-term deposits with an original maturity of three months or less. The carrying amount of these assets approximates to their fair value.

18. Borrowings

		2018 £m	2017 £m
Within current liabilities			
Loan notes	– US dollar denominated	—	46.1
	– Sterling denominated	—	5.3
Short-term borrowings	– US dollar denominated	—	0.2
Borrowings due within one year		—	51.6
Within non-current liabilities			
Bank borrowings		25.9	—
Loan notes	– US dollar denominated	65.4	61.9
Preference shares		0.1	0.1
Borrowings due after more than one year		91.4	62.0
Total borrowings		91.4	113.6

Analysis of borrowings by currency:

	2018 £m	2017 £m
Sterling	26.0	5.4
US dollar	65.4	108.2
	91.4	113.6

The weighted average interest rates paid were as follows:

	2018 %	2017 %
Bank overdrafts	2.1	1.9
UK bank loans	– Sterling denominated	2.1
Loan notes	– Sterling denominated	6.8
	– US dollar denominated	5.7–6.3
		6.0–6.7

An analysis of borrowings by maturity is as follows:

	2018				2017			
	Bank loans and overdrafts £m	Loan notes £m	Preference shares £m	Total £m	Bank loans and overdrafts £m	Loan notes £m	Preference shares £m	Total £m
Borrowings falling due:								
– within one year	—	—	—	—	0.2	51.4	—	51.6
Borrowings falling due:								
– within one to two years	—	65.4	—	65.4	—	—	—	—
– within two to five years	25.9	—	—	25.9	—	61.9	—	61.9
– after five years	—	—	0.1	0.1	—	—	0.1	0.1
	25.9	65.4	0.1	91.4	—	61.9	0.1	62.0
Total borrowings	25.9	65.4	0.1	91.4	0.2	113.3	0.1	113.6

18. Borrowings continued

The Group has a £90.0m revolving credit facility. The revolving credit facility was established in October 2018, is with a syndicate of four banks and has a four-year initial term with options to extend by a further two years. In addition, the Group has ancillary UK facilities of £36.0m in respect of bonding and trade finance requirements, and a £7.8m facility to fulfil US trade finance and working capital requirements. None of the borrowings in the current or the prior year were secured.

There have been no breaches of the terms of the loan agreements during the current or prior year.

The Group has the following undrawn borrowing facilities available, in respect of which all conditions precedent have been met. Interest costs under these facilities are charged at floating rates.

	2018 £m	2017 £m
Undrawn borrowing facilities	68.1	106.0

The Group is subject to two key financial covenants, which are tested quarterly. These covenants relate to the leverage ratio, being the ratio between underlying earnings before interest, tax, depreciation and amortisation ("underlying EBITDA") and debt, and the interest cover ratio between underlying EBITDA and finance costs. The calculation of these ratios involves the translation of non-sterling denominated debt using average, rather than closing, rates of exchange. The Group complied with these covenants throughout the year.

19. Trade and other payables

	2018 £m	2017 £m
Within current liabilities		
Trade payables	12.1	37.7
Other payables	20.9	20.0
Interest payable	1.7	3.2
Other tax and social security	3.3	3.7
Advance receipts from customers	5.7	30.7
Accruals	12.5	14.3
Deferred income	12.4	2.3
	68.6	111.9

Trade payables and accruals principally comprise amounts outstanding for trade purchases and ongoing costs. Advance receipts from customers arise on larger contracts to fund working capital. The directors consider that the carrying amount of payables approximates to their fair value.

The average credit period taken on purchases of goods is 34 days (2017: 42 days) using year-end trade payables divided by cost of sales. No interest is payable on trade payables from the date of invoice to payment.

20. Financial risk management

The Group uses financial instruments to manage financial risk wherever it is appropriate to do so. The main risks addressed by financial instruments are liquidity risk, foreign currency risk, interest rate risk and credit risk. The Group's policies in respect of the management of these risks, which remained unchanged throughout the year, are set out below.

(a) Credit risk

Credit risk is the risk of financial loss to the Group if a customer or counterparty to a financial instrument fails to meet its contractual obligations, and arises principally from the Group's receivables from customers.

The impairment provisions for financial assets disclosed in note 16 "Trade and other receivables" are based on assumptions about risk of default and expected loss rates. The Group uses judgement in making these assumptions and selecting the inputs to the impairment calculation, based on the Group's past history and existing market conditions, as well as forward-looking estimates at the end of each reporting period. Customers are mainly multinational organisations or government agencies with whom the Group has long-term business relationships. The Group's principal customers are government defence departments, such as the US Department of Defense, the UK Ministry of Defence, US and UK defence prime contractors, such as BAE Systems and General Dynamics, and distributors of products for their onward sale to end users.

Approximately half of continuing revenue in 2018 related to the US DoD, the UK MOD and the US and UK defence prime contractors, who consistently pay within terms and are deemed low credit risk as a result. For all other customers the Group's policy is to trade under a letter of credit. If there is any doubt over recoverability, the Group's policy is to provide in full for trade receivables outstanding for more than 120 days beyond agreed terms. The balances which might be affected by credit risk are trade receivables and cash and cash equivalents.

Notes to the Group financial statements continued

20. Financial risk management continued

(b) Capital management

The Group manages its capital to ensure that all entities in the Group will be able to continue as a going concern while meeting the returns to stakeholders. The capital structure of the Group consists of equity (as disclosed in the consolidated statement of changes in equity), retained earnings, cash and cash equivalents (note 17), a revolving credit facility ("RCF") and private placement notes (note 18). The Group seeks to manage its capital through an appropriate mix of these items.

In October 2018, the RCF was renewed at a level of £90.0m for four years with an option of increasing this by £60.0m of additional facility and with the option of renewing this by two additional years. As at 31 October 2018, the RCF was drawn by £26.5m. Private placement notes of \$83.6m mature in November 2019 and it is management's current intention to repay these using a mixture of internal resources and the RCF.

(c) Financial risk management

The primary risks that the Group is exposed to are liquidity risk, foreign currency risk, interest rate risk and credit risk. It is the Group's policy to manage these risks under the following policies:

i. Liquidity risk management

Liquidity risk is the risk that the Group does not have sufficient financial resources to meet its obligations as they fall due. The Group manages liquidity risk by maintaining adequate reserves and by continually monitoring forecast and actual cash flows. The Group's policy is to maintain continuity of funding through available cash and cash equivalents and the RCF.

ii. Foreign currency risk management

The Group's presentational currency is sterling. The Group is subject to exposure on the translation of the assets of foreign subsidiaries, whose functional currencies differ from the Group. The Group's primary balance sheet translation exposures are to the US dollar, Australian dollar and Norwegian krone. The Group minimises the balance sheet translation exposures, where it is practical to do so, by funding subsidiaries with long-term loans, on which exchange differences are taken to reserves. US dollar borrowings held by the Group are treated as a net investment hedge against the US dollar assets of the Group.

The Group faces currency exposures arising from the translation of profits earned in foreign currency. These exposures are not hedged. Exposures also arise from foreign currency denominated trading transactions undertaken by subsidiaries deemed transactional exposures. The Group's policy is to hedge transactional exposures above £250,000 in the banking market on a one-to-one basis using forward contracts. Below £250,000, the exposures are netted across subsidiaries and any surplus or deficit hedged in the banking market using spot or forward contracts. The Group's policy is that there is no speculative trading in financial instruments. During the year to 31 October 2018, there were no options or structured derivatives utilised.

iii. Interest rate risk management

The Group finances its operations through a combination of retained profits, bank and loan note borrowings. The UK borrowings are denominated in sterling and US dollars, and at the shorter end are subject to floating rates of interest.

IFRS 9 Financial Instruments

The Group currently reports under IAS 39 *Financial Instruments: Recognition and Measurement* but will be applying IFRS 9 *Financial Instruments* (as revised in July 2014) from 1 November 2018.

IFRS 9 introduces three new requirements for 1) the classification and measurement of financial assets and financial liabilities, 2) the impairment of finance assets and 3) general hedge accounting.

Chemring Group PLC is not a financial institution and does not have any complex financial instruments. The Group does not apply hedge accounting and the Group's customers are generally governments that are considered creditworthy and pay consistently within agreed payment terms. As such, adoption of IFRS 9 is not assessed as having a significant impact on the Group. Details of these new requirements and their impact are described as follows:

Area	Impact on IFRS 9 adoption
Classification and measurement	Reclassification of financial assets into the IFRS 9 categories will have no overall impact on their respective measurement bases.
Impairment of financial assets	New requirements to recognise expected credit losses on day one are not expected to materially impact the Group, whose customer base typically has favourable credit history. Any debts considered doubtful have been fully provided for in this financial year. In future, any material impairment on debtors will need separate disclosure on an income statement line item, with debtors ageing analysis to be provided in the disclosure note.
Hedge accounting	Chemring currently does not apply hedge accounting and has not done so in previous periods.

20. Financial risk management continued

IFRS 9 Financial Instruments continued

On 1 November 2018, the Group has assessed which business models apply to the financial assets held by the Group on 1 November 2018, the date of the initial application of IFRS 9, and has classified its financial instruments into the appropriate IFRS 9 categories.

The initial application of IFRS 9 is not expected to have any significant impact on the Group's financial assets as regards their classification and measurement.

	2018		2017	
	Carrying value £m	Fair value £m	Carrying value £m	Fair value £m
Assets carried at amortised cost				
Trade receivables	45.4	45.4	92.0	92.0
Accrued income	9.0	9.0	7.0	7.0
Other receivables	3.5	3.5	1.2	1.2
Cash and cash equivalents	9.6	9.6	33.6	33.6
Assets classified as held for sale	25.5	25.5	—	—
Assets carried at fair value				
Derivative financial instruments	0.1	0.1	0.4	0.4
Assets classified as held for sale	18.2	18.2	—	—
Liabilities carried at fair value				
Derivative financial instruments	(0.5)	(0.5)	(0.4)	(0.4)
Liabilities classified as held for sale	(10.2)	(10.2)	—	—
Liabilities carried at amortised cost				
Trade payables	(12.1)	(12.1)	(37.7)	(37.7)
Other payables	(20.9)	(20.9)	(20.0)	(20.0)
Interest payable	(1.7)	(1.7)	(3.2)	(3.2)
Other tax and social security	(3.3)	(3.3)	(3.7)	(3.7)
Accruals	(12.5)	(12.5)	(14.3)	(14.3)
Liabilities classified as held for sale	(16.7)	(16.7)	—	—
Borrowings	(91.4)	(95.8)	(113.6)	(113.6)
Provisions	(20.7)	(20.7)	(15.3)	(15.3)

The following items are not financial instruments as defined by IFRS 9:

- (a) prepayments made/advances received (right to receive future goods or services, not cash or a financial asset);
- (b) tax receivables and payables and similar items (statutory rights and obligations, not contractual); or
- (c) deferred revenue and warranty obligations (obligations to deliver goods and services, not cash or financial assets).

21. Financial instruments

The following table details the fair value of derivative financial instrument assets/(liabilities) recognised in the balance sheet:

	2018 £m	2017 £m
Included in current assets	0.1	0.4
Included in current liabilities	(0.3)	(0.4)
Included in non-current liabilities	(0.2)	—
Forward foreign exchange contracts	(0.4)	—

There was a £0.4m loss (2017: £1.7m gain) on the movement in the fair value of derivative financial instruments recognised in the income statement.

Notes to the Group financial statements continued

21. Financial instruments continued

The table below details the maturity profile of the nominal value of the Group's derivative financial instruments and loans:

	2018			2017		
	Derivative instruments £m	Loans and overdrafts £m	Total £m	Derivative instruments £m	Loans and overdrafts £m	Total £m
Falling due:						
– within one year	0.2	—	0.2	0.1	51.6	51.7
– within one to two years	0.1	65.4	65.5	—	—	—
– within two to five years	(0.1)	26.0	25.9	—	62.0	62.0
	0.2	91.4	91.6	0.1	113.6	113.7

Fair value hierarchy

IFRS 7 *Financial Instruments: Disclosures* requires companies that carry financial instruments at fair value in the balance sheet to disclose their level of visibility, determining into which category those financial instruments fall under the fair value hierarchy.

The fair value measurement hierarchy is as follows:

- Level 1 – quoted prices (unadjusted) in active markets for identical assets or liabilities;
- Level 2 – inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices); and
- Level 3 – inputs for the asset or liability that are not based on observable market data (i.e. as unobservable inputs).

The following tables present the Group's assets and liabilities that are measured at fair value:

		2018		2017	
	Fair value hierarchy	Carrying amount £m	Fair value £m	Carrying amount £m	Fair value £m
Held at amortised cost					
Floating rate bank facilities due 2022	Level 2	(25.9)	(25.9)	(0.2)	(0.2)
\$83.6m fixed rate loan notes due 2019	Level 2	(65.4)	(69.6)	(61.9)	(69.2)
\$61.1m and £5.3m fixed rate loan notes due 2017	Level 2	—	—	(51.4)	(53.0)
Held at fair value					
Derivative financial instruments – assets	Level 2	0.1	0.1	0.4	0.4
Assets classified as held for sale	Level 3	18.2	18.2	—	—
Derivative financial instruments – liabilities	Level 2	(0.5)	(0.5)	(0.4)	(0.4)
Liabilities classified as held for sale	Level 3	(10.2)	(10.2)	—	—
		(83.7)	(87.9)	(113.5)	(122.4)

The assets and liabilities under Level 3 on the fair value hierarchy relate to discontinued businesses (see note 29 for further details). The fair value of derivative financial instruments is estimated by discounting the future contracted cash flow, using readily available market data.

Sensitivity analysis

For the year ended 31 October 2018 the closing exchange rate for the US dollar was 1.28 (2017: 1.33) and the average exchange rate was 1.34 (2017: 1.30).

For the year ended 31 October 2018 a 10 cent decrease in the US dollar exchange rate would have increased reported net debt by approximately £5.6m (2017: £8.9m).

The following table details the Group's sensitivity to a 10 cent movement in the US dollar rate against sterling with regards to its income statement. The Group considers a 10 cent strengthening or weakening of US dollars against sterling as a reasonable possible change in foreign exchange rates. The other functional currencies used in the Group (Norwegian krone and Australian dollars) are not significant enough to have a material impact on the Group results in the event of a reasonable possible change to their exchange rates.

21. Financial instruments continued

Sensitivity analysis continued

	+10 cents US dollar impact		-10 cents US dollar impact	
	2018 £m	2017 £m	2018 £m	2017 £m
Continuing operations				
Revenue	(9.3)	(9.1)	10.8	10.6
Underlying operating profit	(1.9)	(0.8)	2.2	1.0
Interest	0.2	0.5	(0.3)	(0.6)
Underlying profit before tax	(1.7)	(0.3)	1.9	0.4

71% of the Group's gross debt is at a fixed rate of 5.68% and the remainder is at floating rates. The Group has not entered into any interest rate swaps and the Group's policy is to manage interest risk with a mixture of fixed and floating rate debt. This is monitored on an ongoing basis for appropriateness.

As the Group mainly has fixed interest rate debt, a change in interest rates would not have an immediate significant impact on the income statement. A change in interest rates of 1% throughout the year would cause the Group's finance expense to change by £0.1m.

22. Provisions

	Legal provision £m	Environmental provision £m	Restructuring provision £m	Disposal provision £m	Other provision £m	Total £m
At 1 November 2017	1.6	3.1	5.9	4.5	0.2	15.3
Provided	7.5	—	1.1	—	3.0	11.6
Transfers between categories	—	—	0.2	—	(0.2)	—
Foreign exchange adjustments	(0.1)	0.1	—	—	—	—
Paid	—	—	(3.9)	(0.1)	—	(4.0)
Released	—	—	—	(2.2)	—	(2.2)
At 31 October 2018	9.0	3.2	3.3	2.2	3.0	20.7

These provisions are classified on the balance sheet as follows:

	2018 £m	2017 £m
Included in current liabilities	6.7	6.5
Included in non-current liabilities	14.0	8.8
	20.7	15.3

The legal provision represents the estimated legal liabilities faced by the Group at the balance sheet date. Further details of the Group's contingent liabilities are set out in note 34.

The environmental provision is held in respect of potential liabilities, associated with the Group's facility in Chicago, US. The range of possible outcomes is between £1.1m and £7.3m.

The restructuring provision relates principally to the closure of an Energetics facility in California, US. The closure of the facility is expected to be completed in the first half of 2019 and the likely cost of restructuring is expected to be between £2m and £4m.

The disposal provision relates to estimated liabilities faced by the Group in respect of the disposal of its European Munitions businesses in 2014, under the terms of their respective sale agreements. The range of possible outcomes is between £nil and £10.7m, and the risk of economic outflow relating to these reduces with the passage of time.

Other provisions relate to the Group's offset obligations. As a result of sales transactions in certain jurisdictions, the Group may enter into contracts that have offset commitments. The offset obligation is valued based on the amounts delivered under the contract over a certain period of time. The range of possible outcomes of the offset obligations of the Group depends on the solution agreed and is between £1.6m and £8.1m. A provision of £3.0m (2017: £nil) has been recognised to cover the estimated offset obligation.

Provisions are subject to uncertainty in respect of the outcome of future events. Legal provisions will be utilised based on the outcome of cases and the level of costs incurred defending the Group's position. Environmental provisions will be utilised based on the outcome of further environmental studies and remediation work. Restructuring provisions will be utilised based on actual costs incurred for redundancy, dead rent and dilapidations and these will be impacted by the final negotiated settlement of any claims with landlords. Disposal provisions will be utilised based on the outcome of certain events which are specified in sale and purchase agreements. It is not possible to estimate more accurately the expected timing of any resulting outflows of economic benefits.

Notes to the Group financial statements continued

23. Deferred tax

The following are the principal deferred tax assets/(liabilities) recognised by the Group and movements thereon:

	Accelerated tax depreciation £m	Pensions £m	US interest deductions £m	Tax losses £m	Acquired intangibles £m	Other £m	Total £m
At 1 November 2016	(16.6)	3.3	14.6	7.4	(9.8)	2.2	1.1
(Charge)/credit to income	4.6	(1.2)	10.8	(5.7)	(0.9)	2.2	9.8
(Charge)/credit to equity	(0.3)	(2.0)	(2.8)	(0.2)	0.4	3.7	(1.2)
At 1 November 2017	(12.3)	0.1	22.6	1.5	(10.3)	8.1	9.7
(Charge)/credit to income	4.1	(1.2)	(22.6)	1.1	5.8	(5.3)	(18.1)
(Charge)/credit to equity	—	(0.1)	—	—	—	(0.5)	(0.6)
Transfers	(0.6)	—	—	—	(0.5)	(0.2)	(1.3)
At 31 October 2018	(8.8)	(1.2)	—	2.6	(5.0)	2.1	(10.3)
Analysed as:							
Deferred tax assets	1.7	—	—	2.6	25.0	7.5	36.8
Deferred tax liabilities	(10.5)	(1.2)	—	—	(30.0)	(5.4)	(47.1)
At 31 October 2018	(8.8)	(1.2)	—	2.6	(5.0)	2.1	(10.3)
Deferred tax assets	0.3	0.1	22.6	1.5	30.2	8.5	63.2
Deferred tax liabilities	(12.6)	—	—	—	(40.5)	(0.4)	(53.5)
At 31 October 2017	(12.3)	0.1	22.6	1.5	(10.3)	8.1	9.7

The Finance Act 2016, which provided for reductions in the main rate of UK corporation tax from 20% to 19% effective from 1 April 2017 and to 17% effective from 1 April 2020, was substantively enacted on 19 September 2016.

The closing UK deferred tax asset as at 31 October 2018 has been calculated at the rates which will be in force when the assets and liabilities are expected to reverse.

The Group's deferred tax provision at the balance sheet date includes an asset of £nil (2017: £22.6m) in relation to amounts carried forward under the US interest limitation regulations.

The US Tax Cuts and Jobs Act ("TCJA") was substantively enacted on 22 December 2017. The TCJA provides for a reduction in the main rate of federal corporate income tax from 35% to 21% for accounting periods beginning on or after 1 January 2018, thus impacting the Group for its 2019 financial year, however the impact on the deferred tax asset has been recognised in the year ended 31 October 2018.

The impact on Chemring has been two-fold; the reduction in the main rate of US federal corporate income tax has resulted in a write off of deferred tax of £8.6m associated with tax losses and interest restrictions, offset by a £3.9m credit on the revaluation of the deferred tax liabilities associated with US-related acquired intangibles. This has resulted in a net write off of £4.7m in respect of the rate change. In addition, the introduction of restrictions on the availability of interest deductions has resulted in a write off of deferred tax of £12.7m. The total impact of £17.4m has been treated as a non-underlying item in 2018 (see note 3).

Certain deferred tax assets and liabilities have been offset in accordance with the Group's accounting policy. Deferred tax balances after offset are analysed on the balance sheet as per the table above.

At the balance sheet date, the Group had unrecognised tax losses of £29.9m (2017: £27.5m) potentially available for offset against future profits in certain circumstances, the increase arising primarily as a result of the tax losses arising in the UK. No deferred tax asset has been recognised in respect of this amount because of the unpredictability of future taxable qualifying profit streams.

24. Share capital

	2018 £m	2017 £m
Issued and fully paid		
281,763,364 (2017: 281,588,075) ordinary shares of 1p each	2.8	2.8

During the year, 175,289 ordinary shares (2017: 162,819) were issued for cash to employees under the Group's approved savings-related share schemes.

The Company's share capital also includes 62,500 7% cumulative preference shares of £1 each, which are all issued and fully paid up, and are classified for accounting purposes within non-current liabilities. The cumulative preference shares carry an entitlement to a dividend at the rate of 7p per share per annum, payable in equal instalments on 30 April and 31 October each year. Holders of the preference shares have the right on a winding-up to receive, in priority to any other classes of shares, the sum of £1 per share together with any arrears of dividends.

25. Reserves

The share premium account, the special capital reserve and the revaluation reserve are not distributable.

The special capital reserve was created as part of a capital reduction scheme involving the cancellation of the share premium account which was approved by the Court in 1986, in accordance with the requirements of the Companies Act 1985.

Included within retained earnings are £3.7m (2017: £3.6m) relating to the share-based payment reserve and £0.7m (2017: £nil) of the Company's own shares held by the Group's Employee Share Ownership Plan Trust.

Group dividends (note 9) are payable out of the parent company retained earnings as disclosed in the parent company financial statements. This provides cover over the declared final dividend of 2.2p per ordinary share for the year ended 31 October 2018.

26. Own shares

	2018 £m	2017 £m
At 1 November 2017	9.6	9.6
Transactions	(1.8)	—
At 31 October 2018	7.8	9.6

The own shares reserve represents the cost of shares in the Company purchased in the market and held by the Group to satisfy awards under the Group's share-based incentive schemes, details of which are set out in note 28. No ordinary shares (2017: nil) were acquired during the year and 410,104 ordinary shares (2017: nil) were distributed following the vesting of awards under the PSP. The total number of ordinary shares held in treasury at 31 October 2018 was 1,788,710 (2017: 2,198,814), with an average cost of 439.0p (2017: 439.0p) per share.

This represents 0.6% (2017: 0.8%) of the total issued and fully paid ordinary share capital.

27. Obligations under non-cancellable operating leases

	2018 £m	2017 £m
Minimum lease payments under operating leases recognised in the income statement	1.4	1.8

At the balance sheet date, the Group had outstanding commitments for future minimum lease payments under non-cancellable operating leases, falling due as follows:

	2018 £m	2017 £m
Within one year	1.7	2.3
In the second to fifth years	3.5	3.0
Over five years	0.1	0.2
	5.3	5.5

Operating lease payments represent rentals payable by the Group. Leases are largely negotiated for an average term of three years and rentals are largely fixed for the lease period, with an option to extend for a further period at the then prevailing market rate.

Notes to the Group financial statements continued

28. Share-based payments

The Group operates share-based compensation arrangements to provide incentives to the Group's senior management and eligible employees. The Group recognised a net charge of £1.1m (2017: £1.9m) in respect of share-based payments during the year.

Details of the four schemes which operated during the year are set out below.

The Chemring Group Performance Share Plan (the "PSP") and The Chemring Group Performance Share Plan 2016 (the "2016 PSP")

Under the PSP and the 2016 PSP, conditional awards of ordinary shares are made at nil cost to employees. Awards ordinarily vest on the third anniversary of the award date. The PSP commenced in March 2006 and expired in March 2016, when it was replaced by the 2016 PSP, which has broadly similar terms. Awards remain outstanding under the PSP but all new awards are now made under the 2016 PSP.

	PSP		2016 PSP	
	Number of conditional shares		Number of conditional shares	
	2018	2017	2018	2017
Outstanding at the beginning of the year	3,169,973	4,503,592	2,183,887	—
Awarded	—	—	2,228,787	2,295,577
Vested	(410,104)	—	—	—
Lapsed	(1,060,000)	(1,333,619)	(558,877)	(111,690)
Outstanding at the end of the year	1,699,869	3,169,973	3,853,797	2,183,887
Subject to vesting at the end of the year	—	—	—	—

The following awards were outstanding at 31 October 2018:

Date of award	Number of ordinary shares under award	Vesting price per share Pence	Date when awards due to vest
25 January 2016	1,558,104	nil	25 January 2019
7 March 2016	141,765	nil	7 March 2019
24 March 2017 ¹	1,966,009	nil	24 March 2020
19 January 2018 ¹	1,394,634	nil	19 January 2021
26 June 2018 ¹	493,154	nil	26 June 2021

1. These awards were granted under the 2016 PSP.

The Group has applied a discount to the share-based payments, to reflect the anticipated achievement of the stipulated targets for each PSP and 2016 PSP award based on the predicted figures within the Group's financial projections and the expected number of leavers over the life of the awards.

The 2016 PSP awards made in the year ended 31 October 2018 had targets based on earnings per share growth and total shareholder return. The awards have been valued using the following modelling inputs:

	Date awarded				
	26 June 2018	19 January 2018	24 March 2017	7 March 2016	25 January 2016
Share price at valuation	218p	188p	196p	134p	138p
Exercise price	nil	nil	nil	nil	nil
Risk-free rate	0.6%	0.6%	0.2%	0.4%	0.7%
Expected volatility	36.1%	34.7%	28.8%	38.6%	36.4%
Fair value	153.3p	132.2p	165.5p	85.5p	107.0p

The weighted average fair value of awards made during the year was 136.9p (2017: 165.5p).

In the year to 31 October 2018 410,104 (2017: nil) awards vested. The charge recognised in respect of the awards is based on their fair value at the grant date.

28. Share-based payments continued**The Chemring Group Restricted Share Plan (the "RSP")**

Under the RSP, deferred awards of ordinary shares are made at nil cost to employees. Awards ordinarily vest on the second or third anniversary of the award date. The first awards under the RSP were made in February 2013.

	Number of deferred shares	
	2018	2017
Outstanding at the beginning of the year	50,000	50,000
Awarded	—	—
Exercised	—	—
Outstanding at the end of the year	50,000	50,000
Subject to vesting at the end of the year	—	—

The following RSP awards were outstanding at 31 October 2018:

Date of award	Number of ordinary shares under award	Vesting price per share Pence	Date when award due to vest
7 March 2016	50,000	nil	7 March 2019

The Chemring Group 2008 and 2018 UK Sharesave Plan (the "UK Sharesave Plan")

Options were granted during the year on 30 July 2018.

	2018		2017	
	Number of share options	Weighted average exercise price Pence	Number of share options	Weighted average exercise price Pence
Outstanding at the beginning of the year	1,813,653	126.7	1,728,037	128.1
Granted	461,603	178.0	528,998	148.0
Exercised	(175,289)	143.8	(162,819)	141.3
Lapsed	(198,157)	150.4	(280,563)	166.7
Outstanding at the end of the year	1,901,810	135.1	1,813,653	126.7
Subject to exercise at the end of the year	42,420	157.8	74,792	150.7

The following options were outstanding at 31 October 2018:

Date of award	Number of ordinary shares under award	Exercise price per share Pence	Dates between which options may be exercised
30 July 2013	4,296	209.0	1 October 2018–31 March 2019
30 July 2014	52,515	142.0	1 October 2019–31 March 2020
30 July 2015	38,124	152.0	1 October 2018–31 March 2019
30 July 2015	33,848	152.0	1 October 2020–31 March 2021
27 July 2016	798,933	105.0	1 October 2019–31 March 2020
27 July 2016	78,853	105.0	1 October 2021–31 March 2022
27 July 2017	394,659	148.0	1 October 2020–31 March 2021
27 July 2017	65,470	148.0	1 October 2022–31 March 2023
30 July 2018	351,531	178.0	1 October 2021–31 March 2022
30 July 2018	83,581	178.0	1 October 2023–31 March 2024

The weighted average fair value of options granted in the year was 44.0p (2017: 37.0p).

The weighted average fair value of options exercised in the year was 36.6p (2017: 36.7p).

The weighted average share price on exercise of the options during the year was 143.8p (2017: 141.3p).

The fair values of the share options in the UK Sharesave Plan are based on the difference between the exercise price and the share price on the grant date of the option.

Notes to the Group financial statements continued

29. Disposals and held for sale

As disclosed in the Chairman's statement on page 6, a strategic review of the Group's Energetics portfolio was conducted during the year. The Board concluded that the future focus within the Energetics segment should be on the Energetic Devices businesses. It therefore made the decision to exit a number of commodity Energetics businesses including: Chemring Defence UK Limited, Chemring Prime Contracts Limited, Chemring Military Products Inc. and Chemring Ordnance Inc. Accordingly, these businesses are presented as held for sale as at 31 October 2018.

Impairment losses relating to the disposal group

Impairment losses of £69.3m for write downs relating to the discontinued operations to the lower of their carrying amount and their fair value less costs to sell have been included in non-underlying items (see note 5). The impairment losses have been applied to reduce the carrying amount of goodwill, property, plant and equipment, capitalised development costs, inventory and receivables.

Assets and liabilities classified as held for sale

As at 31 October 2018, the discontinued operations were stated at fair value less costs to sell and comprised the following assets and liabilities:

	2018 £m
Deferred tax asset	4.4
Inventory	7.3
Trade and other receivables	32.0
Assets classified as held for sale	43.7
Deferred tax liability	(6.1)
Trade and other payables	(18.4)
Current tax	(2.4)
Liabilities directly associated with assets classified as held for sale	(26.9)

The above items are presented at the lower of carrying amount and fair value less costs to sell. For those business units where the carrying value of the assets and liabilities is expected to be realised through sale, no fair value adjustments have been carried out. £25.5m of the assets classified as held for sale and £16.7m of the liabilities classified as held for sale are shown at carrying value.

The assets and liabilities at fair value less costs to sell are valued on an undiscounted basis, with impairments down to realisable value applied to assets in order of increasing liquidity. This fair value measurement for the disposals has been categorised as a Level 3 fair value based on the inputs to the valuation technique used. £18.2m of assets classified as held for sale and £10.2m of liabilities classified as held for sale are shown at fair value.

The costs to sell these businesses are estimated at £0.8m.

In 2017 a £3.5m credit from discontinued operations related to disposals made in prior years. The (costs)/credits in relation to disposals are included within the results of discontinued operations – further analysis is presented in note 5.

Disposal (costs)/credits	2018 £m	2017 £m
European munitions businesses disposal	—	2.7
Disposed property dilapidations	—	0.1
Marine business disposal	—	0.7
3d-Radar disposal	(0.7)	—
	(0.7)	3.5

30. Retirement benefit obligations

In the UK, the Group operates a defined benefit scheme (the "Chemring Group Staff Pension Scheme"). In Norway, Chemring Nobel operates a defined benefit scheme (the "Chemring Nobel Scheme"). The Group's other UK and overseas pension arrangements are all defined contribution schemes, with a combined cost of £5.8m (2017: £5.5m) for continuing operations.

The Chemring Group Staff Pension Scheme is a funded scheme and the assets of the scheme are held in a separate trustee administered fund. The scheme was closed to future accrual on 6 April 2012. A full actuarial valuation for the Scheme as at 6 April 2018 has been prepared and updated to 31 October 2018, using the projected unit credit method. The main assumptions for the scheme are detailed below. The surplus of the Chemring Group Staff Pension Scheme was £7.5m at 31 October 2018 (2017: £0.6m deficit).

30. Retirement benefit obligations continued

Under the funding plan agreed with the trustees following the 2018 actuarial valuation, the Company agreed to eliminate the deficit indicated by that valuation in the period to 31 December 2018. This funding plan provided for one further contribution of £0.4m to be made in November 2018. The Company and the trustees monitor funding levels annually, and a new funding plan is agreed with the trustees every three years, based on actuarial valuations. The Group considers that the current contribution rates agreed with the trustees are sufficient to eliminate the calculated deficit over the agreed period.

In October 2018, the High Court handed down a judgement involving the Lloyds Banking Group's defined benefit pension schemes. The judgement concluded that pension schemes should be amended to equalise pension benefits for men and women in relation to guaranteed minimum pension benefits. The Group is working with its actuarial advisers, to understand the extent to which judgement crystallises any additional liabilities for the Group UK defined benefit pension scheme. It is estimated that the additional liability could be in the region of £0.4m and £1.2m therefore £0.8m has been recognised in the year to 31 October 2018. Subsequent to further assessment, any necessary further adjustment is expected to be recognised in the first half of the year ended 31 October 2019.

The trust deed provides for an unconditional right to a return of surplus assets in the event of a plan wind-up. The trustees gave no rights to unilaterally wind up or augment the benefits due to members of the scheme. Based on these rights, any net surplus in the UK scheme is recognised in full.

The Chemring Nobel Scheme is a funded scheme and the assets of the scheme are held in a separate fund. The actuarial liability has been calculated at 31 October 2018 by a qualified actuary using the projected unit credit method. The main assumptions used were a discount rate of 2.0% and rate of increase in deferred pensions of 3.5%. The net surplus of the Chemring Nobel Scheme was £nil at 31 October 2018 (2017: £nil) and as such is immaterial for further detailed disclosures.

The movement in the net defined benefit liability is as follows:

	Defined benefit obligations		Defined benefit asset		Net defined benefit asset/(liability)	
	2018 £m	2017 £m	2018 £m	2017 £m	2018 £m	2017 £m
At 1 November	(83.8)	(94.7)	83.2	77.4	(0.6)	(17.3)
Included in profit or loss						
Past service cost	(0.8)	—	—	—	(0.8)	—
Net interest cost	(2.3)	(2.5)	2.2	2.1	(0.1)	(0.4)
	(3.1)	(2.5)	2.2	2.1	(0.9)	(0.4)
Included in other comprehensive income						
Remeasurement gain/(loss):						
Actuarial gain/(loss) arising from:						
– Demographic and financial assumptions	(0.8)	7.6	—	—	(0.8)	7.6
– Experience adjustment	(0.1)	1.8	—	—	(0.1)	1.8
– Return on plan assets excluding interest income	—	—	1.8	2.5	1.8	2.5
	(0.9)	9.4	1.8	2.5	0.9	11.9
Other						
Contributions by the employer	—	—	7.9	5.0	7.9	5.0
Additional contributions by the employer	—	—	0.2	0.2	0.2	0.2
Net benefits paid out	4.4	4.0	(4.4)	(4.0)	—	—
At 31 October	(83.4)	(83.8)	90.9	83.2	7.5	(0.6)

The Chemring Group Staff Pension Scheme had 966 members at the end of the year (2017: 1,030). Of these members 53.2% (2017: 53.1%) were pensioners drawing benefits from the scheme and the balance were deferred members. The duration of the liability is long, with pension payments expected to be made for at least the next 40 years.

Notes to the Group financial statements continued

30. Retirement benefit obligations continued

Additional pension obligations arising from past additional voluntary contributions and corresponding insurance assets, both equalling £2.3m, have been included in this year's accounts for the first time. The comparative figures have not been restated as there is no impact to the primary statements and the amount is considered not material.

The pension schemes' assets are analysed as follows:

	2018 £m	2017 £m	2018 %	2017 %
Equities	27.9	54.6	30.7	65.6
Liability Driven Investment	22.5	20.7	24.8	24.9
Corporate bonds	34.9	7.5	38.4	9.0
Assets held by insurance company	2.3	—	2.5	—
Cash	3.3	0.4	3.6	0.5
	90.9	83.2	100.0	100.0

The schemes' assets are invested in accordance with the statement of investment principles after taking professional advice from the schemes' investment advisers. The investment strategy is to split the assets into a growth portfolio of index trading equity funds, real return funds, and a matching portfolio of leveraged liability driven pooled funds.

The principal assumptions used in the actuarial valuation of the Chemring Group Staff Pension Scheme were as follows:

	2018 %	2017 %
Discount rate	2.8	2.7
Rate of increase in deferred pensions	2.1	2.0
Rate of increase in pensions in payment (where applicable)	3.1	3.0
Inflation – RPI	3.2	3.1
– CPI	2.1	2.0

In determining defined benefit obligations, the Group uses mortality assumptions which are based on published mortality tables. For the Chemring Group Staff Pension Scheme, the actuarial table currently used is SAPS Normal Health pensioner tables with future improvements in line with CMI 2017 and a 1.25% long-term trend rate.

This results in the following life expectancies at age 65:

	2018	2017
Future pensioners – male	89.2	88.5
– female	90.8	90.5
Current pensioners – male	87.8	87.1
– female	89.3	89.0

The most significant assumptions in the pension valuation are the discount rate applied to the liabilities, the inflation rate to be applied to pension payments and the mortality rates. If the discount rate used in determining retirement benefit obligations were to change by 0.1% then it is predicted that the deficit in the scheme would change by approximately £1.2m. A change in the rate of inflation by 0.1% is predicted to change the deficit by approximately £0.6m and a one year change to the longevity assumption would change the deficit by approximately £2.7m. The principal risks to the schemes are that the investments do not perform as well as expected, the discount rate continues to fall driven by lower market interest rates and the rate of improvement in mortality assumed is insufficient and life expectancies continue to rise.

The Group anticipates contributions to the defined benefit schemes for the year ending 31 October 2019 will be £0.4m (2018: £7.9m).

31. Cash generated from operating activities

	2018 £m	2017 £m
Operating (loss)/profit from continuing operations	(15.9)	4.6
Amortisation of development costs	3.6	6.9
Amortisation of intangible assets arising from business combinations	11.6	12.1
Amortisation of patents and licences	0.1	0.1
Loss on disposal of non-current assets	0.2	0.2
Depreciation of property, plant and equipment	15.3	16.4
Non-cash movement of non-underlying items	35.3	15.0
Gain on the fair value of derivative financial instruments	—	(0.1)
Share-based payment expense	1.1	1.7
Operating cash flows before movements in working capital	51.3	56.9
Decrease in inventories	1.6	3.5
Decrease/(increase) in trade and other receivables	0.2	(11.8)
(Decrease) in trade and other payables	(8.3)	(6.9)
(Decrease) in provisions	(0.1)	(0.1)
Operating cash flow from continuing underlying operations	44.7	41.6
Discontinued operations		
Operating cash flow from discontinued underlying operations	12.2	5.5
Cash impact of non-underlying items from discontinued operations	(0.1)	(0.7)
Net cash inflow from discontinued operating activities	12.1	4.8
Net cash outflow from discontinued investing activities	(1.2)	(2.8)
Net cash inflow from discontinued operations	10.9	2.0

32. Reconciliation of net cash flow to movement in net debt

	2018 £m	2017 £m
Decrease in cash and cash equivalents	(24.5)	(29.4)
Decrease in debt and lease financing due to cash flows	26.0	29.4
Decrease in net debt resulting from cash flows	1.5	—
Effect of foreign exchange rate changes	(2.0)	10.0
Amortisation of debt finance costs	(1.3)	(2.4)
Movement in net debt	(1.8)	7.6
Net debt at the beginning of the year	(80.0)	(87.6)
Net debt at the end of the year	(81.8)	(80.0)

Notes to the Group financial statements continued

33. Analysis of net debt

	At 1 November 2017 £m	Cash flows £m	Non-cash changes £m	Exchange rate effects £m	At 31 October 2018 £m
Cash at bank and in hand	33.6	(24.5)	—	0.5	9.6
Debt due within one year	(51.6)	26.0	25.6	—	—
Debt due after one year	(61.9)	—	(26.9)	(2.5)	(91.3)
Preference shares	(0.1)	—	—	—	(0.1)
	(80.0)	1.5	(1.3)	(2.0)	(81.8)

34. Contingent liabilities

At 31 October 2018, the Group had contingent liabilities in respect of bank and contractual performance guarantees and other matters arising in the ordinary course of business. Where it is expected that a material liability will arise in respect of these matters, appropriate provision is made within the financial statements. As the conditions of these guarantees are currently being met, no obligating event is foreseeable and therefore no provision has been made.

The Group is, from time to time, party to legal proceedings and claims, and is involved in correspondence relating to potential claims, which arise in the ordinary course of business.

Pricing of an historic contract

A dispute between Alloy Surfaces Company, Inc. and the US Army, in relation to disputed pricing of a certain historic contract fulfilled by Alloy Surfaces Company, Inc., proceeded to a hearing in front of the US Armed Services Board of Contract Appeals ("ASBCA") in April 2017. ASBCA is expected to take approximately two years to issue its decision in relation to this matter, and therefore it is too early to predict the outcome of the hearing. The range of possible outcomes is between £nil to £12.0m. A provision of £1.0m (2017: £1.1m) exists to cover estimated legal costs for the Group with regards to this issue.

Controlled Foreign Company ("CFC") Finance Company exemption

Since 2013, the Group has benefited from the UK's Controlled Foreign Company ("CFC") Finance Company exemption. The European Commission has launched an investigation into whether the UK's CFC Finance Company exemption breaches state aid rules. No timescale has been set for the review and this could take several years to conclude. If, at the end of the investigation, the regime is considered to be in contravention of the State Aid provisions, the UK Government will be required to seek repayment of the lost tax from the relevant taxpayers. Given the early stage of the investigation, it is too early to determine whether a tax liability is probable. The range of possible outcomes is between £nil and £15m, plus interest.

Serious Fraud Office investigation

The Serious Fraud Office ("SFO") is currently undertaking a formal investigation into concerns about bribery, corruption and money laundering involving intermediaries who previously represented one of the Group's UK-based subsidiaries, Chemring Technology Solutions Limited ("CTSL"), and its predecessor companies. The investigation commenced following a voluntary report made by CTSL relating to two specific historic contracts, the first of which was awarded prior to the Group's ownership of the business concerned and the second in 2011, neither of which are considered to be material in the context of the Group. It is too early to predict the outcome of the SFO's investigation, in which the Group continues to co-operate fully.

Countermeasures UK incident

On 10 August 2018 an incident occurred at our Countermeasures facility in Salisbury. The Group responded immediately to support those who were injured, and maintains appropriate employers' liability insurance that we expect will provide full compensation in due course. We continue to fully support the Health and Safety Executive ("HSE") as it undertakes its investigation. Whilst provisions have been recorded for costs that have been identified, it is possible that additional uninsured costs and, depending on the outcome of the HSE investigation, financial penalties may be incurred. At this stage these costs are not anticipated to be material in the context of the Group's financial statements.

35. Related party transactions

Transactions between the Company and its subsidiaries, which are related parties, have been eliminated on consolidation and are not disclosed in this note. Transactions with the Group's pension schemes are disclosed in note 30.

Trading transactions

There were no trading activities between the Group and its associate in this period or the comparative period.

Remuneration of key management personnel

For the purposes of remuneration disclosure, key management personnel includes only the directors and excludes the other senior business managers and members of the Executive Committee. Their remuneration is set out below in aggregate for each of the categories specified in IAS 24 *Related Party Disclosures*. Further information on the remuneration of individual directors is provided in the audited part of the directors' remuneration report on pages 76 to 91.

The directors of the Company had no material transactions with the Company during the year, other than in connection with their service agreements. The remuneration of the executive directors is determined by the Remuneration Committee, having regard to the performance of the individuals and market trends. The remuneration of the non-executive directors is determined by the Board, having regard to the practice of other companies and the particular demands of the Group.

	2018 £m	2017 £m
Remuneration of key management personnel	2.2	2.1

Further detail can be found in the directors' remuneration report on pages 66 to 91.

36. Events since the end of the year

There are no post balance sheet events.

Parent company balance sheet

As at 31 October 2018

		2018	2017
	Note	£m	£m
Non-current assets			
Property, plant and equipment	1	0.2	0.3
Investments in subsidiaries	2	652.8	625.2
Amounts owed by subsidiary undertakings	4	436.9	360.3
Retirement benefit surplus	12	3.1	—
		1,093.0	985.8
Current assets			
Trade and other receivables	4	8.1	12.9
Cash and cash equivalents		—	25.3
		8.1	38.2
Total assets		1,101.1	1,024.0
Current liabilities			
Borrowings	6	—	(51.4)
Trade and other payables	5	(294.0)	(214.1)
		(294.0)	(265.5)
Non-current liabilities			
Borrowings	6	(84.6)	(61.9)
Trade and other payables	5	(63.0)	(62.8)
Provisions	7	(5.0)	(0.2)
Deferred tax	11	(0.1)	(0.4)
Preference shares	8	(0.1)	(0.1)
Retirement benefit obligations	12	—	(0.2)
		(152.8)	(125.6)
Total liabilities		(446.8)	(391.1)
Net assets		654.3	632.9
Equity			
Share capital	9	2.8	2.8
Share premium account		305.4	305.3
Special capital reserve		12.9	12.9
Retained earnings		341.0	321.5
		662.1	642.5
Own shares	10	(7.8)	(9.6)
Total equity		654.3	632.9

Profit attributable to shareholders

In accordance with the concession granted under section 408 of the Companies Act 2006, the profit and loss account of Chemring Group PLC has not been presented separately in these financial statements. There is no material difference between the results disclosed and the results on an unmodified historical cost basis. The Company reported a profit for the year ended 31 October 2018 of £28.2m (2017: £27.4m).

These financial statements of Chemring Group PLC (registered number 86662) were approved and authorised for issue by the Board of directors on 17 January 2019.

Signed on behalf of the Board



Michael Ord
Director



Andrew Lewis
Director

Parent company statement of comprehensive income

For the year ended 31 October 2018

	2018 £m	2017 £m
Profit after tax attributable to equity holders of the parent as reported	28.2	27.4
Items that will not be reclassified subsequently to profit and loss		
Actuarial (losses)/gains on pension scheme, net of deferred tax	(0.2)	2.8
Total comprehensive income attributable to the equity holders of the parent	28.0	30.2

Parent company statement of changes in equity

For the year ended 31 October 2018

	Share capital £m	Share premium account £m	Special capital reserve £m	Retained earnings £m	Own shares £m	Total £m
At 1 November 2017	2.8	305.3	12.9	321.5	(9.6)	632.9
Profit after tax	—	—	—	28.2	—	28.2
Other comprehensive loss	—	—	—	(0.2)	—	(0.2)
Total comprehensive income	—	—	—	28.0	—	28.0
Ordinary shares issued	—	0.1	—	—	—	0.1
Share-based payments (net of settlement)	—	—	—	0.2	—	0.2
Transactions in own shares	—	—	—	—	1.8	1.8
Dividends paid	—	—	—	(8.7)	—	(8.7)
At 31 October 2018	2.8	305.4	12.9	341.0	(7.8)	654.3

	Share capital £m	Share premium account £m	Special capital reserve £m	Retained earnings £m	Own shares £m	Total £m
At 1 November 2016	2.8	305.1	12.9	296.1	(9.6)	607.3
Profit after tax	—	—	—	27.4	—	27.4
Other comprehensive income	—	—	—	2.8	—	2.8
Total comprehensive income	—	—	—	30.2	—	30.2
Ordinary shares issued	—	0.2	—	—	—	0.2
Share-based payments (net of settlement)	—	—	—	1.6	—	1.6
Dividends paid	—	—	—	(6.4)	—	(6.4)
At 31 October 2017	2.8	305.3	12.9	321.5	(9.6)	632.9

The auditor's remuneration for audit and other services is disclosed in note 4 to the Group financial statements.

A final dividend of 2.2p per ordinary share has been proposed. See note 9 to the Group financial statements.

As at 31 October 2018 the Company had distributable reserves of £336.3m (2017: £316.9m). When required, the Company can receive dividends from its subsidiaries to further increase distributable reserves.

Notes to the parent company financial statements

1. Property, plant and equipment

	Land and buildings £m	Plant and equipment £m	Total £m
Cost			
At 1 November 2016	0.1	0.4	0.5
Disposals	—	(0.1)	(0.1)
At 31 October 2017 and 31 October 2018	0.1	0.3	0.4
Depreciation			
At 1 November 2016	—	0.1	0.1
Charge	—	0.1	0.1
Disposals	—	(0.1)	(0.1)
At 31 October 2017	—	0.1	0.1
Charge	—	0.1	0.1
At 31 October 2018	—	0.2	0.2
Carrying amount			
At 31 October 2018	0.1	0.1	0.2
At 31 October 2017	0.1	0.2	0.3

The Company had no capital commitments as at 31 October 2018 or 31 October 2017. Land and buildings represent leasehold improvements.

2. Investments in subsidiaries

	Shares in subsidiary undertakings £m	Loans to subsidiary undertakings £m	Total £m
Cost			
At 1 November 2016	548.6	6.6	555.2
Additions	113.9	—	113.9
At 31 October 2017	662.5	6.6	669.1
Additions	30.0	—	30.0
At 31 October 2018	692.5	6.6	699.1
Impairment			
At 1 November 2016 and 31 October 2017	43.9	—	43.9
Impairment	2.4	—	2.4
At 31 October 2018	46.3	—	46.3
Carrying amount			
At 31 October 2018	646.2	6.6	652.8
At 31 October 2017	618.6	6.6	625.2

The additions of £30.0m in the year ended 31 October 2018 represent a capital contribution to CHG Overseas Limited.

The additions of £113.9m in the year ended 31 October 2017 represent a capital contribution to CHG Overseas Limited.

Investment values are allocated to their respective cash-generating units ("CGUs"). The carrying amount of the investments has been allocated to the Group's principal CGUs, being the individual operating companies described in the operating segment descriptions on pages 20 to 25. Where the investment value relates to an intermediate holding company, the CGUs that are the subsidiaries of that holding company are used to support the carrying value.

The Company tests investments at least annually for impairment. Tests are conducted more frequently if there are indications that investments might be impaired. The recoverable amounts of the CGUs are determined from value-in-use calculations. The key assumptions for the value-in-use calculations have been individually estimated for each CGU and are detailed in note 11 of the Group financial statements.

In 2018 the Company concluded that the investment value relating to Chemring Defence UK Limited and Chemring Prime Contracts Limited was fully impaired and a charge of £2.4m was recorded.

2. Investments in subsidiaries continued

Stress testing was performed on the forecasts to consider the impact of reasonably worst case scenarios in the first two years, including significant delays to major contracts and new product lines followed by a 10% fall in the forecast cash flows. This would result in an additional impairment of £33.4m to CHG Overseas Limited being required.

A 1% addition to the discount rate for each CGU was also separately modelled, and would result in an additional impairment of £33.5m to CHG Overseas Limited being required.

Setting long-term growth rates beyond the five-year forecast period to zero would not result in any CGUs requiring further impairment.

3. Investments in Group undertakings

Details of the Group undertakings at 31 October 2018 are set out in note 14 to the Group financial statements.

The directors consider that the carrying value of the investments does not exceed their fair value.

4. Trade and other receivables

	2018 £m	2017 £m
Within current assets		
Trade receivables	0.1	—
Amounts owed by subsidiary undertakings	5.7	—
Other receivables	0.9	12.2
Corporation tax recoverable	0.7	—
Prepayments and accrued income	0.7	0.7
	8.1	12.9
Within non-current assets		
Amounts owed by subsidiary undertakings	436.9	360.3
	436.9	360.3

An asset of £0.1m (2017: £0.4m) is recognised within other receivables in respect of the fair value of derivative financial instruments, as set out in note 21 to the Group financial statements. The directors consider that the carrying value of the trade and other receivables approximates to their fair value.

Interest on amounts owed by subsidiary undertakings is charged between 3%-8%. No interest is charged on trade and other receivables from the date of invoice to payment.

5. Trade and other payables

	2018 £m	2017 £m
Within current liabilities		
Corporation tax payable	—	1.2
Derivative financial instruments (note 21 to the Group financial statements)	0.3	0.4
Trade payables	0.8	0.1
Amounts owed to subsidiary undertakings	287.7	205.5
Other payables	3.3	3.5
Other tax and social security	0.2	0.2
Accruals and deferred income	1.7	3.2
	294.0	214.1
Within non-current liabilities		
Derivative financial instruments (note 21 to the Group financial statements)	0.2	—
Amounts owed to subsidiary undertakings	62.8	62.8
	63.0	62.8

Interest on amounts owed to subsidiary undertakings attracts interest rates between 1%-4%. No interest is payable on trade payables from the date of invoice to payment.

Notes to the parent company financial statements

continued

6. Borrowings

	2018 £m	2017 £m
Within current liabilities		
Loan notes – US dollar denominated	—	46.1
– Sterling denominated	—	5.3
Borrowings due within one year	—	51.4
Within non-current liabilities		
Bank borrowings	19.2	—
Loan notes – US dollar denominated	65.4	61.9
Borrowings due after more than one year	84.6	61.9
Total borrowings	84.6	113.3

An analysis of borrowings by maturity is as follows:

	2018 £m	2017 £m
Borrowings falling due:		
– less than one year	—	51.4
– within one to two years	65.4	—
– within two to five years	19.2	61.9
	84.6	113.3

The interest incurred on the above borrowings is detailed within notes 7 and 18 to the Group financial statements.

7. Provisions

	Disposal provision £m	Legal provision £m	Total £m
At 1 November 2017	0.1	0.1	0.2
Provided	—	5.0	5.0
Released	—	(0.1)	(0.1)
Paid	(0.1)	—	(0.1)
At 31 October 2018	—	5.0	5.0

It is not possible to estimate more accurately the expected timing of any resulting outflows of economic benefits. The legal provision represents the estimated legal costs relating to ongoing investigations.

8. Preference shares

	2018 £m	2017 £m
Cumulative preference shares (62,500 shares of £1 each)	0.1	0.1

The cumulative preference shares carry an entitlement to a dividend at the rate of 7p per share per annum, payable in equal instalments on 30 April and 31 October each year. Holders of the preference shares have the right on a winding-up to receive, in priority to any other classes of shares, the sum of £1 per share together with any arrears of dividends.

9. Share capital

	2018 £m	2017 £m
Issued, allotted and fully paid		
281,763,364 (2017: 281,588,075) ordinary shares of 1p each	2.8	2.8

During the year, 175,289 ordinary shares (2017: 162,819) were issued for cash to employees under the Group's approved savings-related share schemes.

The preference shares are presented as a liability and accordingly are excluded from called-up share capital in the balance sheet.

Share-based incentive schemes

Full details of the schemes are set out in note 28 to the Group financial statements.

10. Own shares

	2018 £m	2017 £m
At the beginning of the year	9.6	9.6
Transactions	(1.8)	—
At the end of the year	7.8	9.6

The own shares reserve represents the cost of shares in Chemring Group PLC purchased in the market and held by the Group to satisfy awards under the Group's share-based incentive schemes (see note 28 to the Group financial statements). During the year, no ordinary shares (2017: nil) were acquired and 410,104 ordinary shares (2017: nil) were distributed following the vesting of awards under the Chemring Group Performance Share Plan. The total number of ordinary shares held in treasury at 31 October 2018 was 1,788,710 (2017: 2,198,814), with an average cost of 439.0p (2017: 439.0p) per share. This represents 0.6% (2017: 0.8%) of the total issued and fully paid ordinary share capital.

11. Deferred tax

	2018 £m	2017 £m
At the beginning of the year	(0.4)	6.7
Charge to income statement	0.3	(5.6)
Charge to other comprehensive income	—	(1.5)
Deferred tax liability at the end of the year	(0.1)	(0.4)
The amount provided represents:		
Other timing differences	(0.1)	(0.4)

At the balance sheet date, the Company had unrecognised tax losses of £17.5m (2017: £21.1m) potentially available for offset against future profits in certain circumstances. No deferred tax asset has been recognised in respect of this amount because of the unpredictability of future taxable qualifying profit streams.

12. Pensions

The Company has assumed its share of the assets and liabilities of the Group's defined benefit pension scheme. An analysis of the surplus/deficit balance is shown below:

	Total £m
At 1 November 2016, retirement benefit obligation	(6.3)
Contributions	2.1
Other finance costs	(0.3)
Actuarial movements	4.3
At 31 October 2017, retirement benefit obligation	(0.2)
Contributions	3.5
Other finance costs	—
Actuarial movements	(0.2)
At 31 October 2018, retirement benefit surplus	3.1

Further details are set out in note 30 to the Group financial statements.

13. Staff costs

	2018 Number	2017 Number
Average monthly number of total employees (including executive directors)	29	24
The costs incurred in respect of these employees (including share-based payments) were:		
	2018 £m	2017 £m
Wages and salaries	3.9	4.3
Social security costs	0.5	0.5
Other pension costs	0.4	0.4
Share-based payment	0.6	1.1
	5.4	6.3

Disclosures in respect of directors' emoluments can be found in the directors' remuneration report on pages 66 to 91.

Accounting policies

1. General information

Chemring Group PLC is a company incorporated in England and Wales under registration number 86662. The address of the registered office is Roke Manor, Old Salisbury Lane, Romsey, Hampshire, SO51 0ZN. The nature of the Group's operations and its principal activities are set out in note 2 of the Group financial statements and in the directors' report on pages 50 to 53. These financial statements are the consolidated financial statements of Chemring Group PLC and its subsidiaries (the "Group").

The financial statements are presented in pounds sterling, being the currency of the primary economic environment in which the Group operates, and rounded to the nearest £0.1m. Foreign operations are included in accordance with the foreign currencies accounting policy.

Going concern

The directors have, at the time of approving the financial statements, a reasonable expectation that the Group and the Company have adequate resources to continue to adopt the going concern basis of accounting in preparing these financial statements. Further detail is contained in the statement on going concern on page 61.

2. Adoption of new and revised standards

The following International Financial Reporting Committee ("IFRIC") interpretations, amendments to existing standards and new standards were adopted in the year ended 31 October 2018 but have not materially impacted the reported results or the financial position:

- Amendments to IAS 7 *Statement of Cash Flows*; and
- Amendments to IAS 12 *Recognition of Deferred Tax Assets for Unrealised Losses*.

Early adoption of revised standards and interpretations

In the year ended 31 October 2017, the following standard was adopted and has affected the amounts reported in these financial statements:

- IFRS 15 *Revenue from Contracts with Customers* (effective for periods beginning on or after 1 January 2018 with early adoption permitted).

New and revised standards and interpretations in issue but not yet effective

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 yet been applied in these financial statements were in issue but not yet effective (and in some cases had not yet been adopted by the European Union):

Effective for periods beginning on or after 1 January 2018

- Amendments to IFRS 2 *Classification and Measurement of Share-based Payment Transactions*;
- IFRS 9 *Financial Instruments: Recognition and Measurement*;
- Annual Improvements to IFRSs 2014–2016 Cycle; and
- IFRIC 22 *Foreign Currency Transactions and Advance Consideration*.

Effective for periods beginning on or after 1 January 2019

- IFRS 16 *Leases*;
- Amendments to IAS 19 *Employee Benefits*;
- Annual Improvements to IFRSs 2015–2017 Cycle; and
- IFRIC 23 *Uncertainty over Income Tax Treatments*.

Effective for periods beginning on or after 1 January 2021

- IFRS 17 *Insurance Contracts*.

The directors do not expect the adoption of these standards and interpretations will have a material impact on the financial statements of the Group in future periods except as follows:

- IFRS 16 *Leases* will impact the measurement, recognition, presentation and disclosure of leases, particularly operating leases where the term is longer than 12 months.

The impact of IFRS 16 *Leases* is currently being assessed. Under IFRS 16 *Leases*, lessees will be required to apply a single model to recognise a lease liability and asset for all leases, including those classified as operating leases under current accounting standards, unless the underlying asset has a low value or the lease term is 12 months or less. The adoption of IFRS 16 will have a significant impact on the results as each lease will give rise to a right of use asset which will be depreciated on a straight-line basis, and a lease liability with a related interest charge. The depreciation and interest will replace the operating lease payments currently recognised as an expense. The impact will depend on the transition approach and the contracts in effect at the time of the adoption. At 31 October 2018, operating lease commitments were £5.3m and operating lease payments for 2018 were £1.4m.

2. Adoption of new and revised standards continued

New and revised standards and interpretations in issue but not yet effective continued

IFRS 9 sets out requirements for recognising and measuring financial assets, financial liabilities and some contracts to buy or sell non-financial items. This standard replaces IAS 39 *Financial Instruments: Recognition and Measurement*. The adoption of IFRS 9 *Financial Instruments* from 1 November 2018 is expected to result in changes in accounting policies and adjustments to the amounts recognised in the financial statements, however the overall impact on the financial statements is not expected to be material. In accordance with the transitional provisions in IFRS 9, comparative figures will not be restated.

Trade receivables, contract assets and cash and cash equivalents will now be classified as amortised cost, rather than loans and receivables, however as these assets were accounted for at amortised cost under IAS 39, there is not expected to be a change in the carrying amount.

Trade payables and bank loans and overdrafts continue to be classified as other financial liabilities and accounted for at amortised cost.

Regarding impairment, the Group will apply the IFRS 9 simplified approach to measuring expected credit losses which uses a lifetime expected loss allowance for all assets held at amortised cost. The impact of the change in impairment methodology is not expected to be material.

Further information on IFRS 9 is provided in note 20 of the Group financial statements.

Beyond this information, it is not practicable to provide a reasonable estimate of the effect of these standards.

3. Group accounting policies

Basis of preparation

These financial statements have been prepared in accordance with IFRS adopted for use in the EU and therefore comply with Article 4 of the EU IAS Regulation. These financial statements have also been prepared in accordance with IAS, IFRS and related IFRIC interpretations, subsequent amendments to those standards and related interpretations, future standards and related interpretations issued or adopted by the International Accounting Standards Board ("IASB") that have been endorsed by the EU (collectively referred to as IFRS). These are subject to ongoing review and endorsement by the EU or possible amendment by interpretive guidance from the IASB and the IFRIC, and are therefore still subject to change.

In accordance with IFRS 5, the 2017 comparative figures in the consolidated income statement and consolidated statement of cash flows and related notes have been represented to show only continuing operations. Discontinued operations are shown as a single line item in the consolidated income statement as required by the standard. The comparative balance sheet has not been represented in respect of held for sale assets, in accordance with IFRS 5.

The financial statements are prepared under the historical cost convention, except as described below under the heading of "Derivative financial instruments".

The particular accounting policies adopted have been applied consistently throughout the current and previous year.

Basis of consolidation

The Group financial statements consolidate those of the Company and all of its subsidiaries. A subsidiary undertaking is an entity over which the Group has the power to govern the financial and operating policies so as to obtain benefits from its activities. The results of subsidiaries acquired are consolidated from the date on which control passes to the Group and the results of disposed subsidiaries are consolidated up to the date on which control passes from the Group.

The Company considers that it has the power to govern the financial and operating policies of the US entities falling within the Special Security Agreement and these entities have therefore been consolidated in these financial statements.

The Company and all of its subsidiaries make up their financial statements to the same date. All intra-group transactions, balances, income and expenses are eliminated on consolidation.

Operating profit

Operating profit is stated before the share of results of associates and before finance income and expense. The use of underlying measures, in addition to total measures, is considered by the Board to improve comparability of business performance between periods. Underlying measures referred to are stated before costs relating to acquisitions and disposals, business restructuring costs, profit/loss on disposal of businesses, items deemed to be of an exceptional nature, impairment of goodwill and acquired intangibles, impairment of assets held for sale, amortisation of acquired intangibles and gains/losses on the movement in the fair value of derivative financial instruments, and excludes discontinued operations.

Accounting policies continued

3. Group accounting policies continued

Revenue recognition

The majority of the Group's revenue arises from the manufacture and shipment of goods. Sales contracts are reviewed for performance obligations but the principal driver for timing of revenue recognition is delivery obligations, typically based on Incoterms. Once the relevant delivery obligation has been met revenue can be recognised. This also applies to sales where there are no goods shipped but a deliverable is completed at a certain point in time, such as the issue of a report.

Revenue also arises from milestone contracts, typically with larger and more complex projects that contain multiple performance obligations. Often the contracts are divided into milestones for payment purposes anyway, but judgement is required when assessing the way the contract is broken up to ensure that each one is a separate and valid performance obligation. If they are not, the relevant revenue amount is allocated across the other obligations as appropriate.

A number of sales contracts allow for bill and hold arrangements, where the customer has bought the goods but has not yet taken physical possession. This usually arises when the customer has limited storage space or there have been delays in their own production schedule. For such revenue to be recognised the bill and hold arrangement must be substantive and the relevant goods must be clearly identified as belonging to the customer and ready for immediate shipment at the customer's request.

These categories of sales are common across all segments.

Sale of goods

Revenue from the sale of goods is recognised when all of the following conditions are satisfied:

- the Group has identified a sales contract with a customer;
- the performance obligations within this contract have been identified;
- the transaction price has been determined;
- this transaction price has been allocated to the performance obligations in the contract; and
- revenue is recognised as or when each performance obligation is satisfied.

Performance obligations are satisfied when the customer gains control of promised goods or services from the contract.

Another significant source of Group revenue, especially within the Sensors segment, arises from time and materials contracts, where revenue is typically billed on a monthly basis based on work performed to date.

Rendering of services

Revenue from a contract to provide services, including customer-funded research and development, is recognised by reference to the stage of completion of the contract. Stage of completion is typically estimated by either completion of relevant milestones or proportion of contract costs incurred for work performed to date, as appropriate.

Acquisitions and disposals

On acquisition of a subsidiary, associate or jointly controlled entity, the cost is measured as the fair value of the consideration. The assets, liabilities and contingent liabilities of subsidiary undertakings that meet the IFRS 3 (Revised) *Business Combinations* recognition criteria are measured at the fair value at the date of acquisition, except that:

- deferred tax assets or liabilities, and liabilities or assets relating to employee benefit arrangements, are recognised and measured in accordance with IAS 12 *Income Taxes* and IAS 19 (Revised) *Employee Benefits* respectively;
- liabilities or equity instruments related to the replacement by the Group of an acquiree's share-based payment awards are measured in accordance with IFRS 2 *Share-based Payments*; and
- assets (or disposal groups) that are classified as held for sale, in accordance with IFRS 5 *Non-current Assets Held for Sale and Discontinued Operations*, are measured in accordance with that standard.

Where cost exceeds fair value of the net assets acquired, the difference is recorded as goodwill.

Where the fair value of the net assets exceeds the cost, the difference is recorded directly in the income statement. The accounting policies of subsidiary undertakings are changed where necessary to be consistent with those of the Group.

3. Group accounting policies continued

Acquisitions and disposals continued

If the initial accounting for a business combination is incomplete by the end of the reporting period in which the combination occurs, the Group reports provisional amounts for the items for which the accounting is incomplete. Those provisional amounts are adjusted during the measurement period (see below), or additional assets or liabilities recognised, to reflect new information obtained about facts and circumstances that existed as at the acquisition date that, if known, would have affected the amounts recognised as at that date.

The measurement period runs from the date of acquisition to the date the Group obtains complete information about facts and circumstances that existed as at the acquisition date, subject to a maximum period of one year.

In accordance with IFRS 3 (Revised) *Business Combinations*, acquisition and disposal-related items are recognised through the income statement. Acquisition and disposal-related items refer to credits and costs associated with the acquisition and disposal of businesses, together with the costs of aborted bids and the establishment of joint ventures.

Discontinued operations and assets held for sale

When the Group makes a decision to exit a significant business unit or separate major line of business, the associated operations and cash flows are classified as discontinued operations in the financial statements, in accordance with the provisions of IFRS 5 *Non-current Assets Held for Sale and Discontinued Operations*.

These discontinued operations may represent components of the Group that have already been disposed of or are classified as held for sale.

Non-current assets and disposal groups classified as held for sale are measured at the lower of carrying amount and fair value less costs to sell.

Non-current assets and disposal groups are classified as held for sale if their carrying amount will be recovered through a sales transaction rather than continuing use. This condition is regarded as met only when the sale is highly probable and the asset or disposal group is available for immediate sale in its present condition. Management must be committed to the sale which should be expected to qualify as a completed sale within one year from the date of classification.

Intangible assets – goodwill

The purchased goodwill of the Group is regarded as having an indefinite useful economic life and, in accordance with IAS 36 *Impairment of Assets*, is not amortised but is subject to annual tests for impairment. On disposal of a subsidiary, associate or jointly controlled entity, the amount attributable to goodwill is included in the determination of the profit or loss on disposal.

Acquired intangibles

The Group recognises separately from goodwill intangible assets that are separable or arise from contractual or other legal rights and whose fair value can be measured reliably. These intangible assets are amortised at rates calculated to write down their cost or valuation to their estimated residual values by equal instalments over their estimated useful economic lives, which are:

- technology – average of ten years
- customer relationships – average of ten years

Development costs

Development costs that qualify as intangible assets are capitalised as incurred and, once the relevant intangible asset is ready for use, are amortised on a straight-line basis over their estimated useful lives, averaging three years (2017: five years).

The carrying value of development assets is assessed for recoverability at least annually or when a trigger is identified.

Patents and licences

Patents and licences are measured initially at purchase cost and are amortised on a straight-line basis over their estimated useful lives, averaging eight years (2017: seven years).

Property, plant and equipment

Other than historically revalued land and buildings, property, plant and equipment is held at cost less accumulated depreciation and any recognised impairment loss. Borrowing costs on significant capital expenditure projects are capitalised and allocated to the cost of the project.

No depreciation is provided on freehold land. On other assets, depreciation is provided at rates calculated to write down their cost or valuation to their estimated residual values by equal instalments over their estimated useful economic lives, which are:

- freehold buildings – up to fifty years
- leasehold buildings – the period of the lease
- plant and equipment – up to ten years

Accounting policies continued

3. Group accounting policies continued

Impairment of non-current assets

Assets that have indefinite lives are allocated to the Group's cash-generating units and tested for impairment at least annually. Assets that are subject to depreciation or amortisation are reviewed for impairment whenever changes in circumstances indicate that the carrying value may not be recoverable. To the extent that the carrying value exceeds the recoverable amount, an impairment loss is recorded for the difference as an expense in the income statement. The recoverable amount used for impairment testing is the higher of the value-in-use and the asset's fair value less costs of disposal. For the purpose of impairment testing, assets are grouped at the lowest levels for which there are separately identifiable cash flows.

Inventories

Inventories are recorded at the lower of cost and net realisable value. Cost represents materials, direct labour, other direct costs and related overheads, and is determined using the "first-in, first-out" ("FIFO") method. Net realisable value is based on estimated selling price, less further costs expected to be incurred to completion and disposal.

Provision is made for slow-moving, obsolete and defective items where appropriate.

Borrowing costs

Borrowing costs directly attributable to the acquisition, construction or production of qualifying assets, which are assets that necessarily take a substantial period of time to prepare for their intended use, are added to the cost of those assets, until such time as the assets are ready for their intended use. Once the assets are ready for their intended use, these capitalised borrowing costs are depreciated in line with the underlying asset.

All other borrowing costs are recognised in the income statement in the period in which they are incurred.

Government grants

Government grants are not recognised until there is reasonable assurance that the Group will comply with the conditions attaching to them and that the grants will be received.

Government grants for staff retraining costs are recognised as income over the periods necessary to match them with the related costs and are deducted in reporting the related expense.

Government grants relating to property, plant and equipment are treated as deferred income and released to the income statement over the expected useful economic lives of the assets concerned.

Tax

The tax expense represents the sum of current tax and deferred tax.

Current tax is based on taxable profit for the year. Taxable profit differs from profit as reported in the income statement because it excludes items of income or expense that are taxable or deductible in other years, and it excludes items of income or expense that are never taxable or deductible. The Group's liability for current tax is calculated using tax rates that have been enacted or substantively enacted at the balance sheet date.

Deferred tax represents amounts expected to be payable or recoverable on differences between the carrying amounts of assets and liabilities in the financial statements and the corresponding tax bases used in the computation of taxable profit, and is accounted for using the balance sheet liability method. Deferred tax liabilities are generally recognised for all taxable temporary differences, and deferred tax assets are recognised to the extent that it is probable taxable profits will be available in the future against which deductible temporary differences can be utilised. Such assets and liabilities are not recognised if the temporary difference arises from goodwill or from the initial recognition (other than in a business combination) of other assets and liabilities in a transaction that affects neither the taxable profit nor the accounting profit.

Deferred tax liabilities are recognised for taxable temporary differences arising on investments in subsidiaries and associates, and interests in joint ventures, except where the Group is able to control the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future.

The carrying amount of deferred tax assets is reviewed at each balance sheet date and reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow all or part of the asset to be recovered. Deferred tax is calculated at the tax rates that are expected to apply in the period when the liability is settled or the asset is realised. Deferred tax is charged or credited in the income statement, except where it relates to items charged or credited directly to equity, in which case the deferred tax is also dealt with in equity.

Deferred tax assets and liabilities are offset when there is a legally enforceable right to set off current tax assets against current tax liabilities, when they relate to income taxed by the same tax authority, and when the Group intends to settle its current tax assets and liabilities on a net basis.

3. Group accounting policies continued

Special capital reserve

The special capital reserve was created as part of a capital reduction scheme involving the cancellation of the share premium account which was approved by the Court in 1986, in accordance with the requirements of the Companies Act 1985.

Foreign currencies

The individual financial statements of each Group company are presented in its functional currency, being the currency of the primary economic environment in which it operates. For the purpose of these Group financial statements, the results and financial position of each Group company are expressed in pounds sterling, which is the functional currency of the Company, and the presentation currency for these financial statements.

In preparing the financial statements of each Group company, transactions in foreign currencies, being currencies other than the entity's functional currency, are recorded at the rates of exchange prevailing on the dates of the transactions. At each balance sheet date, monetary assets and liabilities that are denominated in foreign currencies are retranslated at the rates prevailing on the balance sheet date. Non-monetary items carried at fair value that are denominated in foreign currencies are translated at the rates prevailing at the date when the fair value was determined. Non-monetary items that are measured in terms of historical cost in a foreign currency are not retranslated.

Exchange differences arising on the settlement of monetary items and on the retranslation of monetary items are included in the income statement for the period.

In order to hedge its exposure to certain foreign exchange risks, the Group enters into forward foreign exchange contracts which are accounted for as derivative financial instruments (see below for details of the Group's accounting policies in respect of such derivative financial instruments).

For the purpose of presenting these financial statements, the assets and liabilities of the Group's foreign operations are translated at exchange rates prevailing on the balance sheet date. Income and expense items are translated at the average exchange rates for the period.

Goodwill and fair value adjustments arising on the acquisition of a foreign entity are treated as assets and liabilities of the foreign entity and translated at the closing rate.

Financial instruments

Financial assets and liabilities are recognised in the Group's balance sheet when the Group becomes a party to the contractual provisions of the instrument.

Financial assets

Trade receivables

Trade receivables do not carry any interest and are stated at their fair value and amortised cost as reduced by appropriate allowances for estimated irrecoverable amounts.

Cash and cash equivalents

Cash and cash equivalents comprise cash on hand and demand deposits, and other short-term highly liquid investments that are readily convertible to a known amount of cash and are subject to an insignificant risk of change in value.

Financial liabilities and derivative financial instruments

Financial liabilities

Financial liabilities and equity instruments are classified according to the substance of the contractual arrangements entered into.

Bank borrowings

Interest bearing bank loans and overdrafts are recorded at the proceeds received, net of direct issue costs. Finance charges, including premiums payable on settlement or redemption, and direct issue costs are accounted for on an accruals basis in the income statement using the effective interest method, and are added to the carrying amount of the instrument to the extent that they are not settled in the period in which they arise.

Trade payables

Trade payables are not interest bearing and are stated at their fair value and amortised cost.

Accounting policies continued

3. Group accounting policies continued

Financial liabilities and derivative financial instruments continued

Derivative financial instruments

The Group's activities expose it to the financial risks of foreign currency transactions, and it uses forward foreign exchange contracts to hedge its exposure to these transactional risks. The Group does not use derivative financial instruments for speculative purposes.

Derivative financial instruments are recognised at fair value on the date the derivative contract is entered into and are revalued to fair value at each balance sheet date. The fair values of derivative financial instruments are calculated by external valuers.

The method by which any gain or loss is recognised depends on whether the instrument is designated a hedging instrument or not. To be designated as a hedging instrument, the instrument must be documented as such at inception, and must be assessed at inception and on an ongoing basis to be highly effective in offsetting changes in fair values or cash flows of hedged items.

Hedge accounting principles are used for forward foreign exchange contracts where appropriate, with movements in fair value taken to equity, until such time as the underlying amounts of the contract mature. At maturity or disposal of the net investment, the amounts held in equity will be recycled to the income statement. Changes in fair value of any ineffective portion of net investment hedges and interest rate swap contracts are recognised in the income statement immediately.

Where derivative financial instruments do not meet the criteria for hedge accounting principles, the changes in fair value are immediately recognised in the income statement.

Hedges of net investments in foreign operations

Any gain or loss on the hedging instrument relating to the effective portion of the hedge is recognised in the statement of comprehensive income and accumulated in the translation reserve. The gain or loss relating to the ineffective portion is recognised immediately in the income statement.

Retirement benefit costs

Payments to defined contribution retirement benefit schemes are charged as an administrative expense in the period to which they relate. For defined benefit schemes, the cost of providing benefits is determined using the projected unit credit method, with actuarial valuations being carried out at each balance sheet date. Actuarial gains and losses are recognised in the statement of comprehensive income in full in the period in which they occur.

Past service cost is recognised immediately to the extent that the benefits are already vested, and otherwise is amortised on a straight-line basis over the average period until the benefits become vested.

The discount on scheme liabilities less the expected return on scheme assets on defined benefit obligations is included within finance expense.

The retirement benefit obligation recognised in the balance sheet represents the present value of the defined benefit obligation as adjusted for unrecognised past service cost and as reduced by the fair value of scheme assets. Any asset resulting from this calculation is limited to past service cost, plus the present value of available refunds and reductions in future contributions to the scheme.

Leased assets

Where the Group enters into a lease which entails taking substantially all the risks and rewards of ownership of an asset, the lease is treated as a finance lease. The asset is recorded in the balance sheet as property, plant and equipment, and is depreciated over the shorter of its estimated useful economic life and the lease term. Future instalments under such leases, net of finance charges, are recognised as a liability. The finance element of the instalments is charged to the income statement at a constant rate of interest on the remaining balance of the obligation.

All other leases are operating leases, for which rental charges are recognised in the income statement on a straight-line basis over the life of the lease.

Share-based compensation

The Group operates equity-settled and cash-settled share-based compensation schemes.

For grants made under the Group's share-based compensation schemes, the fair value of an award is measured at the date of grant and reflects any market-based vesting conditions. Non-market-based vesting conditions are excluded from the fair value of the award. At the date of grant, the Company estimates the number of awards expected to vest as a result of non-market-based vesting conditions, and the fair value of this estimated number of awards is recognised as an expense in the income statement on a straight-line basis over the vesting period. At each balance sheet date, the impact of any revision to vesting estimates is recognised in the income statement over the vesting period. Proceeds received, net of any directly attributable transaction costs, are credited to share capital and share premium.

For cash-settled share-based grants, the total amount recognised is based on the fair value of the liability incurred. The fair value of the liability is remeasured at each balance sheet date, with changes in the fair value recognised in the income statement.

3. Group accounting policies continued

Provisions

Provisions are recognised when the Group has a present obligation, either 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 estimated cash flows to settle the present obligation, its carrying amount is the present value of those 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.

Environmental provisions

Where the Group is liable for decontamination work or the restoration of sites to their original condition, an estimate is made of the costs needed to complete these works, discounted back to present values, relying upon independent third party valuers where appropriate.

Restructuring provisions

A restructuring provision is recognised when the Group has developed a detailed formal plan for the restructuring and has raised a valid expectation in those affected that it will carry out the restructuring by starting to implement the plan or announcing its main features to those affected by it. The measurement of a restructuring provision includes only the direct expenditures arising from the restructuring and not those associated with the ongoing activities of the entity.

Warranty provisions

Provisions for the expected cost of warranty obligations under local sale of goods legislation are recognised at the date of sale of the relevant products, based upon the best estimate of the expenditure required to settle the Group's obligations.

Disposal provisions

Disposal provisions relate to estimated liabilities faced by the Group in respect of discontinued operations and other disposed entities under the terms of their respective sale agreements.

Contingent liabilities

The Group exercises judgement in recognising exposures to contingent liabilities related to pending litigation or other outstanding claims subject to negotiated settlement, mediation, arbitration or government regulation, as well as other contingent liabilities. Judgement may be necessary in assessing the likelihood that a pending claim will succeed, or a liability will arise, and/or to quantify the possible range of the financial settlement.

Alternative Performance Measures

In the analysis of the Group's financial performance and position, operating results and cash flows, APMs are presented to provide readers with additional information. The principal APMs presented are underlying measures of earnings including underlying operating profit, underlying profit before tax, underlying profit after tax, underlying EBITDA, underlying earnings per share and underlying operating cash flow. In addition, EBITDA, net debt and constant currency revenues are presented which are also considered non-IFRS measures. These measures are consistent with information regularly reviewed by management to run the business, including planning, budgeting and reporting purposes and for its internal assessment of the operational performance of individual businesses.

The directors believe that the use of these APMs assist in providing additional information on the underlying trends, performance and position of the Group. APMs are used to improve the comparability of information between reporting periods by adjusting for items that are non-recurring or otherwise non-underlying. Management consider non-underlying items to be:

- amortisation of acquired intangibles;
- material exceptional items, for example relating to acquisitions and disposals, business restructuring costs and legal costs;
- material exceptional items from changes in legislation, for example the GMP equalisation court ruling and the enactment of the US Tax Cuts and Jobs Act;
- gains or losses on the movement in the fair value of derivative financial instruments; and
- the tax impact of all of the above.

The Group's use of APMs is consistent and we provide comparatives alongside all current period figures.

Further detail on the APMs presented within these financial statements, including a reconciliation to the IFRS equivalent, is presented in note 3.

Accounting policies continued

3. Group accounting policies continued

Exceptional items

Exceptional items are excluded from management's assessment of profit because by their size or nature they could distort the Group's underlying quality of earnings. They are typically gains or losses arising from events that are not considered part of the core operations of the business. These items are excluded to reflect performance in a consistent manner and are in line with how the business is managed and measured on a day-to-day basis.

Post balance sheet events

In accordance with IAS 10 *Events after the Balance Sheet Date*, the Group continues to disclose events that it considers material, non-disclosure of which can influence the economic decisions of users of the financial statements.

4. Chemring Group PLC – parent company accounting policies

FRS 101 *Reduced Disclosure Framework*

The financial statements have been prepared in accordance with FRS 101 *Reduced Disclosure Framework*.

The Company operates a multi-employer defined benefit scheme including employees of other Group companies. Following FRS 101, the scheme assets and liabilities have been allocated across the Group companies using a method that management considers to be the most appropriate, based on scheme membership.

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

- share-based payments;
- financial instruments;
- fair value measurements;
- presentation of comparative information in respect of certain assets;
- IFRSs issued but not yet effective;
- related party transactions;
- assumptions and sensitivities for impairment review; and
- cash flow.

Investment in Group undertakings

Investments are stated at cost less any provision for impairment in value.

Critical accounting judgements and sources of estimation uncertainty

There are no critical accounting judgements and sources of estimation uncertainty for the Company.

5. Accounting judgements and sources of estimation uncertainty

When applying the Group's accounting policies, management must make judgements, assumptions and estimates concerning the future that affect the carrying amounts of assets and liabilities at the balance sheet date and the amounts of revenue and expenses recognised during the period. Such judgements, assumptions and estimates are based upon factors including historical experience, the observance of trends in the industries in which the Group operates, and information available from the Group's customers and other external sources.

At the balance sheet date there were no key judgements concerning the future that have significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year. Revenue recognition does however include a degree of judgement, as disclosed below:

Accounting judgements

Revenue recognition

In 2017 the Group adopted IFRS 15 *Revenue from Contracts with Customers*. The standard recognises revenue on the basis of the satisfaction of performance obligations.

Management has to consider whether performance obligations should be recognised at a single point in time, which is generally the case for the sale of products by the Group, or over a period of time, which is more common for certain service contracts.

5. Accounting judgements and sources of estimation uncertainty continued

Accounting judgements continued

Revenue recognition continued

In making its judgement about obligations that are satisfied at a point in time, management has to consider at what point control has passed to the customer, allowing revenue to be recognised. This is typically determined through a consideration of customer acceptance testing, contract terms and delivery arrangements.

The key assumptions concerning the future and other key sources of estimation uncertainty at the balance sheet date that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year include:

Key sources of estimation uncertainty

Goodwill impairment

Determining whether goodwill is impaired requires an estimation of the value-in-use of the cash-generating units to which goodwill has been allocated. The value-in-use calculation requires the entity to estimate the future cash flows expected to arise from the cash-generating unit, and to determine a suitable discount rate in order to calculate present value (see note 11). In reviewing the carrying value of goodwill of the Group's businesses, the Board has considered the separate plans and cash flows of these businesses consistent with the requirements of IAS 36 *Impairment of Assets*. The plans and cash flows of these businesses reflect current and anticipated conditions in the defence industry. The total goodwill intangible asset is set out in note 11, which shows a carrying value of £109.2m at 31 October 2018.

Capitalised development costs

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 substantially improved product, are capitalised, subject to certain criteria being met. Determining the future cash flows generated by the products in development requires estimates which may differ from the actual outcome. In particular, this can depend on the estimation applied to future milestone events to secure long-term positions on production contracts, for example Programs of Record for the US DoD. The total capitalised development intangible asset is set out in note 12, which shows a carrying value of £24.0m at 31 October 2018. Included in this balance are individually material balances relating to Joint Biological Tactical Detection System (£8.9m) and Next Generation Chemical Detector (£9.8m).

Deferred tax assets on tax losses and US interest deductions

The category of deferred tax asset which contains significant estimation uncertainty and which requires management judgement in assessing its recoverability relates to US interest limitations and tax losses carried forward (see note 23).

Applicable accounting standards permit the recognition of deferred tax assets only to the extent that it is probable that future taxable profits will be available to utilise the tax losses carried forward. The assessment of future taxable profits involves significant estimation uncertainty, principally relating to an assessment of management's projections of future taxable income based on business plans and ongoing tax planning strategies. These projections include assumptions about the future strategy of the Group, the economic and regulatory environment in which the Group operates, future tax legislation and customer behaviour, amongst other variables.

Provisions

The Group holds provisions where appropriate in respect of future economic outflows which arise due to past events. These are subject to uncertainty in respect of the outcome of future events. Estimates, judgements and assumptions are based on factors including historical experience, the observance of trends in the industries in which the Group operates, and information available from the Group's customers and other external sources. Actual outflows of economic benefit may not occur as anticipated, and estimates may prove to be incorrect, leading to further charges or releases of provisions as circumstances change. The provisions held by the Group as at 31 October 2018 are set out in note 22.

Taxation

The Group operates in a number of countries around the world. Uncertainties exist in relation to the interpretation of complex tax legislation, changes in tax laws and the amount and timing of future taxable income. In some jurisdictions agreeing tax liabilities with local tax authorities can take several years. This could necessitate future adjustments to taxable income and expense already recorded. At the year end date, tax liabilities and assets are based on management's best judgements around the application of the tax regulations and management's estimate of the future amounts that will be settled.

The Group's operating model involves the cross-border supply of goods into end markets. There is a risk that different tax authorities could seek to assess higher profits (or lower costs) to activities being undertaken in their jurisdiction, potentially leading to higher total tax payable by the Group.

At 31 October 2018 there is a provision of £4.2m in respect of uncertain tax positions. Due to the uncertainties noted above, there is a risk that the Group's judgements are challenged, resulting in a different tax payable or recoverable from the amounts provided. Management estimates that the reasonably possible range of outcomes is between £0.5m and £6.0m.

The key uncertainties impacting taxation arise from potential changes to legislation such as the OECD's Base Erosion and Profit Shifting (BEPS) project.

Independent auditor's report to the members of Chemring Group PLC

1. Our opinion is unmodified

We have audited the financial statements of Chemring Group PLC (the "Company") for the year ended 31 October 2018 which comprise the consolidated income statement, consolidated statement of comprehensive income, consolidated statement of changes in equity, consolidated balance sheet, consolidated cash flow statement, parent company balance sheet, parent company statement of comprehensive income, parent company statement of changes in equity, and the related notes, including the accounting policies in notes 1–4.

In our opinion:

- the financial statements give a true and fair view of the state of the Group's and of the parent company's affairs as at 31 October 2018 and of the Group's loss for the year then ended;
- the Group financial statements have been properly prepared in accordance with International Financial Reporting Standards as adopted by the European Union;
- the parent company financial statements have been properly prepared in accordance with UK accounting standards, including FRS 101 *Reduced Disclosure Framework*; 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.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) ("ISAs (UK)") and applicable law. Our responsibilities are described below. We believe that the audit evidence we have obtained is a sufficient and appropriate basis for our opinion. Our audit opinion is consistent with our report to the Audit Committee.

We were first appointed as auditor by the directors on 17 March 2018. The period of total uninterrupted engagement is for the financial year ended 31 October 2018. We have fulfilled our ethical responsibilities under, and we remain independent of the Group in accordance with, UK ethical requirements including the FRC Ethical Standard as applied to listed public interest entities. No non-audit services prohibited by that standard were provided.

Overview

Materiality: Group financial statements as a whole	£1.8m
	5% of 3 year average underlying profit before tax
Coverage: by full scope audit procedures	88% of total profits and losses that made up Group profit before tax (including all operations classed as continuing and discontinuing)

Risks of material misstatement

Revenue Recognition

Recoverability of Group goodwill, Group other intangibles and of the parent company's investments in, and intergroup receivable balances with, subsidiaries

2. Key audit matters: our assessment of risks of material misstatement

Key audit matters are those matters that, in our professional judgement, were of most significance in the audit of the financial statements and include the most significant assessed risks of material misstatement (whether or not due to fraud) identified by us, 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. We summarise below the key audit matters, in decreasing order of audit significance, in arriving at our audit opinion above, together with our key audit procedures to address those matters and, as required for public interest entities, our results from those procedures. These matters were addressed, and our results are based on procedures undertaken, in the context of, and solely for the purpose of, our audit of the financial statements as a whole, and in forming our opinion thereon, and consequently are incidental to that opinion, and we do not provide a separate opinion on these matters.

	<i>The risk</i>	<i>Our response</i>
Revenue recognition (£297.4m; 2017: £307.1m) Refer to page 64 (Audit Committee report), page 136 (accounting policy) and page 97 (financial disclosures).	Revenue cut off There is a cut off risk over the existence of goods and services revenue due to pressures on management to increase profitability and other key metrics, increasing the risk of fraudulent premature revenue recognition. Certain 'point in time' contracts require management to exercise some judgement with respect to determining the timing of the satisfaction of the performance obligations.	Our procedures included: ■ Control design: evaluating controls over the revenue process; ■ Corroborating terms: assessing management's assumptions behind the timing of when control transfers to the customer against the customer contract; ■ Tests of detail: comparing the timing of revenue recognition for a sample of revenue transactions in the final month of the accounting period against the point at which control transfers to the customer; and ■ Assessing transparency: assessing the adequacy of the Group's disclosures about the degree of judgement involved in determining the timing of revenue recognition. Our results ■ We found the timing of revenue recognition to be acceptable.

Independent auditor's report to the members of Chemring Group PLC continued

2. Key audit matters: our assessment of risks of material misstatement continued

	<i>The risk</i>	<i>Our response</i>
Recoverability of Group goodwill, Group other intangibles and of the parent company's investments in, and intergroup receivable balances with, subsidiaries (Group: £170.8m; 2017: £216.1m; parent company: £1,089.7m; 2017: £985.5m) Refer to page 64 (Audit Committee report), page 137 (accounting policy) and pages 106, 108 and 130 (financial disclosures).	Forecast-based valuation A history of business combinations results in significant Group goodwill, Group other intangibles and of the parent company's investments in and intergroup receivable balances with subsidiaries. Due to the above and the movement in share price, parent company equity is greater than the total value of market capitalisation and debt, thus the recoverability of parent company investments in, and intergroup receivable balances with, subsidiaries is reliant on the estimates made of the valuation of future cash flows. The estimated recoverable amount of all Group intangible assets and parent company investments and intergroup receivables is subjective due to the inherent uncertainty involved in forecasting and discounting future cash flows for CGUs.	Our procedures included: ■ Extrapolating past forecasting accuracy: assessing three years' historical accuracy of the Group's forecasting and building comparable variations in forecasting accuracy into our own models that were used to re-perform the valuation; ■ Our sector experience: evaluating assumptions used, in particular those relating to operating cash flow forecasts; ■ Benchmarking assumptions: benchmarking discount rates (including the underlying assumptions used) against market data, including publicly available analysts' reports and peer comparison using input from our own valuation experts; ■ Sensitivity analysis: performing sensitivity analysis by reviewing the impact of reasonable downward changes to the assumptions noted above; ■ Comparing valuations: comparing the sum of the discounted cash flows to the aggregate of the Group's market capitalisation and the fair value of the net debt to assess the reasonableness of those cash flows; and ■ Assessing transparency: assessing whether the Group's and parent company's disclosures about the sensitivity of the outcome of the impairment assessment to changes in key assumptions reflected the risks inherent in the valuation of Group goodwill, Group other intangibles and of the parent company's investments in and intergroup receivable balances with subsidiaries. Our results ■ We found the resulting estimate of the recoverable amount of Group goodwill, Group other intangibles and parent company's investments in and intergroup receivable balances with subsidiaries to be acceptable.

3. Our application of materiality and an overview of the scope of our audit

Materiality for the Group financial statements as a whole was set at £1.8m, determined with reference to a benchmark of Group profit before tax, normalised to exclude this year's non-underlying items as disclosed in note 3 and by averaging over the last three years due to the impact on profits of the Salisbury incident during the year at the UK Countermeasures facility, as described in the strategic report. This materiality was revised down from £2.4m used during the planning stage, due to the energetic incident described above.

Materiality for the parent company financial statements as a whole was set at £1.4m determined with reference to a benchmark of parent company net assets, of which it represents 0.2%.

We agreed to report to the Audit Committee any corrected or uncorrected identified misstatements exceeding £0.1m, in addition to other identified misstatements that warranted reporting on qualitative grounds.

Of the Group's 15 components, we subjected 10 to full scope audits for Group purposes and two to specified risk-focused audit procedures over revenue and inventory. The components for which we performed work other than audits for Group reporting purposes were not individually significant but were included in the scope of our Group reporting work in order to provide further coverage over the Group's results.

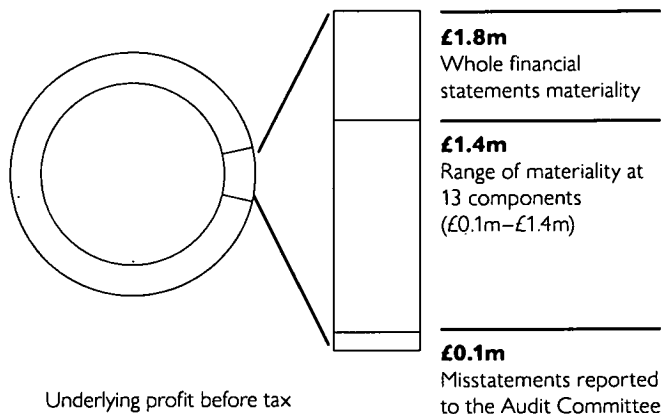
The components within the scope of our work accounted for the percentages illustrated opposite.

The remaining 17% of total Group revenue, 10% of total profits and losses that made up Group profit before tax and 15% of total Group assets is represented by three components, none of which individually represented more than 11% of any of total Group revenue, Group profit before tax or total Group assets. For these residual components, we attended inventory counts and performed analysis at an aggregated Group level to re-examine our assessment that there were no significant risks of material misstatement within these.

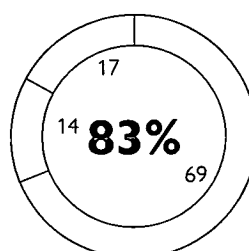
The Group team instructed component auditors as to the significant areas to be covered, including the relevant risks detailed above and the information to be reported back. The Group team approved component materiality, which ranged from £0.1m to £1.4m, having regard to the mix of size and risk profile of the Group across the components. The work on 8 of the 12 components was performed by component auditors and the rest, including the audit of the parent company, was performed by the Group team. The Group team performed procedures on the items excluded from underlying Group profit before tax.

Underlying profit before tax
£24.9m

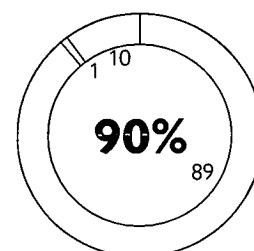
Group materiality
£1.8m



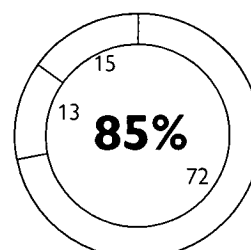
Group revenue*



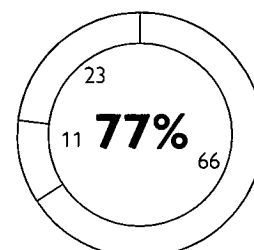
Total profits and losses that made up Group before tax*



Group total assets*



Total profits and losses that made up Group profit before non-underlying items and tax*



Full scope for Group audit purposes

Specified risk-focused audit procedures

Residual components –

Group analytic and inventory count attendance

* Audit coverage has been calculated on the above measures, including all operations classed as continuing and discontinuing.

Independent auditor's report to the members of Chemring Group PLC continued

4. We have nothing to report on going concern

We are required to report to you if:

- we have anything material to add or draw attention to in relation to the directors' statement in the accounting policies note 1 to the financial statements on the use of the going concern basis of accounting with no material uncertainties that may cast significant doubt over the Group and Company's use of that basis for a period of at least 12 months from the date of approval of the financial statements; or
- the related statement under the Listing Rules set out on page 52 is materially inconsistent with our audit knowledge.

We have nothing to report in these respects.

5. We have nothing to report on the other information in the Annual Report and Accounts

The directors are responsible for the other information presented in the annual report together with the financial statements. Our opinion on the financial statements does not cover the other information and, accordingly, we do not express an audit opinion or, except as explicitly stated below, any form of assurance conclusion thereon.

Our responsibility is to read the other information and, in doing so, consider whether, based on our financial statements audit work, the information therein is materially misstated or inconsistent with the financial statements or our audit knowledge. Based solely on that work we have not identified material misstatements in the other information.

Strategic report and directors' report

Based solely on our work on the other information:

- we have not identified material misstatements in the strategic report and the directors' report;
- in our opinion the information given in those reports for the financial year is consistent with the financial statements; and
- in our opinion those reports have been prepared in accordance with the Companies Act 2006.

Directors' remuneration report

In our opinion the part of the directors' remuneration report to be audited has been properly prepared in accordance with the Companies Act 2006.

Disclosures of principal risks and longer-term viability

Based on the knowledge we acquired during our financial statements audit, we have nothing material to add or draw attention to in relation to:

- the directors' confirmation within the long-term viability statement 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 and liquidity;
- the principal risks disclosures describing these risks and explaining how they are being managed and mitigated; and
- the directors' explanation in the long-term viability statement of how they have assessed the prospects of the Group, over what period they have done so and why they considered 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.

Under the Listing Rules we are required to review the long-term viability statement. We have nothing to report in this respect.

Corporate governance disclosures

We are required to report to you if:

- we have identified material inconsistencies between the knowledge we acquired during our financial statements audit and the directors' statement that they consider that the annual report and financial statements taken as a whole is fair, balanced and understandable and provides the information necessary for shareholders to assess the Group's position and performance, business model and strategy; or
- the section of the annual report describing the work of the Audit Committee does not appropriately address matters communicated by us to the Audit Committee.

We are required to report to you if the corporate governance report does not properly disclose a departure from the 11 provisions of the UK Corporate Governance Code specified by the Listing Rules for our review.

We have nothing to report in these respects.

6. We have nothing to report on the other matters on which we are required to report by exception

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

- adequate accounting records have not been kept by the parent company, or returns adequate for our audit have not been received from branches not visited by us; or
- the parent company financial statements and the part of the directors' remuneration report to be audited are not in agreement with the accounting records and returns; or
- certain disclosures of directors' remuneration specified by law are not made; or
- we have not received all the information and explanations we require for our audit.

We have nothing to report in these respects.

7. Respective responsibilities

Directors' responsibilities

As explained more fully in their statement set out on page 53, the directors are responsible for: the preparation of the financial statements including being satisfied that they give a true and fair view; 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; assessing the Group and parent 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 they either intend to liquidate the Group or the parent company or to cease operations, or have no realistic alternative but to do so.

Auditor's responsibilities

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 other irregularities (see below), or error, and to issue our opinion in an auditor's report. Reasonable assurance is a high level of assurance, but does not guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud, other irregularities or error and are considered material if, individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements.

A fuller description of our responsibilities is provided on the FRC's website at www.frc.org.uk/auditorsresponsibilities.

Irregularities – ability to detect

We identified areas of laws and regulations that could reasonably be expected to have a material effect on the financial statements from our sector experience, through discussion with the directors and other management (as required by auditing standards), and from inspection of the Group's regulatory and legal correspondence.

We had regard to laws and regulations in areas that directly affect the financial statements including financial reporting (including related company legislation) and taxation legislation. We considered the extent of compliance with those laws and regulations as part of our procedures on the related financial statement items.

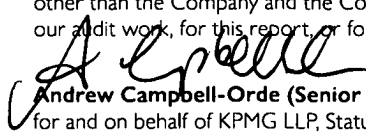
In addition we considered the impact of laws and regulations in the specific areas of health and safety, environmental and anti-bribery and corruption. With the exception of any known or possible non-compliance, and as required by auditing standards, our work in respect of these was limited to enquiry of the directors and other management and inspection of regulatory and legal correspondence. We considered the effect of any known or possible non-compliance in these areas as part of our procedures on the related financial statement items.

We communicated identified laws and regulations throughout our team and remained alert to any indications of non-compliance throughout the audit. This included a request to component audit teams to report on any indications of potential existence of non-compliance with relevant laws and regulations (irregularities).

As with any audit, there remained a higher risk of non-detection of irregularities, as these may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal controls.

8. The purpose of our audit work and to whom we owe our responsibilities

This report is made solely to the Company's members, as a body, in accordance with Chapter 3 of Part 16 of the Companies Act 2006. Our audit work has been undertaken so that we might state to the Company's members those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Company and the Company's members, as a body, for our audit work, for this report, or for the opinions we have formed.


Andrew Campbell-Orde (Senior Statutory Auditor)

for and on behalf of KPMG LLP, Statutory Auditor
Chartered Accountants
Gateway House
Tollgate
Chandlers Ford
Southampton
SO53 3TG

17 January 2019

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Find out more online

For more information about Chemring Group PLC, please visit www.chemring.co.uk where the latest shareholder information can be accessed, including:

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|-----------------------------|------------------------------------|-----------------------|
| ■ Current share price | ■ Shareholder services and notices | ■ Analysts' forecasts |
| ■ Key financial information | ■ Corporate governance | ■ Regulatory news |
| ■ Financial calendar | ■ Results and presentations | |

Chemring Group PLC's Annual Report and Accounts 2018 and the Notice for the Annual General Meeting can also be viewed and downloaded at www.chemring.co.uk/investors.

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