ZOTEFOAMS

Investing in our future...

Annual Report 2018

Our ambition is to be the world leader in cellular materials technology in our chosen markets

in

Lift to find out more →

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in USA

What?

Infrastructure, extrusion and two high-pressure autoclaves

Investment	**On stream**
$42m	2018/19

The commissioning of a second high-pressure autoclave will mark the culmination of a four-year $42m investment programme to augment our USA facility's existing foam expansion capabilities with extrusion and high-pressure nitrogen saturation – the three stages of Zotefoams' proprietary manufacturing process. The plant produces our AZOTE® polyolefin foams range.

⊕ **Read more** p8, 10

in UK

What?

Infrastructure and two low-pressure autoclaves

Investment	**On stream**
£12m	2019

A project to install two large low-pressure autoclaves plus associated buildings and infrastructure on the UK site will significantly increase expansion capacity for the ZOTEK® high-performance products range of foams. The site currently operates four smaller low-pressure autoclaves for this range of products.

⊕ **Read more** p8, 10

> **We have delivered strong organic growth, in line with our strategy, from a long-term approach to investment in our product portfolio, supported by unique technology and focused around key market trends in an increasingly global business.**

David Stirling
Group CEO

⊕ **Read more** p9

in POLAND

What?

New production facility

Investment	**On stream**
£23m	2020

A third foam manufacturing production site will augment capacity for the Group's polyolefin range of foams by approximately 20%. It will also incorporate significant inventory and fabrication capacity, as well as act as a production hub for the T-FIT® range of technical insulation products.

The initial investment includes infrastructure to double capacity when needed, along with land for further investment.

⊕ **Read more** p8, 10

in PEOPLE

What?

Investing in people to deliver sustainable growth

Zotefoams has built a strong portfolio of opportunities in speciality cellular materials technology. To deliver well we need people who understand the opportunities, who can balance competing priorities and a structure to support and control the organisation. We have therefore invested in all parts of the Zotefoams organisation during 2018, at different paces across functions and Business Units.

⊕ **Read more** p9, 31-33

vesting

in our production capabilities, enabling us to meet growing demand from partners new and old. Working around the world, **our talented team** continues to develop unique, **differentiated products**, manufactured using our **unique processes**.

p31
p4
p6

Financial highlights

Group revenue	Profit before tax and exceptional item	Basic earnings per share before exceptional item	Total dividend for the year
£81.04m	**£10.81m**	**18.66p**	**6.12p**
Growth **+16%**	Growth **+23%**	Growth **+16%**	Growth **+3.2%**
2017 **£70.15m**	2017 **£8.81m**	2017 **16.04p**	2017 **5.93p**

Gross margin	Profit before tax	Basic earnings per share	Return on capital employed
35.8%	**£9.86m**	**16.96p**	**16.5%**
Change **-54 basis points**	Growth **+31%**	Growth **+24%**	Growth **+100 basis points**
2017 **36.3%**	2017 **£7.55m**	2017 **13.70p**	2017 **15.5%**

Group at a glance
Four strong, distinctive brands

Zotefoams produces a wide range of innovative products that are a critical component in a world of everyday applications.

Revenue by geography

Group revenue %

North America
Local manufacturing presence in Kentucky for Polyolefin Foams, small cutting operation in Oklahoma to service the construction market, and headquarters of MuCell Extrusion LLC (MEL), based in Massachusetts, licensing technology globally.

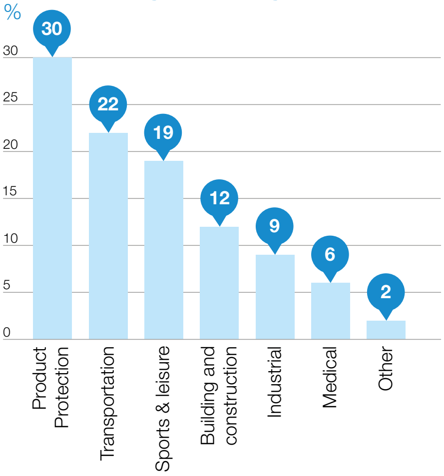
Continental Europe
Largest market for polyolefin foams. Following a successful refinancing and equity raise in May 2018, work has begun on a £23m manufacturing facility in south west Poland. Scheduled to begin operations in 2020, the plant will initially service our Polyolefin Foams business. Sufficient land has been purchased to allow larger-scale operations in the future.

United Kingdom
Group headquarters and main factory, manufacturing polyolefin foams and high-performance products (HPP) for sale globally.

Rest of the world
T-FIT® technical insulation manufacturing in China for sales of insulation products globally. Local representation of High-Performance Products ("HPP") business. Joint venture with INOAC Corporation for polyolefin foams sales in Asia.

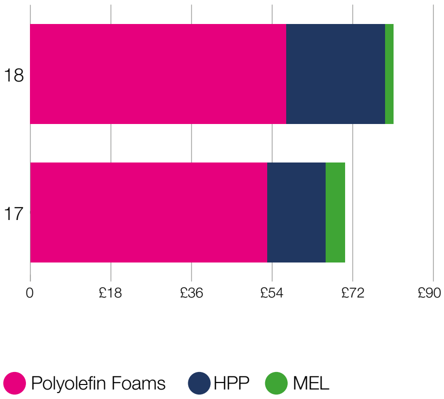
Revenue by industry 2018

%



Revenue by business unit

£m



POLYOLEFIN FOAMS

AZOTE®

Premium durable foams
Uniformly dense foam sheets with a consistent cell structure. These foam sheets and blocks are manufactured from common polymers using our unique nitrogen-expansion process.

Key markets served

- Automotive
- Aviation
- Building and construction
- Industrial
- Marine
- Military
- Product protection
- Sports and leisure

Key market drivers

- Light weighting
- Durability
- Fire safety
- Reduced toxicity
- Energy saving

Read more p10, 16

Delivering award-winning environmentally friendly and energy-efficient insulation for Swiss Shielding Corporation AG (SSC).

Read more p16

AUTOCLAVE TECHNOLOGY

HIGH-PERFORMANCE PRODUCTS

ZOTEK®

Lightweight technical foams
Ultra-durable, highly heat-resistant and impact-resistant foam. ZOTEK® foams are manufactured from engineering polymers using our unique nitrogen-expansion process.

Key markets served

- Athletic footwear
- Automotive
- Aviation
- Construction
- Product protection

Key market drivers

- Light weighting
- Personal safety
- High-technology insulation
- Durability
- Fire safety
- Sports and leisure

⊕ **Read more** p11, 17

Advancing sustainability in aviation, with the emphasis on reducing carbon emissions for Thompson Aero Seating.

⊕ **Read more** p17

T-FIT®

Technical insulation for industry
A range of bacteria-resistant insulation products manufactured from Zotefoams' own ZOTEK® block foam materials. T-FIT® products are purpose-designed to perform in demanding environments.

Key markets served

- Food and personal care manufacturing
- High-temperature processing environments
- Pharmaceutical, biotech and semiconductor cleanrooms

Key market drivers

- Ageing population
- Demographic changes
- Reduced toxicity
- Energy saving

⊕ **Read more** p11, 18

Helping Asia's largest dairy producer eliminate condensation issues – a major source of potential contamination in food production.

⊕ **Read more** p18

EXTRUSION TECHNOLOGY

MEL

MuCell®

Innovative and accessible technology for greener, lower-cost plastic products
This pioneering technology injects gas into plastics during the manufacturing process to create micro-bubbles and is licensed to customers manufacturing plastic parts. The end product uses 15–20% less material.

Key markets served

- Automotive
- Consumer packaging

Key market drivers

- Environmental benefit
- Lower cost

⊕ **Read more** p11, 19

Enabling our customer to reaffirm market leadership through a new, cost saving, fully recyclable pack format for milk in South America.

⊕ **Read more** p19

Differentiated products

From record-breaking footwear material to lighter, stronger aviation components

Zotefoams designs and manufactures specialised foam products for a world of everyday and extraordinary applications.

For nearly 100 years we have created innovative solutions for our customers, enabling them to become more profitable and sustainable. Our leadership position today is based on our wide portfolio of differentiated products, our technological excellence and our exceptional people.

Looking forward, our products will continue to provide solutions in a resource-constrained world that is getting older, healthier and wealthier, by helping to save energy, reduce waste, improve safety standards and keep people active.

> **Zotefoams' reputation as a world-leading innovator and supplier of unique, high-performance foams coupled with the quality of its products creates a strong platform for growth. I look forward to working with the team to deliver the Group's ambition to be the world leader in cellular materials in its chosen markets.**
>
> **James Bridges**
> Director of HPP
> Appointed 1 October 2018

Our exclusive partnership with Nike

currently centres around our ZOTEK® PEBA foam – an ultra-light revolutionary foam offering a unique combination of durability and outstanding physical performance with exceptional energy return. The Nike Zoom Vaporfly 4%, which pairs a Nike ZoomX midsole produced from Zotefoams material with a full-length carbon plate, can make runners up to 4% more efficient than Nike's previous fastest marathon shoe.

Sports and leisure

Light weighting

Lightweight materials to reduce fuel consumption in aviation

With the emphasis on reducing carbon emissions, perhaps greater in the aviation sector than any other, ZOTEK® F is an increasingly attractive lightweight alternative to traditional materials including silicone, PU, composites and metal. A recent project has seen this closed cell foam with exceptional Fire, Smoke and Toxicity properties replace a composite solution to achieve a weight reduction of 1.6kg per seat.

Light weighting

Fire safety

Durability

The outstanding energy absorption properties of our ZOTEK® N nylon foam range deliver the ultimate lightweight impact protection in automotive engineering and for individuals, from the workplace to the sports pitch. An innovative range of protective sportswear sees ZOTEK® N combined with traditional materials in clothing that is lighter, more flexible and comfortable than existing options.

The unique properties of T-FIT® Clean technical pipework insulation deliver the lowest Flame, Smoke and Toxicity rating of any polymer/elastomer insulation product. Manufactured from ZOTEK® F 42 HTLS, this is the only foam insulation compliant with FM4910 Cleanroom Materials Flammability Test Protocol.

Reduced toxicity

Energy saving

Safety and sustainability are two key attributes of Plastazote® MP15FR, our lightest flame-retardant foam from the AZOTE® range. These were significant criteria in its selection for use in a new insulation system for railway carriages that achieves a 26% energy saving, earning our customer a prestigious environmental award.

Light weighting

Energy saving

Fire safety

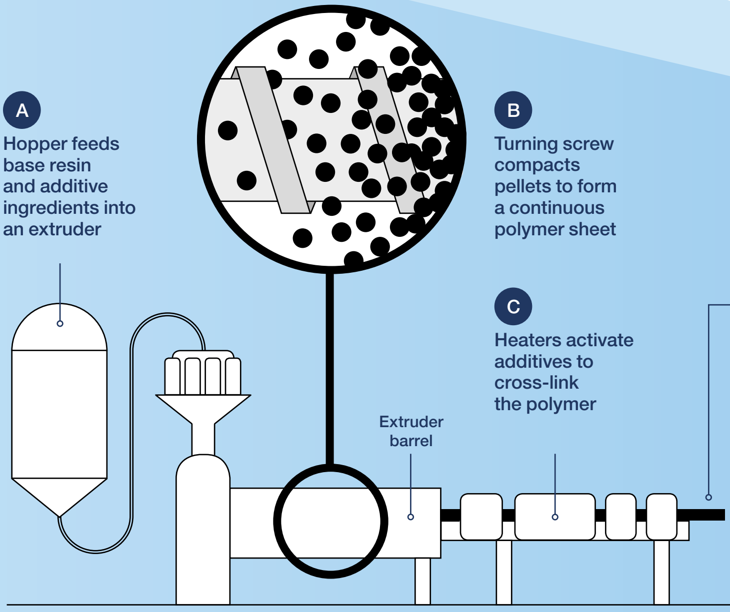
Durability

Zotefoams’ unique, pure manufacturing process

The Zotefoams difference

Zotefoams manufactures a wide range of crosslinked, lightweight, block foams using a unique three-stage nitrogen-expansion manufacturing process. This affords an exclusive combination of beneficial characteristics – uniformity, purity, low toxicity and durability – that differentiates Zotefoams’ materials from all other foams. Our core autoclave process is capital-intensive, with a long investment cycle, and represents a considerable barrier to entry for potential competitors.

Operating at temperatures up to 250°C, this environmentally friendly technology is extremely flexible, allowing us to foam a wide range of polymers. The combination of foaming process and polymer performances delivers properties including excellent fire resistance, high-temperature stability, toughness and insulation, that are prized in a wide range of demanding applications.



D Slabs are cut to precise sizes

Stage 1

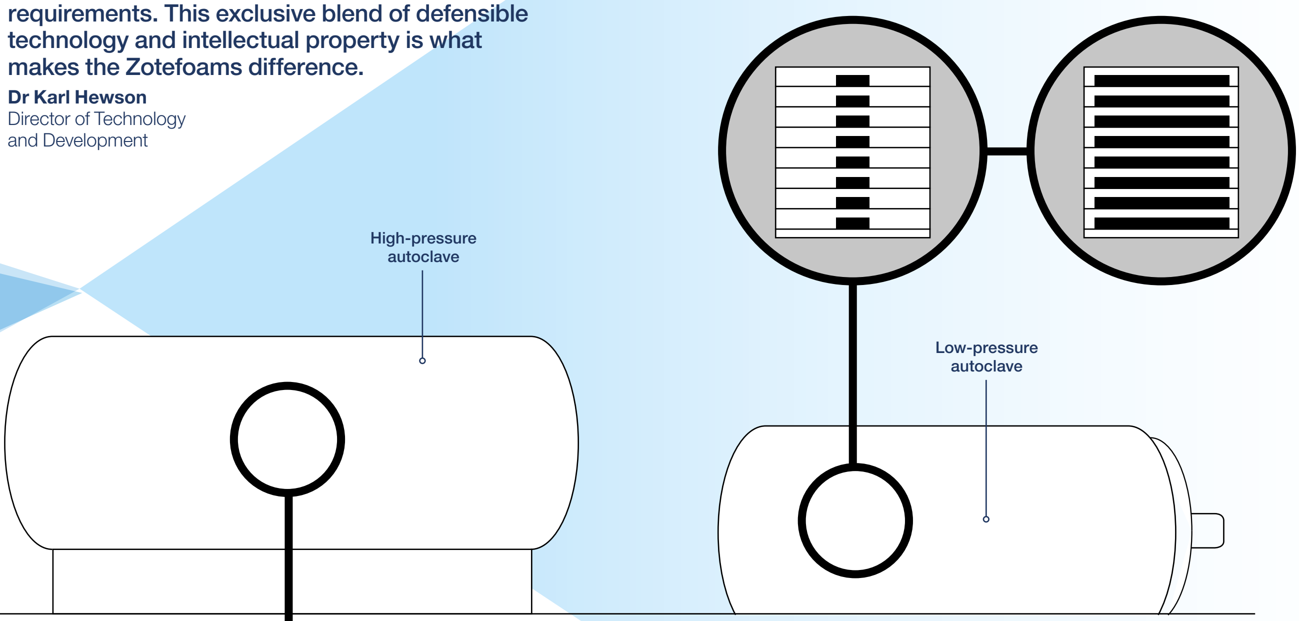
High-quality extrusion and crosslinking of solid polymeric sheet

The range of applications fulfilled by Zotefoams products today is all the more remarkable given that the origins of our process go back almost 100 years. Originally conceived to foam rubber, we now utilise this unique process to create closed-cell crosslinked foams prized for their consistency and purity from a wide range of polyolefins and engineering polymers – including some which cannot be foamed to light weights by any other production method. The ability to adjust parameters at each stage of our process means that we can closely control the characteristics of the finished product, matching them precisely to customer and application requirements. This exclusive blend of defensible technology and intellectual property is what makes the Zotefoams difference.

Dr Karl Hewson
Director of Technology
and Development

F The nitrogen-charged slabs are loaded into a low-pressure autoclave. The material is again heated above its softening temperature under a moderate gas pressure

G Pressure is subsequently reduced, the nitrogen expands, physically foaming the soft polymer in a uniform fashion



Stage 2
Impregnation and saturation

E The extruded slabs are loaded into a high-pressure autoclave. The polymer is heated above its softening temperature and subjected to a high-pressure dose of pure nitrogen that permeates the polymer

Stage 3
Expansion

An introduction from our Chairman
Significant financial and strategic progress in the year

We continue to invest in our portfolio of differentiated products, the capacity to deliver them and the people who make it all possible.

Earnings per share before exceptional item

18.66p

+16%

2017 **16.04p**

Earnings per share

16.96p

+24%

2017 **13.70p**

Total dividend

16.12p

+3.2%

2017 **5.93p**

I am pleased to report another successful year of strong sales and earnings growth and a step-change in the development of our high-margin High-Performance Products (HPP) business. To support future growth, the Group is progressing a number of significant capital investment projects to expand capacity internationally and completed a successful refinancing and equity raise in May 2018. The equity raised maintains the Group's financial flexibility and enables debt levels to be kept within the Board's desired level of leverage.

2018 performance

Group sales grew 16% to £81.04m (2017: £70.15m) and profit before tax and exceptional item grew 23%, a similar growth rate to last year, to £10.81m (2017: £8.81m). Basic earnings per share before exceptional item rose 16% from 16.04p to 18.66p. Profit before tax increased by 31% to £9.86m (2017: £7.55m) and basic earnings per share was up 24% to 16.96p (2017: 13.70p).

Sales of polyolefin foams grew across all regions, with continued strong demand being supported primarily in H2 by the additional capacity from our first high-pressure vessel in the USA. The HPP business grew significantly, driven by our footwear business and supported by a return to solid growth in aviation. MuCell Extrusion (MEL) had a disappointing year. The business has been reorganised to provide focus and greater clarity on the resources needed to deliver the full potential of the MuCell® technology.

We have continued to invest in our pipeline of commercial opportunities and in product and market development as well as in the governance structures to support an increasingly international, high-growth business.

Investments

In my 2017 statement I reported the Board's approval to invest in low-pressure autoclave capacity and infrastructure at the Croydon, UK site at a cost of £12m, primarily for expansion of our ZOTEK® range of HPP foams but with the flexibility to expand our full range of products. Commissioning is expected to commence at the beginning of Q2 2019. I also reported the Board's approval to proceed with a $9m investment to commission the second high-pressure autoclave, together with a supporting extrusion line, at our Kentucky, USA, site, following the start-up of our first high-pressure autoclave. I am pleased to advise that both of these projects are progressing well and are expected to be commissioned on time and on budget.

In May 2018, the Board approved a £23m investment in south-west Poland to increase foam manufacturing capacity. With the site acquired, contractors engaged and ground broken, we expect this production facility to be operational in H2 2020. To support these activities we have enhanced our engineering and project management capabilities and resources and are confident that the capacity expansion projects required to support our growth opportunities will be successfully delivered.

This remains an exciting time for Zotefoams. Upon completion of these investment projects and after including the start-up of our first high-pressure autoclave in the USA, we will have increased Group manufacturing capacity by over 60% and provided infrastructure to scale capacity growth further when required.

Brexit

At the time of writing, there is considerable uncertainty over Brexit, both over the form it may take, its timing and its potential impact on our business. Zotefoams is predominantly a UK-based exporter utilising materials and expertise from global supply partners and invoicing approximately 87% of sales in currencies other than sterling, mostly US dollars or euros. The inherent risks of supply chain disruption and foreign exchange rate volatility are therefore high. We have assessed these risks in detail and have plans in place, co-operating closely with our suppliers, to mitigate the immediate impact of any disruption in supply chains and hedging our cash flows and balance sheet, where possible. Longer term, our investments in the USA and Poland give us a more geographically diversified base from which to supply our AZOTE® polyolefin foam customers while we expect our UK facility to be more focused on production of HPP product, which is less sensitive to the macroeconomic trading environment.

Dividend

The Board is proposing a final dividend of 4.15p per ordinary share (2017: 4.02p) which, if approved by shareholders, would make a total of 6.12p per ordinary share for the year (2017: 5.93p), an increase of 3.2%. This reflects the Board's continued confidence in the Group's future and is in line with the policy of paying a progressive dividend. If approved, the final dividend will be paid on 30 May 2019 to shareholders on the register on 26 April 2019.

Board changes and governance

As I reported in the 2017 Annual Report, Richard Clowes retired from the Board in May 2018 and, to prepare for this, Jonathan Carling joined the Board in January 2018. I also reported that Doug Robertson would replace Richard as the Senior Independent Director upon his departure. Following these changes, we have an experienced and engaged Board and no further changes have been made in 2018.

The interactions and communications between Executive and Non-Executive Directors continue to develop positively and, as a result, the Board is well placed to challenge, guide and support the Executives in the delivery of our strategy.

The Board considers that it has fully applied all the principles and provisions of the UK Corporate Governance Code during 2018. More information is provided in the Corporate Governance report.

People

Having the right people at Zotefoams, which encompasses traits such as integrity, safety-consciousness and dedication as well as the right knowledge and skills, is critical to our future success. The average number of employees in the Group increased by 16% during the year. I would like to welcome the new employees who have joined us around the world during the past 12 months and extend my thanks to all our hard-working employees and their supportive families for making 2018 a year of significant progress for the Group.

Steve Good
Chairman

3 April 2019

Group CEO's review
Strong organic growth in line with our strategy

We believe our existing strategy continues to serve us well.

I am pleased to report another record year of profits and sales. We have delivered strong organic growth, in line with our strategy, from a long-term approach to investment in our product portfolio, supported by unique technology and focused around key market trends in an increasingly global business. Profit before tax and exceptional item increased 23% to £10.81m (2017: £8.81m) while Group revenue grew 16% to £81.04m (2017: £70.15m). Profit before tax increased 31% to £9.86m (2017: £7.55m).

Strategy update

As the world around us changes we regularly re-test our strategy. We believe our existing strategy continues to serve us well and continues to enable us to grow strongly. Our business faces challenges primarily with regard to how we manage our growth: investing at the appropriate time in the right places, allocation of resource across a portfolio of products and markets, and development of an organisation with flexible, talented people and a culture to support this growth.

Zotefoams remains well positioned competitively and environmentally. Our core materials offer improved product performance using less material than competitors and MEL licenses technology specifically to reduce polymer. The emergence of a strongly negative public perception of plastic is, we believe, mainly driven by ill-considered single-use applications predominantly in consumer packaging. Zotefoams' current markets are not immediately impacted by this, as products using our foams are almost solely integral components in larger systems or products (such as cars, planes, footwear, medical parts) or used in the long-term storage of items. They are very rarely used in consumer disposable items. Our foams save weight and fuel in cars, trains and planes, save energy by insulating, and provide protection to people and goods. Our products help our customers reduce emissions, lower energy usage, improve fuel efficiency and comply with increasingly stringent safety regulations.

2018	United Kingdom	Continental Europe	North America	Rest of the World	Total
Change %	**4%**	**12%**	**1%**	**69%**	**16%**
Group revenue (000's)	**£13,137**	**£29,342**	**£21,340**	**£17,218**	**£81,037**
% of Group revenue	**17%**	**36%**	**26%**	**21%**	**100%**
2017					
Group revenue (000's)	£12,679	£26,201	£21,104	£10,162	£70,146
% of Group revenue	18%	37%	30%	15%	100%

In common with other businesses, we seek to minimise the use of natural resource through measures such as reducing energy and polymer usage, which benefits the environment and reduces our costs. In the medium term we anticipate our technology being used to meet the growing demand for improved sustainability, with foams which include recycled or renewable content polymers.

The markets in which we operate are driven by global trends – demographic, environmental and regulatory – which we believe offer potential for high rates of market growth as well as opportunity for our disruptive technology solutions.

We measure strategic progress on four metrics, all before exceptional items:

1. Our HPP and MEL Business Units, which offer these unique, disruptive products and solutions, together now account for 30% (2017: 25%) of Group revenues.
2. Sales of our highly differentiated AZOTE® polyolefin foam products grew by 8%, which was above our target rate of twice global GDP growth.
3. Group operating margins were 14.3% (2017: 13.4%).
4. Group return on capital, which excludes large asset investments not yet commissioned, increased to 16.5% from 15.5%.

Our consistent strategy has resulted in another year of record sales and profits. Zotefoams has become an international, diversified supplier of technical materials and retains a strong portfolio of opportunities to deliver further organic growth in line with our stated strategic intent.

People and embedding our culture to deliver

Developing our organisational capability and culture globally is something which has, over the past few years, become increasingly important for delivering our strategy. We have made significant investments in increasing and developing our workforce which, by the end of 2018, had grown to 459 people, an increase of 16% in the year. A third of our people have less than two years' service. In 2018, 83% of our revenues and most of our sales growth came from outside the UK and we increased our non-UK headcount by 33%. Managing this growth as we scale up our international operations, ensuring governance and building a strong culture, is therefore a primary focus for management. Zotefoams' culture is based around brand values and further development

Group CEO's review
Continued

as a learning organisation, where lessons from failure may be the first step forward, where employees understand how we all contribute to the business and where we celebrate success and value the contributions of others. Within this structure, business units and brand leaders have significant autonomy to operate in a dynamic environment.

The top priority for our business is ensuring the health and safety of employees and site visitors. The Board tolerance for risk is set accordingly and health and safety is an agenda item at every Board and Executive Committee meeting. We recognise that culture, and the behaviour of all employees, has a significant impact on safety risk and performance. Management therefore has a clear priority to ensure safety culture is continuously improved across our business and we will not be satisfied until we achieve our goal of no-one getting hurt while working at Zotefoams.

Key investments

To match Zotefoams' growth ambition and attractive pipeline of opportunities we require sufficient capacity to meet projected demand for our products. A key challenge we face is that our capacity investments, which involve significant infrastructure and bespoke machinery, take time to bring on stream and are costly. The first increment of capacity on any site requires disproportionately high investment in infrastructure, but subsequent investment on the site can then be made more cost-effectively and quickly. As foams are bulky and can be expensive to transport over long distances, the manufacturing location also plays a major part in any investment decision as customers want optimised transport and swift service.

Zotefoams has embarked on a significant capital expansion programme, supported by an equity fundraising and debt refinancing in May 2018. In Kentucky, USA, during 2018 we commissioned a high-pressure autoclave and two extruders which increased Group capacity by approximately 20%, and we are investing further on this site for a similar scale of capacity increase during 2019. To balance the investments in the USA, which will supply an existing low-pressure autoclave on that site, we have added two further low-pressure autoclaves on our UK site which will begin commissioning in Q2 2019. In addition, we have begun work on our third major Zotefoams manufacturing location, in south-west Poland, to deliver a further increase to Group capacity of around 20%.

Our USA operation is now positioned as a significant, stand-alone contributor to Group capacity, initially focused on AZOTE® polyolefin foams, with the site large enough for further investment if required. The UK site will have significantly increased capacity to manufacture our ZOTEK® range of HPP foams, while remaining the primary production site for AZOTE® polyolefin foams in the foreseeable future, while Poland is specifically designed initially for polyolefin foam manufacture and could double its capacity with cost-effective investment in equipment relatively inexpensively on approximately an 18-month lead time. This gives Zotefoams the ability to react to increases in demand for all of our foams range, with an increase in HPP foams supplied via UK and some UK-supplied customers switching to Poland if needed.

These investments demonstrate confidence in the significant growth opportunities in our HPP portfolio and commitment to our customers in our growing Polyolefin Foams business.

Current trading and outlook

We have experienced a strong start to the year, consistent with our growth expectations across the business as a whole. Investments in recent years in our product portfolio, people and productive capacity have positioned Zotefoams for further growth. While we appear to be in a generally less favourable macroeconomic environment than in 2018, with volatile foreign exchange rates, the Board remains confident about the future prospects for our business and is excited by the opportunities we see for continued progress.

POLYOLEFIN FOAMS

AZOTE®

Group revenue

£57.16m

+8%

2017 **£52.82m**

Segment profit

£9.45m

-8%

2017 **£10.29m**

Segment profit margin

17%

2017 **19%**

Sales in Polyolefin Foams increased by 8% to £57.16m (2017: £52.82m). Sales volume grew by 6% while product mix, customer mix and some price increases, offset by modest headwinds in currency exchange rates, contributed a further 2% to growth. Segment profit declined to £9.45m (2017: £10.29m) impacted by higher fixed costs and depreciation of the Kentucky, USA facility which was largely expected at this point in the investment cycle.

Zotefoams uses a commodity polymer, most commonly low-density polyethylene (LDPE), and through infusion of nitrogen gas at high temperature and pressure via its unique autoclave technology, creates AZOTE® polyolefin foams. These foams are more consistent, lighter and possess higher purity than foams manufactured using traditional chemical foaming technology. These attributes make our foams ideal for multiple use or permanent product protection, lightweight parts in aircraft, cars and trains, construction applications and medical equipment.

The commercial focus of our AZOTE® Business Unit is to grow revenues through closer collaboration with end users and channel partners, to continually enhance our product range and deliver capacity and efficiency improvements from production.

Sales of polyolefin foams increased by 8% (9% in constant currency) with a strong performance in the UK and continental Europe, growing 10% and 12% respectively. Sales in North America grew by 1%, with stronger underlying demand for some of our more technically demanding AZOTE® products, supplied from the UK, dampened by product allocation. An increase of 7% in sales to the rest of the world was substantially driven by increased demand in Japan. Customers for AZOTE® foams are remarkably diverse, both geographically and in their use of our foams. However, the largest segments of product protection, industrial and transportation (which includes automotive, rail and aviation) account for around 70% of our polyolefin foam revenue and we recorded double-digit percentage increases in all three, offset by a decline in sports and leisure applications in Europe following the withdrawal of a channel partner from part of this market segment.

During H1 2018, we began operations at our Kentucky, USA facility. This relieved the capacity restrictions which had held back growth of the polyolefin product range during 2017 and early 2018. However, as previously reported, the start-up was not as smooth as expected and the costs of this, added to the additional overheads required to run such a facility, led to a decline in profitability of the AZOTE® foams range. Pleasingly, the issues encountered have largely been addressed and the additional volumes through the USA plant in the second six months of 2018 contributed to increased profit in the Business Unit in this period. Operational improvements in our UK facility delivered additional capacity and allowed us to increase sales volumes in the UK and Europe despite the increased allocation of this facility to HPP products, particularly in the second half of the year.

HIGH-PERFORMANCE PRODUCTS

ZOTEK® T-FIT®

Group revenue
£22.01m
+67%
2017 **£13.15m**

Segment profit
£5.81m
+84%
2017 **£3.16m**

Segment profit margin
26%
2017 **24%**

HPP comprises ZOTEK® technical foams and T-FIT® insulation products. Sales increased by 67% (71% in constant currency) to £22.01m (2017: £13.15m) and segment profit increased by 84% to £5.81m (2017: £3.16m). HPP is a portfolio of products, where our unique autoclave technology is applied to a variety of high-performance polymers to create foams with specific attributes. These attributes, such as energy management, excellent fire resistance, high-temperature performance etc, are designed to meet the exacting needs of industries such as sports equipment, aviation, automotive, biotech and pharmaceutical. We see excellent opportunities to continue the growth experienced to date and we allocate resource and development priority accordingly.

The HPP Business Unit accounted for 27% of Group sales in 2018 (2017: 19%) with footwear and aviation, the two largest applications, both growing strongly. Footwear products now represent around half of HPP sales revenue while aviation is approximately one-third of HPP sales revenue. T-FIT® insulation products were modestly ahead of previous year while revenues from our nylon product range remain relatively immaterial at this point.

In December 2017, we announced a significant strategic partnership with Nike, focused on the footwear market segment. The performance of our materials has been received extremely well in certain of Nike's footwear product lines and we are now working together, with Zotefoams supplying exclusively to Nike, to develop further materials for other products and prove Zotefoams' wider capability as a unique technology in this exciting market.

ZOTEK® F fluoropolymer foams, which are mainly sold for aviation applications, grew revenue by 20% compared with 2017, with our major aviation customer returning to growth following a period of destocking in prior years.

Sales of T-FIT® advanced insulation grew modestly this year, but behind our expectations for what is an exciting product range sold mainly into biotech and pharmaceutical markets with further opportunity in food, dairy and general process industries. We saw sales decline in the first six months as management attention focused on operational improvement of our facility in Kunshan, China, while second-half sales increased strongly, and gross margins improved, as more of our sales came from product manufactured in China rather than from our previous supplier. We expect this momentum to continue into 2019 and have invested in sales and development resource and set up an entity in India in early 2019 to deliver on these expectations. Key to future success of this insulation business is the development of the T-FIT® brand into a globally recognised solution which will also reduce our reliance on larger, project-driven revenues from the HPP Business Unit.

MEL

MuCell®

Group revenue
£1.95m
-54%
2017 **£4.25m**

Segment loss after amortisation
£(1.89)m
-39%
2017 **£(1.36)m**

Segment loss before amortisation
£(1.63)m
-58%
2017 **£(1.03)m**

MuCell Extrusion LLC (MEL) licenses microcellular foam technology and sells related machinery. Sales declined to £1.95m (2017: £4.25m) and segment loss, before amortisation, increased to £(1.63)m (2017: £(1.03)m).

MEL's business model is to develop and license intellectual property (IP). MuCell® technology offers the potential to reduce the plastic content of an article by around 15%, by injecting inert gas to displace plastic with microcellular bubbles. MuCell® technology can be used with most common plastics and reduces material consumption with no negative impact on recycling. Initially, MEL will sell equipment to augment an existing extrusion line and, when the licensee is in production and saving money, MEL will collect a share of those savings as a licence fee and/or royalty payment.

2018 was a difficult year for MEL. The business was substantially restructured mid-year to improve clarity over the development of new accounts, delivery of machinery and financial management. This resulted in senior staff being redeployed internally for a significant portion of the year and therefore the pace of sales, particularly of equipment, was negatively impacted, while our cost base increased. The annual decline in sales is particularly acute as 2017 included a single large contract which represented approximately 38% of that year's equipment sales. Royalty and Licence fees of $1.20m were at a slightly lower level than in 2017 ($1.30m). However, there is much to be positive about with MEL over the past six months and we expect a return to growth in 2019. Our focus on the creation of intellectual property has given us a strong pipeline of very interesting patent applications, the internal issues we experienced prior to the restructuring have been substantially addressed and the commercial momentum has improved in the latter part of 2018 and into 2019.

David Stirling
Group CEO

3 April 2019

Our business model
How our business works

Zotefoams is a diversified value-added polymer processor, utilising unique cellular materials technology in a variety of markets globally.

What we do

Zotefoams manufactures block foams using high-pressure nitrogen gas technology, processes its own foams for specific markets, licenses intellectual property (IP), and also sells related machinery.

The block foams Business Units compete primarily through the superior foam properties created by our technology, offering reduced environmental impact and a better safety and technical performance. This business has significant barriers to entry, including capital cost, know-how, user specifications and, in our HPP business, patents.

Routes to market

Zotefoams' block foams are sold, and often specified, under the AZOTE® and ZOTEK® brand names, which are well known in the industries we serve: automotive, aerospace, product protection, industrial parts, marine, building and construction, military, and sports and leisure. Zotefoams also sells T-FIT® technical insulation, manufactured from ZOTEK® foams, offering variants for sterile, aseptic and general processing environments. Our block foams are typically sold through channel partners, known as foam converters. These converters cut and shape foams into specific parts for end users and, therefore, Zotefoams' success is built on a strong relationship with the foam converters and on having products which meet the specific needs of those end users. Our ZOTEK® foams are often sold with high levels of end-user engagement, which reflects the more technical nature of these products, while our AZOTE® foams traditionally have grown with the engagement and support of foam converters.

Local and global market positions

Typically the benefits of AZOTE® polyolefin foams allow Zotefoams to command a stronger market position closer to our factories, as distribution costs are relatively high for these types of foams. Distribution costs also act as a barrier to imports from other regions. The main markets for AZOTE® foams are, therefore, the UK, continental Europe and North America. Our ZOTEK® foams are more technical, command higher selling prices and distribution costs are not normally a major factor in selling these materials. These businesses are more global in nature and we have strong management alignment to the product range and certain key markets.

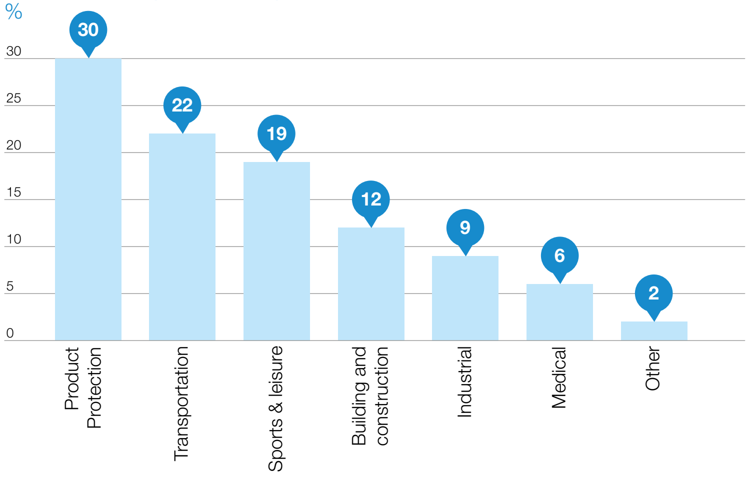
Our licensing business

MuCell Extrusion LLC (MEL) licenses a patented process that creates micro-bubbles in the core of plastic parts or products by injecting gas into them as they are manufactured. This produces a foamed core, bound by a solid skin into one integral material, that seems indistinguishable from a solid product. Products using MuCell® technology can be designed to perform like solid plastic, but will typically use 15-20% less material, realising both cost and environmental benefits by using inert carbon dioxide or nitrogen gas and reducing the plastic content at source. Most customers are in the fast-moving consumer goods (FMCG) or food packaging industries, where value is created from making a small saving in plastic content which is multiplied across many millions of parts annually. MEL shares in the customers' benefits by receiving a licence fee for IP and/or royalty on parts made.

A portfolio approach

Zotefoams works on a portfolio of opportunities which, over time, we expect will deliver our growth targets. Predominantly, our AZOTE® and ZOTEK® foams are value-added materials used in conjunction with other materials to meet an end-user requirement. We are often working in conjunction with a channel partner and/or on applications where other solutions may be successful. MEL faces some similar challenges in working mainly with packaging converters who need to convince their end-user customers of the benefits provided. It is, therefore, important that we invest in developing the portfolio of potential opportunities and the Group Executive team manages the allocation of these resources to optimise our return and risk over time.

Revenue by industry 2018



How we invest, create and deliver

Fundamental to our business model is our ability to invest for the long term in people, products and processes. This enables us to create defensible technology, a unique portfolio of products and a strong market position. Our business can then deliver value for our stakeholders, a sustainable margin and accelerated growth.

Invest

People

Our business is reliant on the quality of our people. We recruit from a broad range of cultures and backgrounds. Further information on our equal opportunities policies may be found in the Directors' report. We invest in our people so they have the necessary skills to contribute to the success of Zotefoams.

Products

We engage with our suppliers and customers to ensure that the products we produce are of a consistently high standard and meet our customers' needs. By listening to our customers, we gain an understanding of their requirements not just for the present, but for the future as well. We use this information, coupled with our extensive knowledge, to research and develop products to meet those needs.

Processes

We invest in our equipment and business processes to maintain and improve safety standards, improve operating efficiencies, increase capacity to meet future demands and reduce operating costs.

Create

Defensible technology leadership

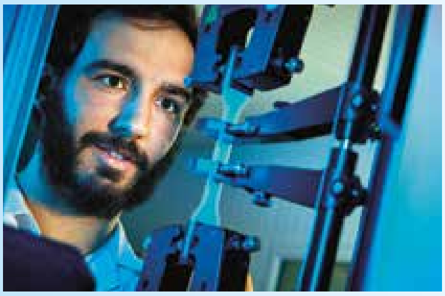
By investing in technology, often as an extension of our existing knowledge, we differentiate ourselves from our competitors. We view our technology leadership as a considerable barrier to entry.

Unique attributes

Our market position is based around the uniqueness of our technology. We use this technology to create a portfolio of products, with unique attributes, which bring advantages to our customers.

Market position

We are active in many markets, both geographical and across industries, and are therefore well positioned to identify and deliver benefits for users of Zotefoams' technology and products.



Deliver

Stakeholder value

Delivering stakeholder value is core to our business. Our technology benefits people across the world by delivering lightweight, protective, regulatory-compliant, resource-efficient products, which are used in leading-edge solutions globally and which are manufactured in a safe environment.

Sustainable margin

We charge the right price to our customers to give a sustainable margin, and continuously strive for efficiency improvements to maintain or improve margins through the supply chain.

Accelerated growth

We continue to deliver value on core products, augmented by success in new and innovative areas.

Our external context
Our response to short, medium and longer-term trends

We deliver stakeholder value by using unique technology to create a portfolio of differentiated products. We focus resources primarily on markets where we are, or have the potential to be, a market leader. We intend to develop our business through sustained high levels of organic growth and, where appropriate, through partnerships or acquisitions.

We have built a clear long-term strategy for growth based around three long-term global megatrends that are driving demand for our products.

Understanding these market trends informs our strategy and product development, as well as the allocation of our resources. Given the diversity of applications for foam it is not possible to track every use for our materials, and a new idea or application may come from a foam converter, an end-user or from within Zotefoams. We therefore actively monitor these and maintain flexibility to react to a wide variety of possibilities.

Environment

Saving scarce resources has become a universal driver. Lightweighting is the key to reducing fuel usage and controlling emissions for the aviation and automotive industries. High-quality insulation conserves thermal energy.

MuCell® technology uses less material to make everyday items as well as saves costs. It also aids recycling and makes commonly used plastics float in water, thus aiding collection of any waste. Much of our AZOTE® foam is used in permanent packaging or packaging that is designed to be reused, while foams used in transportation, which accounts for 22% of sales, are normally specified to the lightest weight for the required physical performance. Zotefoams' products typically use less plastic than competitive solutions due to the cell structure of foam made in our autoclave process, giving us both a cost and environmental advantage.

Demographics

Better healthcare has created a population boom, especially in the older age groups, while globally, discretionary spending power is rising rapidly. Demand for healthcare products is accelerating. Wealthier and more discerning consumers are driving growth rates in other industries such as food and drink, packaging, sports equipment and transportation.

Transport, medical, and sports and leisure applications account for around 47% of sales directly, while our T-FIT® insulation products, demand for which is currently linked to semiconductor, pharmaceutical and biotech manufacturing, account for a further 3% of sales.

Regulation

Regulatory pressures, primarily to safeguard consumers, are driving up standards worldwide. These standards in turn create demand for both safer products and protective equipment.

Zotefoams' products are used to meet some of the most demanding fire standards for our type of materials. Zotefoams has, for example, developed AZOTE® foams which meet EN 45545, the latest EU railway standard for fire protection, and ZOTEK® F fluoropolymer foams meet exacting aircraft and insurance standards for fire performance. We sell AZOTE® grades for automotive, medical, and packaging designed to minimise emissions and/or meet specific purity requirements. Over one-third of Zotefoams' revenue in 2018 came from foam products with specific properties tested to customer requirements, although not all of this was demonstrably for regulation compliance.

As the world around us changes we regularly re-test our strategy. We believe our existing strategy continues to serve us well and continues to enable us to grow strongly.

Our strategic objectives
Our four-part plan to deliver growing returns

We measure progress against four strategic objectives:

1

Grow sales in our AZOTE® Polyolefin Foams business in excess of twice the rate of GDP global growth.

Why?

Zotefoams is a capital-intensive business with high operational gearing. The Polyolefin Foams business represents the largest user of capacity and its volumes are important for the absorption of fixed costs. AZOTE® foams provide unique solutions to a broad spread of customers across many industries, serving as a valuable mitigant against industry and customer risk. Demand for improved resource efficiency, regulation and global demographics underpin our growth potential in this profitable business unit. Investment decisions are made based on AZOTE® capacity requirements.

This year

In 2018, we grew AZOTE® sales by 8%. Sales volume grew by 6%, while product mix, customer mix and some price increases, offset by modest headwinds in foreign exchange rates, contributed a further 2% to growth.

2

Develop an HPP portfolio and MEL customer base to deliver enhanced margins.

Why?

HPP and MEL offer higher growth rates and the potential for higher margins than AZOTE® foams. High-performance products use the same asset base as the Polyolefin Foams business and leverage our uniqueness by providing customers with solutions based on foams that can only be manufactured using our technology. They offer larger-scale opportunities than our polyolefin foams and higher drop-through operating margins. MEL reduces plastics use at source using patented high-pressure gas technology at customers and operates on a royalty basis over a period in excess of ten years. Increasing the customer base will result in a win-win for the customer and Zotefoams and allow us a royalty stream with enhanced margins over a multi-year period.

This year

In 2018, sales in these segments increased by 38%, driven by strong performance in footwear, and accounted for 30% of Group revenue (£23.9m), up from 25% of Group revenue in 2017.

3

Increase our operating margins, before exceptional items.

Why?

Zotefoams targets improved operating margins through a continuous focus on the efficient use of its assets and mix enrichment across its product range by developing applications which most effectively leverage its unique technology. This applies not only to our High-Performance Products but also to our Polyolefin Foams business. Zotefoams adopts a medium- to long-term view, balancing immediate operating margin gain with the investments required in infrastructure and capacity (and their consequent impact on short-term margin), to maximise future growth. Higher operating margins generate higher returns to shareholders.

This year

In 2018, in aggregate, segment margins before central costs decreased to 16.5% from 17.3%. After central costs, which includes corporate, finance and IT as well as foreign exchange gains of £0.82m (2017: loss £0.32m), which mainly relate to the corporate governance of an increasingly complex organisation, Group operating margin increased to 14.3% (2017: 13.4%), with increased sales and improved mix offsetting the impacts of our US start-up and investments in infrastructure to support future growth.

4

Improve our return on capital (over our investment cycle).

Why?

Zotefoams understands the importance of generating a good return on its assets to provide our shareholders with strong returns and maintain their support when funding is required to drive longer-term capital projects. As Zotefoams' business grows, we have made, and further committed to, large capital programmes which change the shape of our statement of financial position. In order for return on capital to provide a meaningful measurement, major capacity and infrastructure investments, which are expected to require considerable capital over a number of years before being commissioned as production assets, are excluded from the calculation until the point of commissioning.

This year

In 2018, the return on capital increased to 16.5% (2017: 15.5%). In 2018, the commissioned US capacity expansion was introduced to the calculation, while investment in the Group's ongoing expansion projects in the UK, USA and Poland were excluded. With these investments included, the return on capital increased to 12.8% from 12.1%.

Our brands in action
We offer what our customers want

AZOTE®

AZOTE® polyolefin foams are manufactured using our unique, high-pressure process. This process differentiates Zotefoams from competitors that manufacture similar foams using low-density polyethylene (LDPE), which is our main raw material.

Zotefoams produces foams that are more consistent, lighter weight and possess higher purity compared with foams manufactured using chemical technology. These superior attributes are valued globally in many uses with examples as diverse as aerospace, sports equipment and medical packaging. Underlying growth of many of these segments is driven by global trends in demographics, regulation and the environment, including resource efficiency.

The main geographical markets for our AZOTE® foams are the UK, other European countries and North America as, beyond this, distribution costs limit the market opportunity. We do sell outside these areas, mainly in Japan and China, into more niche, technical applications and further development of these geographies remains a longer-term goal.

Case study Swiss Shielding Corporation

Award-winning environmentally friendly and energy-efficient insulation

Context

Swiss Shielding Corporation AG (SSC) specialises in the development and production of innovative concepts and system components for railway vehicle construction, including complete solutions for interior layouts.

The business prides itself on being environmentally responsible, using sustainable materials wherever possible to benefit passengers, the economy and the environment.

How we worked together

One such product is SSC's innovative, energy-efficient SSC-Q rail insulation system, which incorporates Plastazote® MP15FR – a lightweight, polyethylene block foam from Zotefoams' AZOTE® range. Due to its closed cell, crosslinked structure MP15FR offers superior performance and a unique combination of advantages for the rail industry, operating efficiently and effectively in all climates and resisting moisture absorption to minimise the risk of condensation and associated mould growth. Plastazote® MP15FR delivers best-in-class flammability credentials along with incomparable lightweight properties, guaranteeing a cost-effective solution to saving energy. It also has exceptional vibration absorption capabilities that give superior comfort for passengers.

The results

SSC-Q conforms to the stringent railway industry standard EN45545. It is environmentally friendly, non-toxic and energy efficient. These properties have been effectively demonstrated in a recent rail vehicle modernisation programme, for which SSC supplied its insulation system to reduce overall energy consumption. SSC has since received recognition from the prestigious Watt d'Or awards – created by the Swiss Federal Office of Energy to acknowledge innovative Swiss companies setting new standards for solutions that unite energy and environment awareness – in the 'Energy-Efficient Mobility' category. The SSC-Q Rail insulation system has enabled a 26% energy saving in comparison with previous insulation systems.

ZOTEK

ZOTEK® products use Zotefoams' unique autoclave technology applied to high-end polymers such as polyvinylidene fluoride fluoropolymer ('PVDF'), nylon or polyether block amide ('PEBA'). Combining the original polymer properties with our foaming process creates truly unique materials.

ZOTEK® F fluoropolymer foams are inherently fire- and chemical-resistant and are mainly used in aerospace applications. ZOTEK® N nylon foams are designed to operate at very high temperatures and are finding uses in a wide variety of mainly industrial applications. There is a considerable level of interest currently in ZOTEK® N as a lightweight thermoplastic composite material for transportation, designed to reduce weight and meet environmental targets for fuel economy. ZOTEK® PEBA foams, which were the fastest-growing product in HPP for the second year in a row, have excellent kinetic energy management properties and are being sold primarily in sports and leisure applications. Historically, sales of ZOTEK® foams have grown due to more stringent regulation in the aviation markets, while recent growth is being led by developments in the footwear market.

Case study Thompson Aero Seating

Advancing sustainability in aviation

Context

The emphasis on reducing carbon emissions to counteract climate change is perhaps greater in the aviation sector than any other.

At the forefront of its field, award-winning Thompson Aero Seating, part of the AVIC Group, is committed to world-class excellence by exceeding already-demanding industry standards across its entire product range. The ongoing exploration of new concepts, materials and technologies by Thompson's pioneering team of designers and engineers ensures that the company is always at the forefront of product development.

How we worked together

A recent project involved placing soft-touch trim around the rear of business class seating to negate the need for a composite panel to give structural support, reducing the overall weight of the seat and, in turn, lowering flammability and saving on fuel costs.

ZOTEK® F was selected as the material to complement the aluminium frame around the seating due to its exceptional characteristics. ZOTEK® F meets exacting aviation industry standards with excellent heat release performance and Fire, Smoke and Toxicity (FST) properties. It has significant processing versatility, enabling the production of complex shapes for applications such as soft-touch trims. With densities starting at just 33kg/m^3, this is a true lightweight material and an increasingly compelling alternative to traditional materials.

The results

ZOTEK® F is now employed across the entire Thompson portfolio, giving an estimated 1.6kg reduction in weight per seat and allowing Thompson to deliver lightweight high-tech premium seats that save on airline fuel costs and offer best-in-class safety.

T-FIT®

The T-FIT® insulation story began with end users looking for a solution to insulate pipes in pharmaceutical and biotechnology cleanrooms. T-FIT® Clean was developed as a unique thermal insulation system designed for these demanding, highly controlled production environments.

Based on the unique technology owned by Zotefoams and following the success of T-FIT® Clean insulation, Zotefoams is expanding the T-FIT® range to address the requirements of the food, dairy, personal care and general process industries. These are products that are inherently pure and free of chemical residues, while satisfying leading fire certification standards. Demonstrably resistant to growth of mould and bacteria, the full range of T-FIT® insulation products manufactured by Zotefoams is durable, moisture-resistant and easy to install and clean.

T-FIT® Hygiene is designed for large-scale, aseptic, food processing. Production areas are built to exacting standards, where the specification is for a pure, pollutant- and fibre-free thermal insulation with capability to withstand the steam purging process typical in this sector. T-FIT® Hygiene can ensure air conditioning, air filtration and other process equipment continues to operate at optimum levels of performance.

Unique in both its material (Nylon PA6) and its foam insulation class, T-FIT® Process is the high temperature addition to the T-FIT® range and operates at temperatures up to 160°C with spikes, for cleaning in place, up to 205°C. Aimed at the utility and general processing industries around the world, T-FIT® Process will assist project and process engineers in their quest for ever more durable and heat-resistant insulation solutions.

Case study

Safeguarding food hygiene through condensation control

Context

Asia's largest dairy producer has recently made significant investments in upgrading its technology and infrastructure to ensure continued leadership in high-quality products and innovation.

Product quality is at the top of its agenda, with a mission to become the number one trusted provider in its sector.

The typical conditions in the company's manufacturing plants – of which there are 60 in China alone – include pipelines running fluids at 23°C ambient with a relative humidity of 70%, and freezers and filling lines operating at temperatures as low as -5°C. A Clean in Place process occurs daily, with pipe systems flushed at 85°C. Controlling humidity is essential to prevent condensation on pipe fittings as well as the associated risk of microbial growth, cross-contamination in the environment and corrosion of infrastructure.

What we did

The installation of T-FIT® Hygiene at one of the company's sites has put an end to condensation issues. With an operating range of -80°C to +160°C, T-FIT® Hygiene is suitable for both chilled and hot processing applications. Its fine, completely closed cell structure is fibre-, dust- and particulate-free, inherently hydrophobic and highly resistant to bacteria and mould growth. T-FIT® Hygiene's flexible, modular design is easily adapted to the demands of complex pipe runs and, with a fast and easy installation process, reduces labour costs, downtime and the Total Cost of Ownership.

Thanks to the success of this initial installation, T-FIT® Hygiene is now being recommended and trialled at other group sites.

MuCell®

MEL licenses microcellular foam technology and sells related machinery. MEL's business model is to develop and license IP and share in the savings or benefits of the licensee through a royalty and/or licence fee.

MEL technology offers the potential to reduce the plastic content of an article by around 15%, by injecting inert gas to displace plastic with microcellular bubbles. MEL technology can be used with most common plastics and reduces material consumption with no negative impact on recycling. The primary target market for MEL is consumer packaging, where production volumes are large and developments are scalable across geographic and product markets.

MEL continues to evolve its product offering and intellectual property (IP). As the business begins to achieve commercial scale our staff become more specialist and our knowledge deepens. MEL staff integrate with the customers in product design, to make the best use of our technological capability, and with this depth of knowledge comes improved customer satisfaction and also more opportunity for further IP.

In the future, we expect to see most growth coming from the existing and new customer base for packaging, especially flexible films and flat sheet (such as that used in the manufacture of yoghurt pots and ready meal containers). However, MEL is also active outside of packaging, with developments for aviation, as well as pipes and tubes.

Case study Plastilene Group

Delivering a more sustainable dairy market in South America

Context

Headquartered in Bogotá, Colombia, Plastilene Group has over 60 years' experience of flexible films and thermoformed plastic packaging. In a five-year partnership with MEL, it has deployed MuCell® technology at plants in Colombia and Guatemala to reduce by 15-20% the material content of coextruded laminated structures for flexible packaging films for sectors like grains, liquids, pellets, food in general, industrial packaging and agricultural applications, as well as rigid sheets for the thermoforming of food trays.

The latest project born out of this successful partnership sees Plastilene revisiting the Colombian packaged pasteurised fresh milk market, which it revolutionised during the 1970s with the introduction of flexible pouches to replace traditional glass bottles. At the time this innovative solution dramatically reduced packaging and distribution costs, while simultaneously improving the quality, safety and shelf life of fresh milk throughout the region. Pouches have remained the pack format of choice ever since.

Sustainability is at the forefront of Plastilene's philosophy, processes and products, a factor that prompted the company to investigate the potential for a more cost-effective, environmentally friendly solution. Converting the market from fresh milk to Ultra High Temperature (UHT) milk, which can be shipped and stored at ambient temperatures and has a significantly longer shelf life than fresh milk, became the objective.

What we did

A cornerstone of the project was harnessing the capabilities of MuCell® technology to produce a foamed laminate for pouch packaging UHT milk, which now accounts for around 80% of the Colombian milk market. The result is a first-of-its-kind application in the dairy market: 100% recyclable, unlike alternatives such as gable top cartons, Plastilene's material is also 17% lighter than conventional laminates, so delivering cost benefits and reducing the carbon footprint of milk suppliers across the region.

Group CFO's review
Investing in growth

With the successful debt refinancing and equity placing earlier in the year, we are now well positioned to continue our organic growth strategy and resource investment in capacity, people and infrastructure.

Group revenue

£81.04m

+16%

2017 **£70.15m**

Profit before tax and exceptional item

£10.81m

+23%

2017 **£8.81m**

Profit before tax

£9.86m

+31%

2017 **£7.55m**

Overview

Zotefoams has delivered another year of strong performance. Sales were up 16%, following on from 2017's growth of 22%, while operating profit before exceptional item grew 23%, a similar growth rate to 2017. Operating profit grew 31% (2017: +10%).

Group revenue grew by over £10m to £81.04m (2017: £70.15m), with the stand-out sales performance coming from the footwear division of HPP, a very pleasing return to strong growth in ZOTEK® F and very satisfying growth across all geographical regions of Polyolefin Foams. In constant currency, net sales were up 17%, despite a decline in revenues from MuCell Extrusion (MEL), where the business is being refocused to deliver its longer-term potential. Operating profit before exceptional item was up 23% (up 31% after exceptional item), as our HPP business grew strongly and the Group benefited from the accompanying higher margins. As expected, margin improvement was dampened by added depreciation and operating costs to run the new Kentucky facility as well as some unanticipated start-up inefficiencies. Investment also continued in operating infrastructure to position the Group to deliver on its expansion strategy. In constant currency, operating profit before exceptional item was up 17%.

In Q4 2018, the High Court ruled that all schemes with Guaranteed Minimum Pension (GMP) rights must ensure that equal benefits are paid to all members. Following calculations by the Trustees' Actuaries, we have provided £0.95m for additional liabilities, including related expenses, in the Company's Defined Benefit Pension Scheme (the DB Scheme) and have recorded this as an operating exceptional item in the income statement.

Zotefoams is midway through an extensive capacity expansion programme. Our range of differentiated products requires a unique technology which is capital intensive, and investment is essential to meet our anticipated organic growth opportunities. Having completed the first stage of our $33m US expansion programme in March 2018, we have continued to invest in UK and US capacity expansion as well as started preparing for a new manufacturing facility in Poland. In 2018, the Group invested a total of £16.1m. We have also invested significantly in working capital during the year, with a net movement of £9.8m primarily supporting HPP growth.

To support this phase in the Group's lifecycle, where capital investment demand temporarily exceeds the cash generated from operations, Zotefoams raised £20.6m (before expenses) in May 2018 through a successful placing of new shares, with proceeds earmarked for the Group's capacity expansion projects. This cash infusion contributed to lower net debt of £13.0m at 31 December 2018 (2017: £18.0m). Simultaneously, we completed a debt refinancing, securing increased facilities of £57.5m (up 64% from previous facilities of approximately £35m) at improved pricing.

Group revenue

Group revenue for the year increased 16% to £81.04m (2017: £70.15m). Polyolefin foam sales increased 8% vs 2017, with the UK and Europe growing strongly, up 10% and 12% respectively, driven by sales volume growth of 7% and 3% respectively, continuing product mix enrichment, an improved customer mix achieved by supplying directly to some German customers previously serviced through an intermediary, and selected price increases. The North America polyolefin business grew 1%, with available capacity lower than expected in the ramp-up of its own manufacturing line. HPP sales were up 67%, driven by significant growth in ZOTEK® PEBA following successful market adoption of footwear products using this material. There was also a return to historical growth rates of the ZOTEK® F product range following two years of inventory consolidation at a key customer. T-FIT® insulation sales were up slightly on 2018, but below our expectations for the year. The Business Unit, however, made great progress in developing its product range, sales network and building recognition in the market place, and expects to start seeing the benefits of this going forward. MEL sales declined 54%, mostly due to the strong comparative in 2017 with a one-off capital contract. Despite significant volatility month-to-month and differing performances of sterling against the US dollar and euro, currency had a very modest negative impact on Group revenue of just 1%.

Gross margin

Gross margin remained relatively stable at 35.8% (2017: 36.3%). In line with our strategy, the increased proportion of sales from HPP had a positive benefit on gross margin, as did further mix enrichment in polyolefin foam sales. Balancing these improvements were additional costs of depreciation and running the Kentucky facility, some of which were unplanned as a result of a slower than anticipated ramp-up. As is normal in the early part of the investment cycle the operational gearing from this facility is low with investment in infrastructure and people not yet fully utilised. We expect this to improve as utilisation of the asset improves. The second phase of capacity on this site, planned for commissioning in late 2019, does not include significant infrastructure or people overhead costs and would be expected to improve margins more quickly as its capacity utilisation increases.

Distribution and administrative costs

The Group continues to pursue its expansion strategy, founded on proprietary cellular materials technology. Organic growth with a portfolio of unique and highly differentiated products requires that we invest actively in, and reprioritise where needed, technical, sales-focused and administration resources to create, execute and manage this growth.

Included within distribution and administrative expenses in the consolidated income statement are sales and marketing, warehousing, technical development, finance, information systems and administration costs as well as the impact of foreign exchange hedges maturing in the period and non-cash foreign exchange translation expenses. These costs increased by 8% to £17.43m in 2018 (2017: £16.11m); however, they include a net gain from foreign exchange hedging contracts and foreign exchange translation of £0.82m (2017 net loss: £0.32m). See Currency review for further information and context.

While production of finished product has grown on the Croydon, UK site, storage facilities have been squeezed by the construction of the new facility for high-temperature low-pressure autoclaves and their ancillary equipment. This has required us to store products off-site and incur costs in 2018 of £0.8m (2017: £0.3m). Additionally, we have invested £0.8m during the year in infrastructure to support our Asian T-FIT® insulation activities based at our Kunshan site in China, ahead of expected development in sales, but with a partial offset in gross margin as we continue to switch to in-house production from contract manufacturing.

The Group expects to make further investments in distribution and administrative expenses as we pursue our ambitious growth targets and expand globally.

The Business Unit results are shown on pages 10-11 in this Strategic Report. They do not include central plc costs, which are not considered to be segment-specific. In 2018 central plc costs were £2.62m (2017: £2.40m).

Currency impact on business segments in 2018

Group revenue £m

	2018 Reported	**2018 Adjusted***	2017 Reported	**Net change %**	
				Reported	**Adjusted**
Polyolefin Foams	**57.16**	**57.57**	52.82	**8%**	**9%**
HPP	**22.01**	**22.54**	13.15	**67%**	**71%**
MEL	**1.95**	**2.00**	4.25	**(54)%**	**(53)%**
Eliminations	**(0.07)**	**(0.08)**	(0.07)	**–**	**–**
Group	**81.04**	**82.03**	70.15	**16%**	**17%**

* Constant currency, adjusting 2018 values to 2017 rates.

Exchange rates

Zotefoams transacts significantly in euros and US dollars. The exchange rates used to translate the key flows and balances were:

	2018	2017
GBP to Euro – average	**0.88**	0.88
GBP to Euro – year-end spot	**0.90**	0.89
GBP to USD – average	**0.75**	0.78
GBP to USD – year-end spot	**0.78**	0.74

Finance costs

The total interest charge for the year was £0.75m (2017: £0.51m) and includes £0.14m (2017: £0.19m) of interest on the Company's Defined Benefit Scheme pension obligation.

Profit before tax

Profit before tax and exceptional item increased by 23% to £10.81m (2017: £8.81m). Profit before tax increased by 31% to £9.86m (2017: £7.55m).

Exceptional item

During 2018, the Company recognised an additional liability in respect of GMP, as explained in further detail in the Pensions section below. This represents a charge of £0.95m, including £0.01m of expenses, which has been considered an operating exceptional item in the income statement.

During 2017, following legal advice received by the pension trustees and a calculation by the actuaries, the Company provided £1.27m for potential additional liabilities in its Defined Benefit Pension Scheme (the 'DB Scheme'). This was based on the legal opinion that, while the DB Scheme was properly closed to future accrual of service in 2005, the linkage with future increases in salary had not been broken. The Company took the steps available to it in 2018 to break this link, for which it had accrued £0.03m of expenses in the exceptional item.

Due to the magnitude and nature of these items, these are considered exceptional and have been treated as such in the financial statements.

Currency review

Zotefoams is a predominantly UK-based exporter. In most cases, we invoice in local currency. In 2018, approximately 87% of sales were denominated in currencies other than sterling, mostly US dollars or euros. Most costs are incurred in sterling, other than the main raw materials for polyolefin foams, which are euro-denominated for UK production, and US subsidiary production, operating cost, other subsidiaries staff, operational cost and some HPP raw materials, which are US dollar-denominated. Movements in foreign exchange rates can have a significant impact on results. The Group therefore uses forward exchange contracts to hedge its foreign currency transaction risk. Zotefoams' policy is to use forward currency contracts to cover approximately two-thirds of the estimated net cash foreign exchange exposure for the euro and US dollar for the next 12 months. The Group has also begun to hedge its exposure to foreign currency denominated assets by targeting an 85% offset with same-currency liabilities, primarily through borrowing in the relevant currency. The Group does not hedge for the translation of its foreign subsidiaries' assets or liabilities. This policy is kept under regular review and formally approved by the Board on an annual basis.

During the year, the sterling average exchange rate against the US dollar strengthened by 4.0%, while the sterling average exchange rate against the euro weakened by 0.9%. In contradiction, the sterling spot rate against the US dollar from December 2017 to December 2018 weakened by 5.6%. Net revenues were £0.99m lower due to the Group's greater dependency on US dollar revenues, offset by £0.60m of currency-related operating cost benefits. The Group generated a net loss on forward contracts of £0.18m (2017 gain: £0.19m), offset by a translation gain, primarily on the Company's US dollar receivables, of £1.00m (2017 loss: £0.51m). In total, the net year-on-year currency impact on the income statement was a benefit of £0.43m.

We expect future growth to come mainly from outside the UK and recognise that one of our key risks is our exposure to foreign currency fluctuations, particularly in the US dollar. While this exposure will increase as the Group grows faster outside of the UK, we are mitigating this risk short term through hedging activities and longer term through investment in overseas operating locations. We recognise, however, that inherent risk will remain, with added uncertainty from Brexit. Based on current scale and structure, it is estimated that, with respect to transaction risk and for every one percent move in the USD/£ rate, profit moves by £0.10m hedged and £0.30m unhedged. It is estimated that, on the same basis, with respect to translation risk and for every one percent move in the USD/£ rate, profit moves by £0.13m hedged and £0.35m unhedged. In the year, it is assumed that the transaction exposure from euro/sterling movements is substantially naturally hedged, with sales revenues offset by costs, primarily related to raw material purchases and certain further processing costs.

Group CFO's review
Continued

Tax and earnings per share

The effective tax rate for the year is 20.32% (2017: 20.40%), which is higher than the Group's weighted average corporate tax rate for the year of 17.99% (2017: 18.54%), mainly due to prior year adjustments and other timing differences. Net income tax paid during the year was £2.14m (2017: £0.94m).

Basic earnings per share before exceptional item was 18.66p (2017: 16.04p), an increase of 16%. Basic earnings per share was 16.96p (2017: 13.70p), an increase of 24%. In May 2018, the Group increased its share capital by 8.8% (3,886,792 shares) to 48,301,234 shares through a placing, and the dilutive impact of this is spread over the remaining seven-month period of the year.

Dividend

The Directors are proposing a final dividend of 4.15p (2017: 4.02p), which would be payable on 30 May 2019 to shareholders on the Company register at the close of business on 26 April 2019. Taken with the interim dividend of 1.97p (2017: 1.91p) this would bring the total dividend for the year to 6.12p per ordinary share (2017: 5.93p), an increase of 3.2%, in line with the Group's policy of paying a progressive dividend. It would also represent a dividend cover of 2.8 times (2017: 2.3 times).

Group financing

Financing growth in an organisation with high capital intensity is a recognised risk to Zotefoams. In May 2018, we completed a debt refinancing to give us sufficient headroom and flexibility to continue to grow capacity and meet our expected demand growth, securing increased facilities of £57.5m (up 64% from previous facilities of approximately £35m) at improved pricing. Directly attributable costs for securing these facilities amounted to £1.0m. The facility comprises a five-year £25 million multi-currency term loan, a five-year £25 million multi-currency revolving credit facility and a further £7.5 million sterling annually renewable term loan. The negotiated facility also includes a £25 million accordion feature to provide additional flexibility to pursue future investment opportunities. Pricing is in the form of a ratchet, based on leverage, and maximum leverage under the covenant is a 3x multiple of net debt to EBITDA.

To mitigate the risk impact of increased leverage, we announced on 16 May 2018 that we had raised £20.6m (before directly attributable costs of £0.6m) of equity through a successful placing, representing 8.8% of the Company's existing issued share capital, or 3,886,792 shares. The placing price of 530p represented a discount of approximately 2.9% to the closing middle market price of 546p on 14 May 2018.

Cash flow

Net cash inflow from operations before investment in working capital increased 31% to £17.48m (2017: £13.30m), reflecting the strong cash-generation nature of the business. £9.75m (2017: £2.70m) of this was re-invested in working capital, partly representing business growth and the base build of inventory in the T-FIT® business in China, but primarily through accounts receivable to support the footwear growth in Asia and additional, higher-value inventory to prepare the business for further HPP growth. HPP raw materials are significantly more expensive than their polyolefin counterparts and their uniqueness requires a different approach to minimum holding quantities. Zotefoams also recognises the importance of its supplier relationships and continues to honour agreed payment terms.

Zotefoams continued to invest significantly in property, plant and equipment during the year, with a net cash outflow of £15.80m in 2018 following outflows of £11.39m and £12.14m in 2017 and 2016 respectively. With the Group's largest project, in Kentucky, USA completing in Q1 2018, our main investment focus in the year was progressing the £11.7m investment in high-temperature low-pressure vessels on the UK site and making the required down-payments on key equipment for the $9m Kentucky, USA investment centred around a second high-pressure autoclave. We also continue to invest in other parts of our UK facility, increasing capacity, flexibility and continuing to ensure a safe working environment.

After dividends paid in the year amounting to £2.71m (2017: £2.55m) and the proceeds of the May equity raise, closing net debt was £12.96m (2017: £17.96m). At the year end, the Group remains comfortably within its covenants, with a ratio of EBITDA to net finance charges of 29 (2017: 29), versus a covenant minimum of 4 and net borrowings to EBITDA (leverage) of 0.7x (2017: 1.4x), against a covenant of 3.0x. Our stated capacity investment plans will see debt levels continue to increase as planned until peak leverage, comfortably below the Board's appetite of 2.0x, is reached in 2020, after which the strong cash generation of our business will allow those levels to reduce relatively quickly.

Pensions

In 1990, the European Court of Justice (ECJ) ruled that pensions must be equal for males and females. The key principle of equalisation is that any two people of the same age with identical pensionable service and pensionable salary history will be entitled to the same benefits, whether they are a man or a woman. Following the ECJ judgment, schemes equalised their retirement ages and, at the point members retired (or left service if earlier), pensions were deemed equal. However, many pension schemes, such as the Zotefoams Defined Benefit Scheme (the DB Scheme) were historically contracted out of the State Earnings Related Pension Scheme (SERPS), resulting in a Guaranteed Minimum Pension (GMP) benefit being payable. GMP mirrors SERPS and is unequal, and over time this has created

Investments

Zotefoams' strategy is focused primarily on organic growth. Over the past four years Zotefoams has invested £48.0m in property, plant and equipment, the majority of which has been to increase capacity in its unique technology. Given the capital-intensive nature of the Zotefoams business, long lead times for key equipment and the importance of operational gearing, investment decisions require significant planning and are made with a clear assessment of strategic fit, risk and risk appetite. Confidence in the Group's developing portfolio of HPP opportunities is a significant consideration in determining the timing of certain investments, while the strategic importance of maintaining growth in the profitable Polyolefin Foams business, the Group's largest volume product range, informs the decision to increase total Group capacity versus relying solely on mix enrichment.

Investment decisions target improvements in the Group's return on capital over the investment cycle, while recognising the short-term impact on this return during construction and operating initially at lower utilisation levels. When Zotefoams embarks on investment in a new location, such as installation of extrusion and high-pressure capability at our existing Kentucky, US site, or the planned investment in foam manufacturing at the Polish site, we take into account the importance of scale and dilution of heavy infrastructure cost over a (future) second or third line. As such, the first step is invariably more dilutive to capital return than any subsequent investments.

Zotefoams defines the return on capital employed (ROCE) as operating profit before exceptional items divided by the average sum of its equity, net debt and other non-current liabilities. This measure excludes acquired intangible assets and their amortisation costs. We also exclude significant capacity investments under construction until they enter production. We do not attempt to adjust for the first phase inefficiencies as mentioned above. In 2018, the return on capital increased to 16.5% (2017: 15.5%). Our increased profits in 2018, boosted by a stronger mix of HPP, more than offset the additional assets brought into our ROCE calculation following the commissioning of our first US high-pressure autoclave and its ancillary equipment. If the capacity investments still under construction were included, the return on capital increased to 12.8% from 12.1% in 2017.

Investing in growth £m

	2015	2016	2017	**2018**	**Total**
Growth capital	6.1	6.9	7.8	**12.8**	**33.6**
Maintenance capital	2.6	5.2	3.6	**3.0**	**14.4**
Total investment in property, plant and equipment	8.7	12.1	11.4	**15.8**	**48.0**

Zotefoams' strategy is focused primarily on organic growth. Over the past four years Zotefoams has invested £48.0m in property, plant and equipment, the majority of which has been to increase capacity in its unique technology.

inequality in scheme benefits. With the resource involved in equalising benefits for GMP often exceeding the value of any additional benefit granted, the pensions industry held off making adjustments until they had no option but to do so. On 26 October 2018 the High Court ruled that schemes are under a duty to make sure that equal benefits are paid, including where these benefits are in the form of GMP. As a result, all schemes with GMP rights are now being expected to act.

The Company has sought advice from the Actuaries of the Trustees and had this reviewed by its own pension advisors. While the pension industry is not clear which of a number of calculation alternatives might be pursued, a method has been proposed which would result in an additional liability of £0.95m. As the sponsoring employer, the Company may, therefore, have an additional liability for pension costs and feels it appropriate at this stage to provide for the possible increase in liability. The exceptional charge represents 2.8% of the DB Scheme obligation as at 31 December 2018 and would represent an increase in cash outflows over the remaining average service lives of the affected employees. This is not considered by the Directors to have a material impact on the Group's financial condition or future prospects.

In the previous year, following legal advice received by the pension Trustees and an estimate calculated by the Actuaries, the Company provided £1.27m for potential additional liabilities, which was treated as an exceptional item. During the first half of 2018 the process of obtaining informed consent from members of the DB Scheme, to close the scheme effectively, was completed. 70% of the affected members of the scheme consented and a majority of these members are in the higher salary bands, resulting in a low risk of material exposure. It is assumed that the members who did not provide consent to the break in salary linkage will on average receive future salary increases in line with the Consumer Price Index.

A full actuarial valuation of the DB Scheme was completed as at 5 April 2017, in line with the requirement to have a triennial valuation. The outcome, on a Statutory Funding Objective basis, calculated a deficit for the Pension Scheme of £4.18m. As a result, the Company agreed with the Trustees to make contributions to the DB Scheme of £43,300 per month to meet the shortfall by 31 October 2026, up from £41,000 per month previously. In addition, the Company pays the ongoing DB Scheme expenses of £15,000 per month (previously £10,600 per month) to cover death-in-service insurance premiums, the expenses of administering the Scheme and Pension Protection Fund levies.

The net IAS19 deficit on the DB Scheme increased by £1.91m to £8.08m as at December 2018 (2017: £6.17m). The main factors contributing to the increase in the deficit are the actual investment return achieved on the assets being lower than required to match the expected increase in defined benefit obligation over the year, and an increase in defined benefit obligation due to GMP equalisation.

Zotefoams does not consider its pension scheme to be a key risk to its ability to achieve its strategic objectives. The net impact of the events of the past two years represent 6.6% in aggregate of the Group's gross liability and both represent cash outflows over many years to come. Mitigation of further risk is expected to come from our growth expectations and a refocus by the pension Trustees on a lower-risk strategy to meet the DB Scheme's deficit shortfall.

Going concern

The Group's business activities, together with the factors likely to affect its future development, performance and position are set out in the Strategic Report on pages 2 to 19 and the section entitled 'Risk management and principal risks' on pages 24 to 30. This also describes the financial position of the Group, its cash flows and liquidity position. In addition, note 21 to the financial statements includes the Group's objectives, policies and processes for managing its capital, its financial risk management objectives, details of its financial instruments and hedging activities, borrowing facilities, and its exposure to credit risk and liquidity risk.

The Directors believe that the Group is well placed to manage its business risks and, after making enquiries including a review of forecasts, budgets and banking facilities, have a reasonable expectation that the Group has adequate resources to continue in operational existence for the next 12 months following the date of approval of the financial statements. Accordingly, they continue to adopt the going concern basis of accounting in preparing the Annual Report.

Financial Reporting Council review letter

On 8 December 2017, Zotefoams received a letter from the Corporate Reporting Review Team (CRRT) of the Financial Reporting Council (FRC) in relation to its regular review and assessment of the quality of corporate reporting in the UK. The letter alerted the Group of the FRC's intention to review the Group's Annual Report ending 31 December 2017, focusing on the cash flow statement and tax disclosures. On 16 October 2018, Zotefoams received a letter from the FRC notifying us of the CRRT's findings, which did not raise any questions or queries. It did, however, highlight some improvements to our existing disclosures to benefit the users of the accounts going forward. The Group has considered these recommendations in preparing the 2018 Annual Report.

Financial risk management

The main financial risks of the Group relate to funding and liquidity, credit, interest rate fluctuations and currency exposures. The management of these risks is documented in note 21.

Gary McGrath
Group CFO

3 April 2019

Risk management and principal risks
Managing our risks to achieve our strategic objectives

Zotefoams' risk management process is designed to improve the likelihood of achieving its strategic objectives, keep its employees safe, protect the interests of its shareholders and key stakeholders, and enhance the quality of its decision-making. The Group is committed to conducting business in line with all applicable laws and regulations and in a manner consistent with its values.

Risk Management Framework

BOARD

- Ensures that risk is managed across the business
- Defines the Group's appetite for risk
- Assesses the Group's principal risks and opportunities

EXECUTIVE COMMITTEE

- Inputs into Board's process for setting risk appetite
- Implements strategy in line with the Group's risk appetite
- Manages opportunities and the resulting risks arising
- Leads operational management's approach to risk
- Inputs its assessment of risk and opportunities into the Internal Controls Committee

AUDIT COMMITTEE

- Monitors and reviews the effectiveness of the Group's risk management framework

INTERNAL CONTROLS COMMITTEE

- Reviews and assesses the effective functioning of the Group's risk management framework
- Collates outputs of functional steering committees' risk management exercises
- Reviews, updates and submits the Group's principal risks and uncertainties schedule to the Board
- Affirms to the Audit Committee the Group's compliance with the UK Corporate Governance Code in relation to risk

FUNCTIONAL STEERING COMMITTEES

- Chaired by, and including, Executive Committee members
- Provide a regular forum for active monitoring of key business risks as they relate to achievement of the Group's strategic objectives, the controls and activities in place to mitigate them, the key actions required and their timings
- Report bi-annually to the Internal Control Committee on successful adherence to their terms of reference specific to risk and raise any failures in the effectiveness of existing processes

- Health and Safety Steering Committee
- Environmental Steering Committee
- HR and Training Steering Committee
- Key Supplier Review Steering Committee
- Contract Review Steering Committee
- IT Steering Committee
- Quality Steering Committee
- New Product Development Committee
- Marketing Steering Committee
- Planning and Capacity Steering Committee
- Capital Planning Steering Committee
- Credit Control Review Committee
- Foreign Exchange Committee
- Zotefoams Inc Executive Committee/Zotefoams Inc Internal Control Steering Committee
- MEL Executive Committee/ MEL Internal Control Steering Committee

OPERATIONAL MANAGEMENT

- Members of functional steering committees
- Create an environment where risk management is embraced and the responsibility for risk management is accepted by all employees
- Implement and maintain risk management processes

EMPLOYEES

- Active in the day-to-day management of risk

Risk appetite

Zotefoams is a growth business. Reflecting the uniqueness of our technology, its capital intensity and the importance of matching capacity with our demand expectations, we have extended planning for the future from three to five years and converted these plans into financial targets. To achieve more ambitious targets, we understand we must be willing to accept higher levels of risk. We seek an appropriately balanced outcome, where we consider the level of reward commensurate with the likelihood of success. We recognise the importance of taking these risks within clear boundaries as recommended by the Executive team and approved by the Board. We challenge, reassess and reaffirm these boundaries regularly and, for key decisions, on a case-by-case basis. As a manufacturing company the health and safety of our employees will always be paramount, which translates into an extremely low tolerance for risk in this area.

Developments during the year

- The Board has approved an improved, more thorough and more inclusive risk management process. The Group's functional control committees updated their terms of reference, generated risk maps based on their perceived ability to help the Group meet its strategic objectives and used these to direct their focus of activities. During the year this process was audited by the British Standards Institute as part of the internal standard for quality, ISO9001:2015, with no non-conformances reported for the Company. The new emphasis of this standard is the management of risks and opportunities. We expect to complete the global roll-out during 2019.
- Zotefoams switched its strategic plan period from three to five years. The Board and Executive team risk-assessed this plan as part of the May 2018 refinancing and equity raise as well as during the two-day annual strategic review in October. Risk discussions also gained more prominence at Board meetings during the year as the Board discussed the execution of existing plans and reviewed capacity expansion initiatives.
- The Executive team, also members of the Functional Steering Committees, met twice during the year specifically to review and update the Group principal risks and uncertainties map.
- The Group reviewed its key policies, such as anti-bribery and corruption, competition, ethics, whistleblowing and share dealing, to make sure they remain relevant and are operating effectively.
- Using cross-functional teams and expert external advice, measures were put in place to ensure timely compliance with the General Data Protection Regulation (GDPR), which became law in May 2018.
- Zotefoams successfully gained the Cyber Essentials Plus certification following a full independent assessment of our IT systems. The Cyber Essentials Scheme is part of the UK Government's National Cyber Security Strategy, with the primary aim of making the UK a safer place to conduct business online. It encourages businesses and organisations to implement digital protection against common cyber-attacks, while allowing them to demonstrate an increased awareness of cyber security.
- During the year the Company also transitioned to the new international standard for environmental management IS14001:2015, further developing our commitment to risk and opportunities management processes. As with previous years, accreditation and product audits were conducted during 2018 and the Company received no significant non-conformities. As a result, all the Company's product accreditations remain.
- The Group continues to use an external adviser to perform its financial internal audit services. During the year, based on the Group's internal risk assessments, our internal auditor Grant Thornton LLP completed an audit on the internal financial control environment at the Group's China subsidiary, with outcomes and improvement plans presented to the Audit Committee.

Principal risks and uncertainties

The details of our principal risks and uncertainties and the key mitigating activities can be found on pages 26 to 29. We are disclosing those risks and uncertainties that we believe have the greatest impact in achieving our strategic objectives. The Group is exposed to a wide range of risks in addition to those listed, and these are managed through the risk management framework shown on page 24. This framework enables us to monitor for any increase in likelihood or impact and ensure that we have the appropriate mitigations in place.

Zotefoams' risk profile will evolve as the business grows at its targeted pace, although we expect these principal risks to remain broadly consistent. As we mature our thinking and approach to risk management and appraise how best to embed and communicate it, we have attempted to simplify our presentation of the key risks by aggregating those risks that share common causes. As a result, we have consolidated the 12 principal risks and uncertainties reported in 2017 into 6 principal risk areas in 2018.

We have removed pension from our key risks. While we recognise the importance of effective management of this area and accept the exceptional items of the past two years, we have concluded that it is not a material risk to the Group given the size of the net pension liability and its diminishing ratio against the Group's net assets as the Group continues to grow.

2017	2018
▶ Single site dependence ▶ Supply chain single source ▶ Cyber threats	▶ Operational disruption
▶ Execution of capacity investments ▶ Financing	▶ Global capacity management
▶ People ▶ Span of control	▶ Scaling up international operations
▶ Unique technology	▶ Technology displacement
▶ Foreign exchange ▶ Macroeconomics	▶ External
▶ Loss of a key customer	▶ Loss of a key customer

Key to links to the strategy

1 **Grow sales in our AZOTE® Polyolefin Foams business in excess of twice the rate of GDP global growth.**

2 **Develop an HPP portfolio and MEL customer base to deliver enhanced margins.**

3 **Increase our operating margins, before exceptional items.**

4 **Improve our return on capital (over our investment cycle).**

⊕ Read more p15

Risk management and principal risks
Continued

Operational disruption

Strategy ① ② ③ ④ **Risk trend** ↔

Description and context

The performance of our business will be impacted if we are unable to run our equipment and manufacture and distribute product at rates at least equivalent to those currently achieved. We face material operational risks from our reliance on our UK site, the importance of effective IT systems, our dependency on certain raw materials and components from a single source.

The Croydon, UK site manufactures the majority of Zotefoams' polyolefin foams and, given their complexity, all of its high-performance products. It operates at high utilisation rates. A major incident specific to safety, health and the environment, or a significant operational disruption from either failure of critical equipment or the IT systems that drive them could shut down the plant for a period of time.

We do what others do not, making us unique and providing significant opportunities. But this uniqueness also means that certain of our engineering components and raw materials are sourced from single suppliers. Disruption in those supplies, either on a temporary or more permanent basis, could affect production and supply to the Group's customers, with the knock-on impact, in certain defined circumstances, of contractual commercial consequences resulting in possible customer claims.

The potential impacts of operational disruption are: i) sizeable financial consequences related to missed sales and the high operational gearing nature of the business; ii) the commercial and longer-term consequences of not delivering to strategic customers dependent on our products; and iii) the reputational damage that might impact future chances to acquire new business.

The UK's decision to exit the European Union and continuing uncertainty around its impacts create, in the short term, potential risks of supply disruption given our sourcing of raw materials from mainland Europe and the size of our sales into the region, transported through the UK's ports.

Mitigating actions

Safety, Health and Environmental policies

We have extensive Safety, Health and Environmental (SHE) policies and procedures in place which are in line with best practice. The reporting of incidents, including 'near misses' and damage to plant or equipment not resulting in personal injury, is mandatory in order to track issues and to prevent reoccurrences. Regular internal and external audits are performed, and quarterly reports are submitted to, and discussed by, the Board. We increased our resourcing of SHE personnel globally during the year.

Maintenance strategy

We ensure that our assets are well looked after through a well-resourced maintenance team, proactive maintenance investment including annual shutdowns and extensive fire prevention systems. Our pressure equipment is operated under prevailing regulations and is subject to systematic internal and frequent external inspections. Appropriate contingency plans are in place in the event of the failure of certain major pieces of equipment.

Operations outside of the UK

Zotefoams is also investing in manufacturing capability outside of the UK. The Kentucky, USA site commissioned its first full manufacturing line in April 2018 and a second line is expected to be available by the end of 2019. These lines provide polyolefin foam capacity, in the first instance, but it will become possible to manufacture some of the more challenging higher-performance foams with experience. We also began construction of a third foam manufacturing location in Poland, the first line of which is expected to commission in 2020. Underlying all this, the Group ensures that it has updated and sufficient insurance in place to cover capital restatement and loss of profits in the event of operational disruption caused by unforeseen events.

Seeking dual sources

Wherever possible, suppliers are sourced from more than one supplier or location. However, this is not always possible due to the special nature of the raw materials, particularly those used to manufacture high-performance products, and the machinery used. We continually monitor suppliers and search for new ones, have expanded our procurement department to support this, have identified new component suppliers in the USA as a result of our investment activities at our Kentucky, USA plant and continue to invest dedicated resources in the search for, testing and approval of alternative suppliers of critical materials.

Investing in IT

We continue to invest in our IT systems and department. We have multiple redundancy points limiting failure of any one hardware or operating system, up-to-date policies and procedures, comprehensive documentation on all our critical assets and core configurations. At the end of 2018, we gained the Cyber Essentials Plus certification, part of the UK Government's National Cyber Security Strategy, following a full independent assessment of our IT systems' ability to deal with common cyber attacks.

Monitoring Brexit developments

We continue to monitor Brexit developments and take appropriate commercial action as the date for the UK's exit approaches, including planning our production and shipping schedules around the expected Brexit date. We have also applied for Authorised Economic Operator Status, which provides a fast track for shipments in and out subject to the meeting of certain criteria audited by HMRC. Longer term our investments in the USA and Poland give us a more diversified base to supply our polyolefin foam customers while we expect our UK facility to be more focused on production of HPP product, which is less sensitive to the macroeconomic trading environment.

Control Committees

- Board
- Executive Committee
- Planning and Capacity Committee
- Health and Safety Steering Committee
- Environmental Steering Committee
- Key Supplier Review Steering Committee
- Contract Review Steering Committee
- IT Steering Committee

Global capacity management

Strategy ① ② ③ ④ **Risk trend** ↔

Description and context

As we grow our business at the rate we target, it is critical that we create the required capacity to match the anticipated demand. A failure to execute well and in a timely manner will impact the speed of growth. We face material risks due to the uncertainty of medium- to long-term demand, the long construction periods of our unique technology, the successful execution of our investment projects, the risk of loss of an important customer and the ability to finance these investments.

Zotefoams' growth is founded upon its unique offering, its relevance to the global megatrends of regulation, safety and demographics, and its ability to create new markets and new applications. The nature of demand differs between our Polyolefin Foams and HPP Business Units. Polyolefin foam sales are very diversified and historically predictable, linked to GDP, but boosted by the benefit of the megatrends listed on page 14. HPP sales are more project-driven and have stronger links directly with the end user, who also has a more direct involvement in growth trajectory. Together, this can make the timing of opportunities difficult to predict, but not having the right capacity available at the right time may mean the opportunity cannot be realised. We plan to invest to maintain our range of performance and price for polyolefin products as we believe this is the best approach to ensure the future growth prospects of this profitable Business Unit.

Our unique technology is highly capital intensive with long lead times. The Croydon, UK site is highly developed with space limitations restricting further investment, meaning the next growth initiatives must come from other sites and geographies and may require sizeable infrastructural investment, accurate risk assessment and more time to implement. Foam is costly to transport, not matching location with the customers it will serve could impact operating margins.

We are currently engaged in a significant programme of capital investment, with projects at different stages of completion in the UK, the USA and Poland. Delays in these projects might impact our ability to serve the growth opportunities our business development teams are generating.

The Group needs to have sufficient cash or be able to draw on loan facilities or access capital markets to finance this capacity expansion. Funds for investment are required up to a number of years before the assets start generating cash, which increases debt levels and leverage ratios.

Mitigating actions

New processes and longer-term planning

During the year we introduced a monthly sales and operations planning process, with the help of a recognised consultancy organisation which, while still in its infancy, is already demonstrating high levels of cross-functional engagement to ensure collaboration and consistency in planning sales and production over the upcoming 18 months.

We also increased our strategic planning view from three to five years to reflect the longer time horizons related to capacity planning. Our five-year strategic plan was rigorously tested by the Board and our external financing consultants during the Group's refinancing process in H1 2018, and reassessed and retested during the Board's annual strategic review process in H2 2018.

Building on our experience in the USA

The experiences gained through the recent investment in the Kentucky, USA site have provided a significant increase in know-how, spread across more personnel, which reduces uncertainty of future execution. We have identified new suppliers of critical equipment in the USA that were previously single-sourced in the UK. We have dedicated project managers and project teams and where we do not have the required expertise we have either hired new employees or engaged experienced consultants to lead and/or work alongside us. The Executive Committee has received progress reports monthly while the Board has rigorously tested key risk assumptions and project status throughout the year.

Debt refinancing and equity raise

In May 2018, we completed a debt refinancing to continue to grow capacity and meet our expected demand growth, securing increased facilities of £57.5m (up 64% from previous facilities of approximately £35m) at improved pricing. We also completed a successful equity placing, raising a further £20.6m (before expenses). This provides us with sufficient headroom and flexibility to complete the investments already communicated as well as be in a position to invest further if opportunities arise.

Control Committees

- Board
- Executive Committee
- Planning and Capacity Steering Committee
- Capital Planning Steering Committee
- Zotefoams Inc Executive Committee

Scaling up international operations

Strategy ① ② ③ ④ **Risk trend** ↑

Description and context

Working more remotely with international operations and engaging with legal environments and cultures less familiar to us increases the risk of not delivering on our growth opportunities or suffering a compliance incident. Our business is growing in Asia and we are investing in a Polish manufacturing facility, to start up in 2020. We must ensure that we hire the right people and manage the span of control challenges.

Until recently most of Zotefoams' revenue was shipped from the UK. Following our investments in the USA and Asia, the Group now employs more people, holds more assets and generates a higher proportion of revenues outside the UK. We are hiring people globally at a faster rate than previously with high expectations of material contributions to the Group's growth strategy.

Failure to ensure responsible corporate behaviour in these new areas will undermine our reputation in these new regions, could bring substantial financial penalties and affect our growth path. Failure to provide these distant operations with effective financial and IT systems, educate them effectively on all aspects of Zotefoams' culture and ethics and align them on our strategic objectives could impact business performance.

Critical to any company's success is its people. The failure to attract, develop or retain the right calibre of staff will impact our ability to deliver. Getting this right from a distance, in cultures less familiar to us, will be challenging.

Mitigating actions

Board involvement

The Board and Executive Committees have continued to review the Group's corporate culture, its communication and the embedding of controls across the organisation. A financial internal audit of the Chinese subsidiary was performed during the year by our external service provider, with the report's findings and issue resolution plan being reviewed and monitored by the Audit Committee.

Key leaders have travelled frequently to overseas locations to ensure that the right people are in the right roles and behaviours are aligned with those at the corporate centre.

Upgraded IT

We have upgraded IT systems to standardise information and improve communication and visibility. The systems are implemented into all new subsidiaries as they get set up. We have introduced a global training tool which will provide training, plus tracking mechanisms, across all our locations on a risk-assessed basis and in the local language. During the year we focused on ensuring that all our Asian employees in at-risk roles had completed anti-corruption training. In 2018, we invested in a fully integrated HR software tool which will provide us with a centralised tool for HR management of our remote locations.

Building up our global functions

We have invested significantly in human resource over the past two to three years as we build global functions and hire leaders with international and cross-cultural experience. We have a Global Talent Manager, who attends all Executive Committee meetings, whose remit is to ensure that senior and emerging talent is appropriate for the Group's current and future needs. During 2018 we increased the size of the Executive Committee with a new Director responsible for our HPP Business Unit. Our growth in Asian employees is expected to come primarily through our T-FIT® insulation business and leadership roles report directly to this individual.

The Group's US operations, comprising Zotefoams Inc and MuCell Extrusion LLC, have been part of the Group since 2001 and 2008 respectively, have well-embedded reporting and control structures and engage in regular and effective communication with senior operational leaders of Zotefoams and the Board. The Zotefoams Inc Business President is a member of the Executive Committee.

Control Committees

- Board
- Audit Committee (in relation to Finance)
- Executive Committee
- HR and Training Steering Committee
- IT Steering Committee
- Zotefoams Inc Internal Control Steering Committee
- MEL Internal Control Steering Committee

Risk management and principal risks
Continued

Technology displacement

Strategy ① ② ③ ④ **Risk trend** ↔

Description and context

The loss of our technological advantage could increase competition and affect growth rates and margins. Either our foam manufacturing process or our MuCell® technology could be matched or bettered.

Our processes for the manufacture of our products are unique to the Group. We are not aware of anyone using autoclave technology to make similar products in commercial quantities. While the principles behind the processes are not confidential, the precise know-how is. Our autoclave technology is flexible allowing us to manufacture foams from a range of polymers. For a product with substantial growth opportunities, or a product with a large consolidated market, a competitor could target an alternate, more economic, process. Critical to the success of MuCell Extrusion LLC (MEL) is the strength of its intellectual property and, on the back of that, its ability to grant commercial licences. Its intellectual property could become dated or its patents expire or be successfully challenged or circumvented.

Mitigating actions

Reinforcing high barriers to entry

There are high barriers of entry to the manufacturing of our unique foams. Significant capital investment, know-how and time is required to invest in autoclaves and related infrastructure. High-Performance Products (HPP) are significantly more complex to manufacture than our polyolefin foams, and certain materials require years to be qualified for supply.

We have reduced, and continue to seek to reduce, technology displacement risk by entering into new markets with significant barriers and cost of market entry for competitors. For example, the development of high-performance products and MuCell® technology, where the product offerings are unique and protected by patents and/or process know-how and capability, opens up new markets for the Group with potential significant and lasting differential advantages.

Investing in R&D capability and people

We invest in people to broaden our technical capability, research new ways to leverage our technology and accelerate the opportunities that make Zotefoams unique. We invest in people to ensure know-how related to the design and efficient use of high-pressure autoclave systems and know-how related to polymer processing is retained by the business. We have introduced graduate schemes and developed strong relationships with local universities to attract high potential individuals. We dedicate financial resource to testing materials and solutions to remain at the forefront of cellular materials technology.

Protecting our intellectual property

We actively maintain our intellectual property and patent our technology, wherever we believe it is appropriate to do so, and guard our know-how to sustain protection when technology is not subject to patent or patents are no longer applicable. This know-how spans multiple disciplines in our business making it difficult to poach. We protect our know-how using confidentiality and contractual agreements with employees, suppliers, customers and maintaining cyber security. The Group keeps a watching brief on competitor activity and maintains close contact with its customers and end users of its products to understand market activity.

MEL actively maintains and updates its intellectual property portfolio. This is done by undertaking research and development to add new patents to the portfolio, further developing its know-how and obtaining licences of key third-party patents, which are complementary to the existing portfolio. In some cases, our close connection with our customers and dedication to a customised solution has yielded new intellectual property opportunities not actively sought.

MEL licences typically include a bundle of patents and know-how and therefore are not completely dependent on any particular patent. All licences are reviewed by senior personnel and the Group CEO to ensure that terms are appropriate. The portfolio is managed by the MEL Executive Committee.

Control Committees

- Executive Committee
- New Product Development Committee
- Zotefoams Inc Internal Control Steering Committee
- MEL Executive Committee

External

Strategy ① ② ③ ④ **Risk trend** ‹›

Description and context

Business growth prospects are vulnerable to movements in foreign exchange rates and geo-political developments. These factors are often out of our control and may influence our business in a number of ways, including influencing the other key risks listed.

Zotefoams has significant exposure to foreign exchange fluctuations. This is both transactional and on the translation of foreign currency balances and the consolidation of its foreign subsidiaries. Despite recent investments overseas, our operations are substantially based in the UK and, therefore, most of our manufacturing assets and costs are sterling denominated. We normally invoice our customers in their local currencies, and in 2018 approximately 87% of the Group's revenue was in currencies other than sterling, mainly US dollars or euros. We therefore generate surpluses in US dollars and euros, which are converted into sterling.

Our markets are exposed to general economic and political changes which have an influence on economic stability and market and consumer confidence, which in turn may impact the Group's performance and ability to achieve our strategic objectives.

The consequences of the UK's decision to leave the European Union may impact our business in a variety of ways and affect other key risks listed in this report, although this impact is not yet fully understood or fully quantifiable given the ongoing negotiations. However, an unfavourable outcome may impact our ability to import raw materials and export finished foam product in a timely manner (operations disruption). Tariffs may increase input costs and export prices, while labour regulations may affect our ability to attract EU talent into our global headquarters in Croydon, UK.

Mitigating actions

Managing exposure to the US dollar

We reduce our net foreign exposure for transactional items by making purchases either in euros or US dollars. For example, there are US dollar costs associated with the Group's operations in Kentucky, USA and with MEL. In addition, the majority of the Group's raw materials are purchased in euros.

With the first phase of our significant capital investment in Kentucky, USA now complete, we have reduced exposure for transactional items on the US dollar by increasing the operating cost base in the USA. Raw materials are now purchased locally and a larger workforce supports full process production. While on a smaller scale, at least to begin with, the same will apply for the euro when our Polish manufacturing facility is complete in 2020.

Currency hedging

The Group has a hedging policy which is approved by the Board. The Group hedges a proportion of its net exposure to transactional risk by using forward exchange contracts. We do not hedge for the translation of our foreign subsidiaries' assets or liabilities in the consolidation of the Group accounts. We are, however, increasingly focused on hedging our statement of financial position through matching, where possible, our foreign-currency denominated assets with foreign-currency denominated liabilities, such as through the use of foreign-currency debt financing.

Diversifying our markets

Some of our markets can be cyclical. However, this risk is spread geographically and across a number of segments that are expected to diversify further with the growth of HPP and MEL. The Group is operationally geared but our experience is that, during challenging times, operational labour costs can be reduced, polymer prices generally fall with reduced economic demand, giving a cost benefit, and cash can be generated from both reducing working capital as well as slowing capital expenditure projects to help offset the effects of a downturn. Our recent refinancing and capital raise have given us sufficient headroom to manage through a downturn.

Monitoring Brexit developments

We continue to monitor Brexit developments and take appropriate commercial action as the date for the UK's exit approaches, including planning our production and shipping schedules around the expected Brexit date. We have also applied for Authorised Economic Operator Status, which provides a fast track for shipments in and out subject to the meeting of certain criteria audited by HMRC. In the longer term, our facility in Poland is expected to become more important in the supply to continental European customers.

Control Committees

- Board review (at times of more fundamental changes)
- Executive Committee
- Marketing Steering Committee
- Foreign Exchange Steering Committee
- Zotefoams Inc Internal Control Steering Committee
- MEL Executive Committee

Loss of a key customer

Strategy ① ② ③ ④ **Risk trend** ˄

Description and context

Group performance could be impacted by the loss, insolvency or divergence of interest with a key customer. The Group's largest customers have traditionally been converters of foam, none of whom have represented a material share of the Group's revenues or future opportunities. As the Group successfully converts projects out of its HPP portfolio into commercial opportunities, the customers for ZOTEK® PEBA, F and N foams are expected to be significantly larger than the average AZOTE® customer and represent a more material risk if the business is lost. Capacity will become available, having been built in some cases to service these customers, pressurising margins in an organisation with high operational gearing.

Mitigating actions

We have good knowledge of the end users of our major customers for polyolefin foams and, with some additional short-term work, would expect to bring or identify additional converter capacity, supply routes, channel partners or take a direct approach to service these markets.

We are excited by the size of the opportunities offered by our ZOTEK® product portfolio and have the risk appetite to pursue them. Where we engage in relationships with large HPP customers we seek to ensure that our interests are protected by balanced commercial contracts. The Board is heavily involved in such decisions. These relationships are by their nature longer term, providing a unique technical solution and competitive advantage to the ZOTEK® foams customer or end user. The loss of such a customer is likely to come with a reasonable notice period, allowing us time to take appropriate action. Continued investment in the portfolio could yield further successes that spread the risk of any single loss, while the T-FIT® insulation business provides further balancing with its more broadly spread global customer base.

We will continually review our customer spread and balance, particularly as the HPP business segment takes on more importance.

Control Committees

- Board
- Executive Committee
- Marketing Steering Committee

Risk management and principal risks
Continued

Viability Statement

The viability period

In accordance with provision C.2.2. of the 2016 revision of the UK Corporate Governance Code, the Directors have assessed the prospects of the Group over a longer period than the 12 months required by the Going Concern provision.

The Directors consider the timeline of five years to be appropriate, being the period upon which the Group actively focuses, has reasonable visibility over its opportunity portfolio, and given the nature of capital investment needed to support the Group's anticipated rate of growth, investment that in some cases requires long lead times as a result of the unique nature and capital intensity of its technology. A longer period of assessment introduces greater uncertainty since the variability of potential outcomes increases as the period considered extends. A shorter period of assessment impacts the Group's ability to put the right capacity in the right place on time.

Assessing viability

The Group is considered to be viable if it maintains interest cover and net borrowings to EBITDA ratios, as prescribed by its existing financial covenants, and if there is available debt headroom to fund operations.

The Directors' assessment of viability has been made with reference to Zotefoams' current position and prospects, our alignment with global trends, our strategy, the Board's risk appetite and Zotefoams' principal risks and how these are managed, as detailed on pages 24-29.

The Board reviews our internal controls and risk management policies as well as our governance structure. It also appraises and approves major financing and investment decisions as well as the Group's performance and prospects as a whole. The Board reviews Zotefoams' strategy and makes significant capital investment decisions over a longer-term time horizon, based on the Group's strategic growth objectives, a multi-year assessment of return on capital, the continuing performance of the business, the quality of its portfolio of opportunities, and its financing arrangements and opportunities. This is aligned with the Group's model to invest, create and deliver.

The bottom-up five-year plan is reviewed at least twice annually by the Directors. In assessing the future prospects of the Group and achievability of this plan, the Group has considered the potential effect of risks that could have a significant financial impact under severe but plausible scenarios. The risks considered were identified from the Group's principal risks and uncertainties assessment. While testing against each individual scenario, the Board has also considered the impact of a combination of the scenarios over the assessment period. This was in order to stress-test an aggregation of severe but plausible risks occurring that should represent the greatest potential financial impact both in the short-term and longer-term viability period.

The Directors considered mitigating factors that could be employed when reviewing these scenarios and the effectiveness of actions at their disposal. These include adequate insurance coverage, adjusting investment in discretionary and maintenance capital investment, the unwinding of working capital in a downturn, ceasing some activities and reducing overhead previously invested to support the Group's growth initiatives.

We are satisfied that we have robust mitigating actions in place. We recognise, however, that the long-term viability of the Group could also be impacted by other, as yet unforeseen, risks or that the mitigating actions we have put in place could turn out to be less effective than intended.

Scenarios tested

The following downside scenarios have been evaluated:

Scenario 1:
Significant operational disruption over a long period. This risk focuses on the most extreme scenario of a fire at the Croydon, UK plant requiring a significant rebuild over a period in excess of a year.

⊕ **Read more** Principal risk: Operational disruption p26; Global capacity management p26

Scenario 2:
Business performance risks. These include both Polyolefin Foams and High-Performance Product growth at rates significantly below those included within the five-year plan and include the assumption that the Group's current major capacity expansion projects will have been completed.

⊕ **Read more** Principal risk: Technology displacement p28; External p29

Scenario 3:
Loss of a key customer in HPP. This scenario reflects having completed the capital investment projects currently committed to but losing the footwear business.

⊕ **Read more** Principal risk: Operational disruption p26; Global capacity management p26; loss of a key customer p29

Scenario 4:
Sterling returning to pre-Brexit referendum foreign exchange rates to the US dollar and euro. This scenario evaluates the cash impact on the Group as a result of forecast growth coming increasingly from non-sterling denominated sales.

⊕ **Read more** Principal risk: External p29

The Group does not consider Brexit to be a material risk to its long-term viability. While immediate operational disruption is possible, albeit mitigated by current supply chain planning, the international markets Zotefoams operates in are not expected to be materially affected and any impact from export tariffs are expected to be offset by a weaker sterling.

Confirmation of longer-term viability

Based on the assessment explained above, the Directors confirm that they have a reasonable expectation that the Group will continue to operate and meet its liabilities, as they fall due, over the next five years.

Our talented team

A values-led business with ambition

We are a pioneering organisation that is growing quickly with an increasing global presence. Behind our continued success lies the capability of our people and the strength of our culture. The Board and Executive team discuss talent and culture on a regular basis, and specifically as an integral part of an annual strategy day. We aim to set clear expectations for culture and values which apply to, and engage, employees at all levels. We are striving to increase levels of engagement with our diverse group of employees and align our culture and capability to create and deliver ambitious business objectives.

Delivering culture and engagement with a consistent theme

In 2017, we derived a set of Culture Pillars to complement our Brand Values; in 2018, these have guided our efforts within the areas of engagement as we generate a consistent theme and focus to how our business and our people behave. From our 2017 employee survey, we picked pillars for focus at Group and local level – one chosen by business management and two by the wider business in both the UK and US geographies – the outcomes are detailed below.

Our Brand Values

- Trustworthy
- Reliable
- Responsive
- Pioneering

Our Culture Pillars

- We live the Brand Values
- We hold ourselves accountable
- We understand how we contribute to Zotefoams' success
- We are a learning organisation
- We constructively challenge ourselves and others
- We value people and recognise our successes

Culture Pillar	Issue	Response	Outcome
We understand how we contribute to Zotefoams' success	We identified a noticeable drop in clarity of purpose in some specific staff and management groups.	We established cross-functional groups to identify loss points and causes and strengthened our UK and USA management communication structure. We also improved global functional links.	Informal survey indicates issues largely resolved and 100% view that communication is now a positive influence on engagement across all management groups.
We value people and recognise our successes	Scores below average for recognition in some areas in the UK & USA.	Cross-functional focus groups identified specific areas where recognition could be improved.	In the UK, we rolled out a range of recognition schemes, total take up 52% people. In the USA, we created an employee appreciation and Brand Values reward programme.
We are a learning organisation	Below-average scores for growth from production operatives on shift.	In the USA, where a large number of new employees were hired, we created a flexible skills training matrix for all shift roles. In the UK, we created an entry level position to allow broader training and role rotation.	In the USA, 63% of production operators trained to flexible operations skillsets; 34% in training and deputising for shift lead roles. In the UK, this has enabled better assessment of aptitude and improved permanent placing of new staff.

Spotlight on the USA

Brand Values Reward Scheme

What we did

Our US team constructed a programme to simultaneously build recognition and increase focus on our Brand Values. Employees are encouraged to nominate colleagues who have exemplified one or more of our Brand Values in their behaviour.

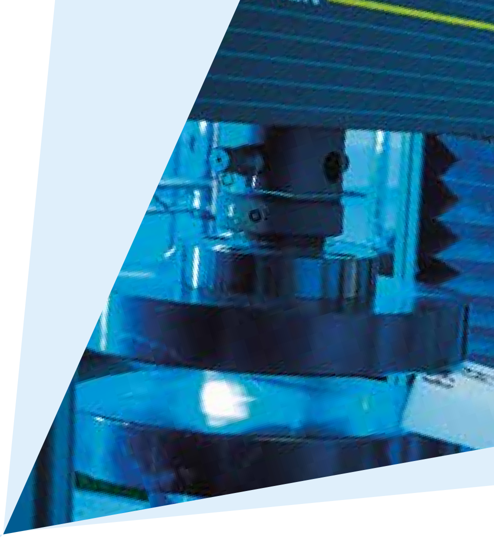
Outcome

Nominations are displayed, reviewed by senior management, recognised and rewarded. There has been huge participation throughout 2018: over 200 submissions, with 85% of staff nominated and 18 rewards given.

> **"Our Brand Values and Culture Pillars are core within the organisation and central to how we operate. From selection of talent through to onboarding new employees and retention of colleagues, the Brand Values and Culture Pillars are kept visible and reinforced throughout the business. Individually and collectively, these are the expectations to which we hold ourselves and one another accountable – every day."**

Dan Catalano
Zotefoams Inc President

Our talented team
Continued



Brand Values are also an ongoing focus in the UK and form, together with our talent profiles, the behaviours that drive our business. We have revised job descriptions across the UK organisation and integrated these behaviours as part of a job evaluation project. Talking about culture and values is becoming an integral part of business strategy and operations – building on this will be a focus for 2019.

To ensure that we address the new requirements of the UK Corporate Governance Code, Jonathan Carling, one of our Non-Executive Directors, will provide oversight to our employee engagement activities.

Developing our people and processes to support growth

Complementing our work on management clarity, we have introduced a new objectives process, a sales and operations planning process at a Group level and a fuller, more integrated process for managing risks and controls. These form part of a programme to better equip our managers to make decisions based on aligned insight and common data. In this, we are strengthening foundations in our functional management to support our growth, furthering alignment across the business and responding to the well documented link between good decision making and successful organisations.

To support our new manufacturing plant in line with “We are a learning organisation” our USA operation has invested an average of 56.5 hours on training per head and secured $100,000 in funding from the State of Kentucky for training in 2019. In the UK, we are making good use of our apprenticeship levy fund and have committed over £50,000 to apprenticeship training.

Building flexible resource through talent development

We continue to pursue our talent strategy as a specific way to address resourcing challenges without stifling organic progression. Cross- functional development is a major theme. Building broader capability in our Mobile Talent Group is under way through project work outside individuals’ areas of expertise, our graduate scheme includes a two-year programme of learning and hands-on exposure to all major functions in the business and our talent pipelines (which include placement students) have a shadowing programme to help employees learn about the roles they might progress to. 38% of employee role changes in the UK this year were cross-functional. We are making significant investments in developing a sustainable talent pipeline, allowing 10% of our talent pool’s time for project work, hiring a further four people into our graduate scheme in 2018 and creating a further five development roles through the apprenticeship scheme. In the USA, we offered a summer placement at MEL, and at Zotefoams Inc we completed a successful Kentucky Fame programme for production engineering and have linked up with a local university with a view to commencing a Co-Op scheme in 2019. Our apprenticeship and graduate schemes have already alleviated hiring challenges across our junior technical and customer-facing roles and early indications suggest we are producing high-potential individuals with flexible skillsets and broad business insight.

Ongoing progression of expertise and diversity through talent acquisition

To complement our programmes for growing talent we continue to grow expertise at management level. In 2018, we achieved this primarily through external appointments, adding four new management roles to strengthen our operations and finance teams. Due to business growth the role of Director of HPP Business Unit was created to add bench strength in both sales and operations leadership.

We continue to progress diversity throughout our organisation. Our balanced age profile reflects our efforts over recent years to recruit well-qualified people into development roles and our years of service reflect our growth. We have also reduced our UK median gender pay gap by 9%, down to 10% in favour of men. Zotefoams has an equal-pay policy, although attracting women into our business, especially into senior and technical roles, remains a challenge. Globally our new hires in 2018 were 40% female for our senior management group and graduate programme.

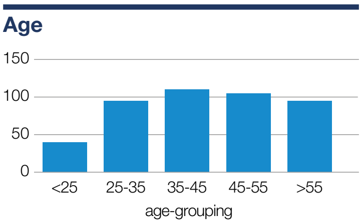
Our UK business is a knowledge and resource hub, providing support to the Zotefoams Group globally. Cultural diversity is therefore beneficial to align with colleagues, suppliers and customers worldwide. Despite being a predominantly UK-based business, 18% of staff at our UK facility are non-British Europeans. We are very proud of our strong retention levels and have continued to attract new recruits from this group despite the uncertainties of Brexit.

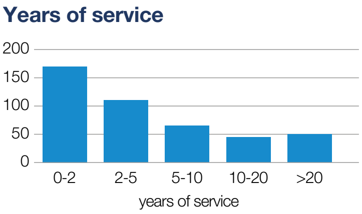
We overhauled our talent acquisition strategy in 2015 and are now in a position to report on the outcome. Analysis shows new vs established hiring methods have delivered a 50% improvement in successful hiring, a 33% improvement in retention after two years and have contributed 66% of our top talent acquisitions (defined as a two-plus years retained top performer or member of talent pool). In 2018, we extended our hiring and sponsoring

We are making significant investments in developing a sustainable talent pipeline

Our USA operation has invested an average of 56.5 hours on training per head

Number of Employees by:





relationships to the Materials Engineering departments of four key universities to augment what we view as a successful approach to talent acquisition.

Mapping and building capability against strategic objectives

Much is done to build capability through the talent programme, but we also run specific focus work on this to address business capability within the existing employee group. In 2018, we closed out the 2016 talent gap review, addressing over 40 progressive actions. The major ongoing business-critical recruitment needs identified by this process have been addressed through our graduate scheme (materials engineering), by a continued acquisition of key language skills into Group and European functions (eight hires) and a shift in balance towards more international hiring to support global growth (33% increase in headcount outside the UK vs 10% within). In 2018, as part of our risk analysis programme, we identified all business-critical knowledge and expertise and how it was distributed across our workforce. A programme to broaden our coverage of all expertise that isn't readily available to hire has been scoped and budgeted for execution in 2019.

Looking forward

2019 will be a year to focus on culture and behaviour. This is a challenge for a technical organisation where a natural task focus is inherent. Our aim is to grow a mindset where culture is as natural a complement to decisions and priorities as strategy.

Clear accountability is essential for controlled and efficient growth and we will be continuing work on our Culture Pillars with a focus on "We hold ourselves accountable". In 2018, we have done much to align and inform our people, as building blocks for increasing empowerment and clarity of purpose. We will continue this journey in 2019 to build confident operational management with clear accountability throughout the organisation.

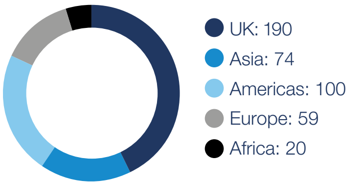
While we have made significant progress in talent acquisition, this is an area where no business can be complacent. We are as good as our ability to attract and retain the right people and we will continue to develop our employer brand and the sustainability of our talent pipelines. In line with "We are a Learning Organisation", our efforts to develop and grow our people will continue through a variety of training programmes and by capitalising on our apprenticeship and training funding.

Our final people challenge for 2019 is that of enabling geographical growth. We will be extending control processes, data management, central expert resources and connectivity with our global staff to maintain our span of control and common guiding philosophy as we grow.

Role by gender

	Male	Female
Non-Executive Director	3	1
Executive Director	2	–
Senior management	4	1
Other staff	338	98

Cultural diversity



We have found our close links with the Materials Engineering Society of Imperial College London very worthwhile and continue our sponsorship for 2018-19.

Spotlight on Finance

Business Partnering

What we did

In 2016 we hired our first Business Partner into the Finance team, primarily to inform decision making in manufacturing.

Outcome

This highly successful approach has seen the team grow to three by 2018, driving Business Unit clarity and accountability as well as effective investment decision-making in an increasingly complex environment. The financial modelling and insightful data analysis undertaken ahead of the Nike contract and our investment in Poland were critical contributors to the management decision to proceed with both. We have extended the concept to some function partnering, giving opportunities for core members in our Finance team to develop partnering skills and deliver benefits in cash management and budgeting.

Group CFO, Gary McGrath comments: "While ensuring compliance and effective accounting remains core to a good finance team, I believe excellence in financial support requires strong customer focus with effective, creative, well-considered financial analysis, reporting, tools and recommendations that allow faster and more effective decision making. This has been my aim since joining Zotefoams 3 years ago and I am proud to see the team beginning to deliver on this."

Sustainability
Doing the right thing

Zotefoams considers that the management of safety, health, environmental, social and ethical matters forms a key element of effective corporate governance.

Identifying efficiencies

We continually strive for efficiency improvements in our energy-intensive production processes. Our newest low-pressure autoclaves are around 5% more efficient than older models.

Pure performance

Our AZOTE® and ZOTEK® foams are expanded using pure nitrogen only. The air we breathe is 78% nitrogen.

Reduced toxicity

Durability

Durable for a decade and more

In 2008, one of the largest integrated biotechnology plants in the world began to standardise on T-FIT® Clean for technical pipework insulation in its cleanrooms, having discovered that the competitor insulation installed just three years earlier was no longer fit for purpose.

Over a decade later, the original T-FIT® material is still in place, saving energy and safeguarding the sterility of manufacturing operations. The service life of T-FIT® material extends far beyond that of competing products, saving time and cost and reducing waste.

Watchful on waste

Foam waste from our USA foam manufacturing and conversion plants is now being collected for re-use in applications such as underlay for sports pitches. We have invested in a baler to reduce the volume of material for collection, which produces benefits in terms of reduced transportation costs and fuel usage.

Zotefoams' products

Zotefoams' products are known for their light weight and durability as well as consistency. Zotefoams' products are frequently part of the sustainability agenda of our customers and/or end users, such as in the aviation and automotive industries, where manufacturers seek weight reduction to deliver fuel savings. A significant proportion of Zotefoams' foams used in packaging are for permanent protection, such as tool cases, or multiple-use applications such as internal transportation of parts in automotive, semi-conductor or other industries.

The MuCell® technology, developed by MuCell Extrusion LLC, offers licensees the opportunity to manufacture extruded plastic parts using less raw materials than with conventional extrusion methods. A 15–20% saving on raw materials at source offers significant environmental benefits, as well as cost reduction, and often requires little compromise in product design, as the end parts are typically indistinguishable from their solid counterparts.

Zotefoams is making advances in both the types of foams that we offer and their uses for existing materials. The global trends of using fewer materials and using less fuel through weight reduction and increased use of better insulation all offer opportunities to use foams. The unique process currently followed by Zotefoams to manufacture our block foam products uses nitrogen gas to expand the foams, which is inert and comprises 78% of the earth's atmosphere, while MuCell® processes use either nitrogen or already-existing carbon dioxide as the foaming agent. The common peroxide cross-linking agent, which improves the foam's properties, is completely expended during the manufacturing process.

Foam products and technologies offer many environmental benefits, and Zotefoams intends to develop further products and solutions to deliver global needs in a sustainable manner.

Achieving accreditations

Zotefoams achieved accreditation to ISO 14001 Environmental Management standard in 2018.

Light weighting

Lighter from the outset

Our foams are typically 15-20% less dense than any competing foam for comparable applications. This means less material contained within and the maximum possible lightweighting benefits for our customers.

It all adds up

The replacement of traditional materials with lightweight fire-retardant ZOTEK® F can offer significant weight savings for aircraft operators.

- Replacing composite panels in aircraft seats can save as much as 1.6kg per seat.
- Using ZOTEK® F for window seals and ECS ducting has reduced the weight of one of the world's most popular passenger jets by around 120kg.

Supply chain savings

MuCell® technology enables manufacturers to use 15-20% less raw material than with conventional extrusion methods. We estimate that, together, just ten MuCell® customers have eliminated as much as 22,000 tonnes of plastic from the supply chain since implementing our technology.

Sustainability
Continued

SHE: Key metrics

Year	2018	2017	2016	2015	2014
Reportable lost time injuries	**4**	6	13	7	1
Company statistics: Year					
Internally recorded environmental incidents	**24**	7	11	6	8
Waste sent to landfill (tonnes)	**2103**	589	237	191	225
Water consumption (000 m³)	**87**	74	60	66	43
Energy consumption (kWhr/kg)	**11.03***	11.05	11.76	11.75	11.63

* Calculation now shown as mix-neutral assessment of energy usage.

Safety, Health and Environment ('SHE')

The Board has in place separate policies relating to Safety, Health and Environment (SHE). The Company is certified to accredited standards OHSAS 18001 on Health and Safety and ISO 14001, the International Standard for Environmental Management Systems, and is regularly audited by those bodies to ensure that the Company complies with those standards. The Company achieved compliance against ISO 14001/2015 in 2018. The Company has also begun preparation for the transition to ISO 45001, which replaces OHSAS 18001, following publication of the details of this standard in 2018.

The Board has ultimate responsibility for SHE policy and performance and receives quarterly reports on SHE issues. Annual performance objectives are agreed by the Board and performance against these objectives is monitored as part of its quarterly reporting programme. RIDDOR reportable lost time accidents are reported immediately and discussed in detail at the Board meeting following any such incident. Additionally, the Board has a detailed review of SHE performance, targets, metrics and approach at least once a year.

The Group CEO is directly responsible to the Board for SHE performance. Site Committees on SHE normally meet once a quarter to consider all SHE matters and are overseen by Steering Committees, chaired by the Group CEO (or appropriate responsible person in subsidiary companies). The Steering Committees consider overall performance and the impact of current and impending legislation.

On joining the Group, all employees receive training on SHE matters, including the Group's policies, and refresher training is provided, as appropriate, to ensure that the employees understand SHE matters. All employees are made aware that everyone has a part to play to ensure the safety of themselves and their colleagues at work. Employees are encouraged to report to their managers any unsafe, or potentially unsafe, conditions. Senior managers are responsible for ensuring that SHE policies are implemented in their areas, that their teams are informed of the departmental SHE requirements and that the employees receive training on environmental issues and safe working practices and understand them. Regular audits are conducted to ensure policy and procedure implementation is appropriate.

The Group considers the reporting of all SHE incidents very seriously and requires the employees to report all incidents, including any near misses, as well as damage to plant or equipment which has not resulted in personal injury. The Group considers the reporting of near misses to be as equally important as actual incidents, since it raises situations to management that could cause, or might have caused, harm. It then ensures appropriate corrective action can be taken to eliminate or minimise the risk. The Group also ensures that appropriate safety practices are included in standard operating procedures to reduce the risk of SHE incidents occurring.

Few controlled substances are used in the manufacture of our foams, but where they are, the Group has established procedures, upon which the relevant employees are trained, to ensure that the storage and handling of such substances are safe and in accordance with regulatory requirements. The manufacturing process involves manual handling and processing of materials. When new or altered equipment or materials are introduced, and at regular periods thereafter, the risks to the processes are assessed and improvements made wherever possible, such as to the design of the equipment, to reduce or eliminate the risks identified.

The most strictly controlled parts of the Group's sites are where high-pressure gas is used. The high-pressure autoclaves are subject to the Pressure Systems Safety Regulations 2000 in the UK and OSHA (Occupational Safety and Health Administration) in the USA. Tightly defined procedures and operational controls are in place to manage the safety of these pressure systems. Fail-safe mechanisms, known as pressure relief valves and bursting discs (which act like fuses in an electrical system), are included in the design of the pressure systems, which when triggered allow depressurisation of sections of the system and prevent any further risks. Operation of these fail-safe mechanisms releases harmless nitrogen gas into the atmosphere.

Our actual carbon emissions (kg) per material gassed (kg) have reduced from 2.3 to 2.1.

Carbon emissions (CO_2 tonnes)	2018	2017	2016	2015	2014
Emissions arising directly from our operations (including fuel used in our vehicles)	**288**	134	136	382	255
Indirect emissions – use of energy (electricity and gas)	**14,443**	16,291	16,006	18,194	17,227
Total	**14,731**	16,425	16,142	18,576	17,482
Carbon emissions (kg) per material gassed (kg)	**1.7**	2.1	2.3	2.4	2.4

Health and safety performance

In 2018, safety risk at our UK site increased due to higher numbers of external contractors supporting our capacity investment projects and a rapid increase in the number of new recruits. Ensuring a common safety approach and close liaison with contractors has been key to ensuring continued improvement on total accident levels.

All SHE incidents are investigated by appropriate levels of management to ascertain the root cause of the incident and, wherever possible, working practices and procedures are improved to minimise the risk of reoccurrence. In 2018, there were no prosecutions, fines or enforcement actions taken as a result of non-compliance with Safety, Health or Environmental legislation (2017: none).

In 2018, the Group had four reportable lost time injuries. All incidents were fully investigated and appropriate corrective actions have been put in place. The nature of these incidents varied, but a theme of individuals not following standard practice or expected behaviour was identified as a common root cause. Consequently, increased behavioural safety awareness is a high priority through 2019.

Environmental performance

Zotefoams' environmental performance in 2018 is reported against a background of three significant changes in our business: the change of product mix, with our HPP foams growing much faster than polyolefin foams; the opening of a full-scale production site in the USA and the construction of a new building on our UK site to house additional autoclaves for capacity expansion. Externally, the more limited number of export markets available to take UK polymer waste, particularly impacted following well-documented changes to China's policy on this, has resulted in more of Zotefoams' waste being sent to UK landfill. As our product mix changes it is important that we measure performance against a standard set of metrics. In this year's report, therefore, we provide a mix-neutral assessment of energy usage which is influenced by our product mix. At this stage in its development the Kentucky, USA production facility consumes a higher proportion of energy for its infrastructure than the larger and fuller Croydon site does in the UK. In addition, the start-up phase of a manufacturing process generates more waste (commissioning scrap) and uses more energy until the plant is producing prime materials. All these factors, specific to this stage in our changing global footprint, have led to an increase in our energy per kg processed in 2018.

Construction of a new building at our UK site is in an area previously used for inventory holding. As our UK site is now full we took the decision in 2018 to dispose of older inventory rather than pay to move and store this externally. This clean-up accounted for approximately 16% of our waste to landfill during 2018.

The majority of the waste produced by Zotefoams in the UK is either solid or foamed polyolefin. Our goal is to minimise waste primarily through improving manufacturing yields. The overall raw material yield for the material produced in the UK was slightly better than 2017, with improvement initiatives offset by scrap levels on early stage products which are typically less efficient. We aim to find an alternative use for any non-prime material, with disposal to landfill as a last resort. Unfortunately, many recycling routes used previously have been over-run with material following China's change in policy of accepting foreign-generated waste and in 2018 around 90% of our waste was sent to landfill. A Waste Management Committee is tasked with identifying non-landfill outlets for our UK-generated waste. In the USA, we have identified customers who have alternative uses for scrap foam and have invested in machinery to compact this for more efficient transportation.

There were no significant environmental incidents during the year (2017: none), while minor incident reports at our UK facility increased mainly due to an increase in noise complaints, substantially related to construction on the site. The Group ensures that all reports are taken seriously, investigated, and the responses given are appropriate to their level of impact or potential impact.

Water usage on the UK site in 2018 was 87,000m³, higher than 2017 (74,000m³) and slightly above the levels expected due to increased plant utilisation. The UK site has older infrastructure in some areas, we continue to identify leaks using metering software and are developing plans to eradicate them.

In October 2009 the Company entered into a Climate Change Levy (CCL) agreement which involves meeting specific targets to reduce energy consumption. Providing the Company meets the requirements of the CCL agreement it receives a rebate on its electricity bills and is also exempt from the Carbon Reduction Commitment Scheme.

We measure energy efficiency by taking energy consumption and dividing it by the amount of material (in kg) that passes through high-pressure autoclaves. The increase in our HPP foams, which are more energy-intensive than polyolefin foams, prompted us to update these metrics to be product-mix neutral in 2018. In 2018, our adjusted energy efficiency measure Specified Energy Consumption (SEC) was broadly unchanged at 11.03 kWh/kg (2017: 11.05 kWh/kg).

Carbon emissions

The Group's total carbon emissions in 2018 for all its operations globally were 14,731 tonnes (2017: 16,425 tonnes). The improvement of 11% in total carbon emissions was due to a change in government electricity conversion factors (reduction of 3,105 tonnes, 17%). Increased activity in Walton, KY contributed to an increase of 731 tonnes in 2018, partially offset by a reduction of 15 tonnes due to lower energy consumption at MEL. Product mix impact would have been an extra 695 tonnes prior to the conversion adjustment.

The methodology we have used is in accordance with the guidance published by the Department for Environment, Food and Rural Affairs in June 2013. We have only included emissions for which we are directly responsible. We have not included emissions for activities over which we have no direct control. For example, we have included business mileage on Company vehicles and mileage claimed by employees in the UK, but not other forms of business travel, such as travel made by employees elsewhere in the Group or travel using public transport or aeroplanes.

Board of Directors
The right skills to take us forward

1.

2.

3.

1. Steve Good
Non-Executive Chairman

Chair of the Nomination Committee and member of the Remuneration Committee

Appointed
October 2014 (Board) and April 2016 (Chairman)

Skills
Steve has strong and relevant international experience in the speciality chemicals and plastics industries, manufacturing, and diverse industrial markets which enables him to give both guidance and challenge to management. He also has significant plc board experience.

Experience
Steve was Chief Executive of Low & Bonar plc between September 2009 and September 2014. Prior to that role, he was Managing Director of its technical textiles division between 2006 and 2009, Director of new business between 2005 and 2006, and Managing Director of its plastics division between 2004 and 2005. Prior to joining Low & Bonar he spent 10 years with BTP plc (now part of Clariant) in a variety of leadership positions managing international speciality chemicals businesses. He is a Chartered Accountant.

External appointments
Non-Executive Director and Chair of the Remuneration Committee, Elementis plc.

Non-Executive Director and member of the Remuneration and Nomination Committees, Dialight Plc

2. David Stirling
Group CEO

Appointed
September 1997 (Finance Director) and May 2000 (Group CEO)

Skills
David has global leadership, strategy and commercial experience, with a specific skillset in intellectual property, business development, finance and manufacturing. He has over 20 years plc Board experience.

Experience
David started his career with KPMG in Scotland, where he qualified as a Chartered Accountant. He has worked for Price Waterhouse in the USA and Poland and with BICC plc. David is a graduate of Glasgow University and has an MBA from Warwick University and an MSc in Finance from London Business School.

External appointments
None

3. Gary McGrath
Group CFO

Appointed
December 2015 (Executive Director) and February 2016 (Group CFO)

Skills
Gary has diverse international experience across a range of manufacturing businesses. He has a track record of building world-class finance organisations and delivering commercial finance support and effective control environments to achieve Board strategies.

Experience
Gary is a Chartered Accountant, qualifying with Arthur Andersen.

He spent 11 years with RMC Group plc before joining Koch Industries Inc, where he spent several years in various positions, including Global Finance Director of INVISTA Apparel and EMEA Vice President of Finance, Planning and Analysis at Georgia Pacific. Before joining Zotefoams, Gary was CFO of GC Aesthetics Limited. He has worked across public, private and private equity environments in the UK, Belgium, Germany, the USA and the Republic of Ireland.

External appointments
None

4.

5.

6.

4. Douglas Robertson

Senior Independent Director

Chair of the Audit Committee and member of the Nomination and Remuneration Committees

Appointed
August 2017

Skills
Extensive multinational experience in both public and private companies, strategic planning, acquisitions and divestments.

Experience
Doug was Group Finance Director of SIG plc until his retirement in January 2017. Prior to joining SIG, Doug had been Group Finance Director of Umeco plc and Seton House Group Limited, having spent his early career with Williams plc in a variety of senior financial and business roles.

External appointments
Non-Executive Director and Chair of the Audit Committee, member of the Remuneration and Nomination Committees, HSS Hire Group plc

Non-Executive Director, Chair of the Audit Committee, member of the Remuneration and Nomination Committee, Mpac Plc

5. Angela Bromfield

Non-Executive Director

Chair of the Remuneration Committee and member of the Audit and Nomination Committees

Appointed
October 2014

Skills
Business leader and strategist with broad-based international career in manufacturing, distribution, construction and infrastructure. Angela has a strong track record of leading companies to change and grow with a particular focus on customers and brand.

Experience
Angela was Strategic Marketing & Communications Director at Morgan Sindall plc until 2013 and prior to that she held senior roles at the Tarmac Group, Premier Farnell plc and ICI plc. Angela was a Non-Executive Director for Mondi Paper & Packaging Limited. Angela has a degree in Chemistry from the University of Reading and an MBA from Warwick University.

External appointments
Non-Executive Director and Chair of the Remuneration Committee, Churchill China plc

Non-Executive Director and member of the Audit and Remuneration Committees, Harworth Group plc

6. Jonathan Carling

Non-Executive Director

Member of the Audit, Nomination and Remuneration Committees

Appointed
January 2018

Skills
Jonathan has extensive engineering, manufacturing, operational and business experience at board level, having led the development and production of a number of luxury cars and aero engines before embarking in his current role in the fusion energy industry.

Experience
Jonathan is the CEO of Tokamak Energy, a technology business developing a faster route to fusion power. Jonathan was previously COO, Civil Large Engines at Rolls-Royce plc, COO at Aston Martin Lagonda Limited, and Chief Engineer with Jaguar Land Rover Limited. Jonathan has extensive engineering, operational and business experience. He was also a Non-Executive Director of Aga Rangemaster Group plc between 2011 and 2015.

External appointments
Chief Executive Officer, Tokamak Energy Ltd

Corporate governance
Committed to the highest standards of corporate governance

Dear Shareholder
I am pleased to present the report on corporate governance on behalf of the Board.

As I highlighted in my letter to shareholders on page 8, 2018 has been a year of considerable activity for the Group. In times of significant growth and investment in our future, the Board's primary functions of providing strategic, governance and risk oversight, while also promoting a positive culture and entrepreneurial leadership across an increasingly international footprint, become all the more vital. Our role is to ensure the long-term success of the business, for the benefit of the Group and those that depend upon it, and I am very pleased with the manner in which the Board has gone about this task in 2018, working collaboratively and providing constructive input and challenge.

In October, the Board visited our operations in Walton, Kentucky, with Doug Robertson and Jonathan Carling also spending time with the MuCell Extrusion LLC team in Boston, Massachusetts. The Walton visit incorporated a two-day strategy meeting but also gave the Directors, both new and long-standing, valuable insight into the manufacturing process and the wider operational structure in what is our most recent major capital project and second-largest manufacturing facility after Croydon, UK. Walton provides the manufacturing capacity and technical expertise to serve our customers in the Americas and beyond, from purpose-built facilities in the heart of one of the largest distribution hubs in the USA. The visit provided the Board with assurance both in relation to the successful execution of the project, the Group's manufacturing capabilities and the efficacy of the integration of the business into the Group's governance and risk management structure. This was particularly evident in relation to the health and safety culture, which was pleasing for the Board to observe first hand.

Statement of compliance with the 2016 UK Corporate Governance Code
The Board and I are committed to the highest standards of corporate governance – good governance is at the heart of everything we do. The UK Corporate Governance Code (the 'Code') is the cornerstone of our governance structure, both in the UK and in our overseas operations. The Code can be downloaded here https://bit.ly/2AKGqTm.

Throughout the financial year ended 31 December 2018, the Group has applied the principles set out in the 2016 Code, including both the main principles and the supporting principles. Further explanation of how the principles and supporting principles have been applied is set out below and in the Board Committee reports that follow on pages 43 to 55.

2018 UK Corporate Governance Code
The 2018 UK Corporate Governance Code was published in July 2018 and was considered at a meeting of the Board of Directors held that month, and at subsequent Board meetings. The Board welcomes the new Code and has already made significant progress implementing its recommendations. Further details are discussed below.

Board and Committee composition
Richard Clowes retired from the Board at the AGM held on 16 May 2018. I would like to thank Richard for his contribution to the Group over the ten years of his tenure, during which the Group has grown into an international business and a leader in its field. Jonathan Carling was appointed to the Board in January 2018, replacing Richard on the Audit, Remuneration and Nomination Committees. Jonathan's biography can be found on page 39. Jonathan was selected following an extensive search and brings with him a wealth of experience and international manufacturing expertise and we are delighted that he has chosen to work with Zotefoams in the next phase of its growth. More information on the appointment process is set out in the Nomination Committee Report on page 45.

Doug Robertson, who joined the Board as a Non-Executive Director in August 2017, was appointed Senior Independent Director with effect from the Annual General Meeting in May 2018.

The Board continues to monitor the structure, diversity and composition of the Board to ensure that we have the appropriate mix of skills and experience to best serve a dynamic, international company.

AGM
The AGM is a good opportunity for shareholders to meet and engage with our Directors and see the Croydon site in operation. We have made further substantial investment in the facility in 2018, both to meet demand and to further improve our manufacturing capabilities. We look forward to welcoming shareholders at the AGM on 15 May 2019, when the new facilities will be available to view.

SP Good
Chairman

3 April 2019

The Board and its Committees

The Board's role is to provide the entrepreneurial leadership of the Group within a framework of prudent and effective controls which enable risk to be assessed and managed. 2018 was a year of significant growth and investment, both in the UK and internationally, so I am particularly pleased with the progress that has been made to further develop and embed the Group's risk management framework, details of which are set out on pages 24 to 25. The Board sets the strategic aims of the Group, ensures that the necessary resources are in place to achieve the Group's objectives and reviews management performance. The Board's role is to act as representative of the shareholders and other stakeholders and focus on the governance of the Group. Management is delegated to the Executive Directors and senior executive management.

As part of their role as members of a unitary Board, the Non-Executive Directors constructively challenge and develop proposals on strategy. The Non-Executive Directors scrutinise the performance of management in meeting agreed goals and objectives and monitor the reporting of performance. They satisfy themselves on the integrity of financial information and that financial controls and systems of risk management are robust and defensible. They are responsible for determining appropriate levels of remuneration of Executive Directors and have a prime role in appointing, and where necessary removing, Executive Directors, and in succession planning.

The Board has three principal Committees which report into it and function within defined Terms of Reference. These are the Audit, Remuneration and Nomination Committees. The Terms of Reference for these Committees are available on the Group's website, www.zotefoams.com.

The Board has put in place a schedule of matters that are reserved for its determination or which need to be reported to the Board. This schedule is reviewed regularly and was last updated in July 2018.

Chairman and Group CEO

The Chairman is responsible for the leadership of the Board, ensuring its effectiveness on all aspects of its role and setting its agenda. The Chairman is also responsible for ensuring that the Directors receive accurate, timely and clear information. The Chairman facilitates the effective contribution of the Non-Executive Directors and ensures constructive engagement between Executive and Non-Executive Directors.

The Board considers that S P Good has sufficient time to devote to his role as Chairman of the Group. Mr Good is currently a Non-Executive Director of Elementis plc and Dialight Plc.

The Group CEO is responsible for the running of the Group's business. He is supported by the Group CFO and the senior management team.

Board balance and independence

The Board currently comprises two Executive Directors, three independent Non-Executive Directors and the Non-Executive Chairman. Doug Robertson was appointed Senior Independent Director at the AGM held on 16 May 2018, following the retirement of Richard Clowes. The Board considers Mr Robertson to be independent.

Steve Good is also Chair of the Nomination Committee and a member of the Remuneration Committee. Only the respective Committee Chairs and members are entitled to be present at meetings of the Remuneration, Audit and Nomination Committees, but others may attend at the invitation of the Committee Chair. During the year, the Chairman met with the Non-Executive Directors regularly without the Executive Directors present and the Non-Executive Directors met without the Chairman present to carry out a review of the Chairman's performance, in line with the principles of the Code.

Appointments to the Board and the Nomination Committee

Appointments to the Board are proposed by the Nomination Committee and approved by the Board. The Nomination Committee report can be found on page 45.

The Board acknowledges the benefits of diversity, including that of gender. When considering appointments to the Board, appointments are made on merit and against objective criteria. Given the size of the Board and the Group, no specific policy or quotas have been set on diversity and, when search consultants are briefed on the search criteria, they are encouraged to cast their search sufficiently broadly to identify the best candidates to ensure that the Board has an appropriate mix of skills, experience and background. This approach is mirrored in our wider recruitment strategy, which is having a positive impact on the talent pipeline in what has historically been a male-dominated industry. More details can be found on pages 31 to 33. Care is taken to ensure that appointees, as well as the existing Directors, have sufficient time to devote to their roles.

Information and professional development

Each month all Directors receive management reports and briefing papers in relation to Board matters. New appointments to the Board receive an induction and, where appropriate, training. The Directors have access to the Company Secretary and independent professional advisers, at the Group's expense, if required for the furtherance of their duties.

Board evaluation

A formal review of the performance of the Board and its Committees is carried out each year. The review of the Chairman's performance is led by the Senior Independent Director, together with the other Non-Executive Directors in consultation with the Executive Directors. The other Non-Executive Directors' performance is evaluated by the Chairman in consultation with the Executive Directors. The Executive team's performance is evaluated by the Remuneration Committee in conjunction with the Group CEO (except in the case of the Group CEO, when the Group CEO is not present in that evaluation).

The 2018 Board review was undertaken by means of a qualitative questionnaire which was prepared by the Chairman and the Company Secretary. The review covered all aspects of the Board's structure, composition and operation, Board interactions (external and internal) and business strategy, risks and priorities. In addition, the survey included specific sections on the Audit, Nomination and Remuneration Committees, including how they were chaired and organised, the quality of the Committee papers as well as their effectiveness.

The Directors' attendance at meetings of the Board and Committees is as follows:

	Board Meetings		**Audit Committee Meetings**		**Remuneration Committee Meetings**		**Nomination Committee Meetings**	
Attendance at meeting	**Eligible**	**Attended**	**Eligible**	**Attended**	**Eligible**	**Attended**	**Eligible**	**Attended**
A C Bromfield	12	12	4	4	6	6	2	2
J D Carling	12	12	4	4	6	6	2	2
R J Clowes (resigned 16 May 2018)	5	5	1	1	3	3	1	1
S P Good	12	12	–	–	6	6	2	2
G C McGrath	12	12	–	–	–	–	–	–
D G Robertson	12	12	4	4	6	6	1	1
D B Stirling	12	12	–	–	–	–	–	–

The Board and its Committees
Continued

The outcome of the review highlighted that good progress had been made against last year's agreed actions, that the Board and its committees are effective and well run, that interactions between Executive Directors and Non-Executive Directors are positive and improving, and that all Directors contribute effectively and provide appropriate commitment to their role. Notably, the quality of Board papers had improved which enabled the Board to concentrate more time on strategic issues facing the business.

Areas identified to work on in 2019 include continuing to improve the quality and timeliness of Board papers to further enhance the interactions between Executive Directors and Non-Executive Directors and the effectiveness of Board meetings, and succession planning.

The Board considers that it is functioning well, that its composition contains an appropriate balance and diversity of views, qualifications, skills, experience and personal attributes necessary to carry out its duties and responsibilities.

Re-election of Directors

The 2018 Code requires Directors to submit for re-election annually at the AGM. The Company implemented this practice in 2012 and will continue to do so.

Remuneration Committee and executive remuneration

A report on the work of the Remuneration Committee is contained within the Directors' remuneration report on pages 46 to 47.

Financial reporting

The Directors' responsibilities for preparing the financial statements are set out in the Statement of Directors' Responsibilities.

Audit Committee and Auditor

The Audit Committee report provides details of the role and activities of the Committee and its relationship with the External Auditor. The report can be found on pages 43 to 44.

Relations with shareholders

Meetings with institutional shareholders are held twice a year following the announcement of the Group's interim and preliminary results in August and March respectively. Other meetings are held at institutional shareholders' request. To ensure that the Board, particularly the Non-Executive Directors, understand the views of the shareholders, the Group's corporate brokers provide summary feedback from the investor meetings, in particular the meetings held following the interim and preliminary results announcements. The Chairman and the Senior Independent Director, as well as the other Non-Executive Directors, are available to meet institutional shareholders if requested.

The Board considers the Annual Report, the AGM and the corporate website www.zotefoams.com to be the primary vehicles for communication with private investors. The Chairs of the Board Committees will normally be available at the AGM to answer questions.

Internal control

The Board has applied the 2016 Code by establishing a continuous process for identifying, evaluating and managing the significant risks the Group faces. The Board regularly reviews the process, which has been in place throughout the year to the date of approval of this report and which is in accordance with the Financial Reporting Council's Guidance on Risk Management, Internal Control and Related Financial and Business Reporting. The Board is responsible for the Group's system of internal control and for reviewing its effectiveness. Such a system is designed to manage, rather than eliminate, the risk of failure to achieve business objectives, and can only provide reasonable and not absolute assurance against material misstatement or loss.

In compliance with the 2016 Code, the Board regularly reviews the effectiveness of the Group's system of internal control, as well as how it is reported to the Board. The Board's monitoring covers all controls, including financial, operational and compliance controls and risk management. It is based principally on reviewing reports from management and the Internal Control Committee to consider whether significant risks are identified, evaluated, managed and controlled and whether any significant weaknesses are promptly remedied. The Board has also performed a specific assessment for the purpose of this Annual Report. This assessment considered all the significant aspects of internal control arising during the period covered by the report. The assessment also included a robust review of the principal risks facing the Group, including those that would threaten the Group's business model, future performance, solvency and liquidity. The Audit Committee assists the Board in discharging its review responsibilities.

During the course of its review of the system of internal control and the principal risks facing the Group, the Board had not identified, nor been advised of, any failings or weaknesses it determined to be significant. Therefore, a confirmation in respect of necessary actions has not been considered appropriate.

Key elements of the Group's system of internal controls are as follows:

Control environment

The Group has an appropriate organisational structure for planning, executing, controlling and monitoring business operations in order to achieve Group objectives. Overall business objectives are set by the Board and communicated through the organisation. Lines of responsibility and delegations of authority are documented.

Risk identification

Group management is responsible for the identification and evaluation of key risks applicable to its areas of business. These risks are assessed on a continual basis and may be associated with a variety of internal or external sources. The Group's risk management framework is detailed on page 24.

Information and communication

Annual and quarterly budgets are a key part of the planning process and the Board reviews performance against these. In addition, the Board receives monthly management reports, which highlight financial results, performance against key performance indicators and significant activities and matters of note during the month under review.

Through these mechanisms, the performance of the Group is regularly monitored, risks are identified in a timely manner, their financial implications assessed, control procedures evaluated, and corrective actions agreed and implemented.

Control procedures

The Group has implemented control procedures designed to ensure complete and accurate accounting for financial transactions and to limit the potential exposure to loss of assets or fraud. Measures taken include physical controls, segregation of duties, reviews by management, Internal Audit and the External Auditor. The effectiveness of these control procedures is tested by the Group's Internal Controls Committee (which is chaired by the Group CEO), the Audit Committee and the Board.

A process of control self-assessment and hierarchical reporting has been established, which provides for a documented and auditable trail of accountability. These procedures are relevant across the Group and provide for successive assurances to be given at increasingly higher levels of management and, finally, to the Board. Planned corrective actions are independently monitored for timely completion.

Monitoring and corrective action

There are clear and consistent procedures in place for monitoring the system of internal financial and non-financial controls. The Audit Committee normally meets not less than three times a year and, within its remit, reviews the effectiveness of the Group's system of internal financial controls. The Committee receives reports from the External Auditor, Internal Audit and management.

Non-financial controls are reviewed regularly by executive management, who report any issues and corrective actions taken.

Audit Committee report
A new, robust, risk management framework

Dear Shareholder

I am pleased to present my report on the activities of the Audit Committee in 2018.

2018 was a year of positive progress for the Group, with record levels of sales and profit. It also saw significant investment in the Group's manufacturing capabilities, both in the UK and overseas, supported by new banking facilities and the issue of a further 3.9 million shares during the placing undertaken in May. As the Group grows, so too does the task of ensuring that adequate systems of control are in place and that these are tested and developed to meet the increasingly complex nature of the Group's operations. Accordingly, the Committee's work in 2018 was focused in particular on the Group's risk management framework, its internal audit function and the systems in place for the financial planning and monitoring of capital-intensive projects internationally. These are discussed in further detail below.

Risk management and internal control

In January 2018, the Group implemented an enhanced risk management framework. The risk management framework is led by the Internal Controls Committee (ICC), which is Chaired by the Group CEO and comprises members of the Group Executive team. The ICC reviews and assesses the effective functioning of the Group's risk management processes and reports directly to the Audit Committee. The risk management framework is set out in more detail on page 24.

Internal audit

After due consideration, the Committee remains of the view that an outsourced internal audit function is more appropriate and effective than in-house provision at this stage of the Group's development. During the year, the Committee reviewed the effective implementation of the actions arising from the 2017 internal audit on inventory management. In November 2018, Grant Thornton LLP carried out a review of controls in the Group's operations in China. Their report was presented to the Audit Committee in December and timely management actions were discussed, approved and are being monitored.

Capital projects

In light of the significant capital investments being made by the Group in the UK, USA and Poland, the Committee considered the key judgements made by management and reviewed each project's progression against budget. This will continue to be an area of focus in 2019.

Financial Reporting Council thematic review

In December 2017, the Financial Reporting Council (FRC) announced that in 2018 it would be conducting a thematic review of aspects of a sample of smaller listed companies' Annual Reports. Zotefoams was included in that sample. I am pleased to report that the FRC confirmed in October 2018 that its review had concluded and had not identified any concerns, questions or queries with the Group's 2017 Annual Report. This provides further assurance that the Group's financial affairs are well managed and appropriately reported.

As a result of its work during the year, the Audit Committee has concluded that it has acted in accordance with its Terms of Reference and has ensured the independence and objectivity of the External Auditor. I will be available at the AGM to answer any questions about the work of the Committee.

D G Robertson
Chair of the Audit Committee

3 April 2019

Summary of the role of the Audit Committee

The main responsibilities of the Audit Committee are:

- monitoring the integrity of the financial statements of the Group and any formal announcements relating to the Group's financial performance and reviewing significant financial reporting judgements contained therein;
- reviewing the Group's internal controls and risk management systems;
- reviewing the arrangements put in place by the Group to prevent bribery and to receive reports of non-compliance;
- annually assessing the need for an internal audit function, monitoring and reviewing the effectiveness of the application of the internal audit function to the Group, monitoring and reviewing management's responses to any findings and reviewing any recommendations made from Internal Audit;
- reviewing the External Auditor's management letter and management responses to any findings and recommendations made from the external audit;
- reviewing and monitoring the External Auditor's independence and objectivity and the effectiveness of the audit process, taking into consideration relevant UK professional and regulatory requirements, and their appointment and remuneration;
- developing and implementing a policy on the engagement of the External Auditor to supply non-audit services, taking into account relevant guidance regarding the provision of non-audit services by the external audit firm; and
- reporting to the Board on how it has discharged its responsibilities, including making recommendations, when necessary, on any actions or improvements required.

The Audit Committee's Terms of Reference, which are available on the Group's website, include all matters indicated by the Disclosure and Transparency Rule 7.1 and the UK Corporate Governance Code. The Terms of Reference are reviewed regularly by the Audit Committee to ensure that they remain appropriate and reflect best practice. The Terms of Reference were last reviewed in August 2018.

Composition of the Audit Committee

The Committee comprises three independent Non-Executive Directors, excluding the Chairman, in line with the Code.

The members of the Audit Committee during 2018 were Angela Bromfield, Richard Clowes (until May 2018), Doug Robertson (Chair) and Jonathan Carling (from 2 January 2018). Their biographies can be found on pages 38 to 39.

Audit Committee report
Continued

Doug Robertson is a Fellow of the Institute of Chartered Accountants of England and Wales and was Group Finance Director of SIG plc until January 2017, having previously held that position at both Umeco plc and Seton House Group Limited. In the opinion of the Board, Mr Robertson has significant, recent and relevant financial experience to fulfil the requirements of the role.

The Audit Committee's membership, as a whole, has competence relevant to the sector in which the Group operates. All current members have held, or currently hold, Board-level positions in manufacturing industries with international reach.

Meetings

The Audit Committee has a planned calendar, linked to events in the Group's financial calendar. The Audit Committee met four times in 2018.

The Company Secretary acts as secretary to the Audit Committee. The Company Chairman, Group CEO, Group CFO, Group Financial Controller and senior representatives of the External and Internal Auditor are invited to attend relevant meetings of the Committee, although the Committee reserves the right to request any of these individuals to withdraw. At each meeting, the External Auditor is given the opportunity to raise matters without management being present. Other senior management may be invited to present such reports as are required for the Committee to discharge its duties. For example, the Head of Supply Chain attended the August meeting to provide an update on the 2017 Internal Audit action plan, whilst the Director of the HPP Business Unit attended the December meeting to review the Internal Audit report on operations in China. This provided the Committee with an opportunity to meet the wider management team and gain insight into areas of the business beyond the finance function. During the year, on an informal basis, the Audit Committee Chair liaises with senior representatives of both the External and Internal Auditor to discuss matters ahead of the formal Committee meetings.

Overview of the actions taken by the Audit Committee to discharge its duties

Since the beginning of 2018 the Audit Committee has:

- reviewed the financial statements in the 2017 Annual Report, including the going concern and viability statements and the stress testing of the viability statement, and received the External Auditor's report on the audit of the 2017 Annual Report;
- reviewed the interim report issued in August 2018 and received the report from the External Auditor on their review of the interim report;
- reviewed the Group's Statement on Modern Slavery;
- considered the risks impacting the Company, its customers and the economic environment, relating to Brexit and the Company's preparations to mitigate those risks;
- considered the inventory management and working capital position;
- considered the 2018 UK Corporate Governance Code;
- reviewed the Group's policies on ethics, anti-bribery, corruption and fraud;
- monitored the implementation of policies and procedures to comply with GDPR;
- considered the output from the Group-wide process used to identify, evaluate and mitigate high-level business risks, including reviewing the Group's high-level business risk matrix;
- agreed a programme of work for 2018 to be performed by the Internal Auditor and received the Internal Auditor's reports on the work undertaken and management's responses to the recommendations therein;
- reviewed the effectiveness of the Group's internal controls (including, but not limited to, financial controls and measures for detecting fraud) to ensure that they remain appropriate and adequate as the Group grows;
- reviewed and agreed the scope of the audit work to be undertaken by the External Auditor;
- considered the views of both the External and Internal Auditor on the effectiveness of the Group's internal financial controls;
- agreed the fees to be paid to the External Auditor for their audit and work on the Annual Report and interim report;
- undertaken an evaluation of the independence, objectivity and effectiveness of the External Auditor, including reviewing the amount of non-audit services provided by the External Auditor; and
- reviewed its own effectiveness.

Financial reporting and significant financial issues

The Audit Committee assesses whether suitable accounting policies have been adopted and whether management has made appropriate estimates and judgements. The Committee reviews accounting papers prepared by management which provide details on the main financial reporting judgements. The Committee reviews reports by the External Auditor on the full-year and half-year results which highlight any issues with respect to the work undertaken on the audit or review.

Another area of significant focus in the 2017 Annual Report considered by the Audit Committee in 2018 was whether the £2.3m of goodwill on the consolidated statement of financial position, which arose on the acquisition of MuCell Extrusion LLC in 2011, remained appropriate in view of past year losses and management's expectations of future cash flows. The Committee has concluded that it does remain appropriate.

External Audit tender

The Audit Committee is aware of the requirement for FTSE 350 companies to put to tender their external audits at least once every ten years (as set out in the Competition and Markets Authority's Statutory Audit Services for Large Companies Market Investigation (Mandatory Use of Competitive Tender Processes and Audit Committee Responsibilities) Order 2014) and for Audit Committees to state their plans for when they are likely to consider a tender process if the external audit has not been put to tender in the past five years.

A tender process for the external audit for the Group was last undertaken in 2012, following which PricewaterhouseCoopers LLP ('PwC') was selected as the External Auditor. The 2018 audit was PwC's seventh annual audit for the Group and the third annual audit led by the current audit Partner. The Group is by virtue of the FRC Ethical Standard subject to the requirement to put the audit to tender every ten years and the Audit Committee expects to carry out a tender process in 2021.

Effectiveness of the External Auditor

The Audit Committee assesses the effectiveness of the external audit process in a number of ways. At least annually, the External Auditor presents a report, which includes an assessment and confirmation of their independence, as well as the activities that the External Auditor is undertaking to ensure compliance with best practice and regulation. At the conclusion of the annual audit, the Audit Committee undertakes an assessment of the External Auditor in relation to their fulfilment of the agreed audit plan, the robustness and perceptiveness of the External Auditor in handling key accounting and audit judgements and the thoroughness of the External Auditor's review of internal financial controls. As part of this assessment, management's opinions on the External Auditor are also considered.

In December 2016, the Audit Committee approved a new policy, which took effect from 1 January 2017, in relation to the provision of non-audit services provided by the External Auditor. The new policy requires that no non-audit services will be provided by the External Auditor without the prior approval of the Audit Committee. The External Auditor did not provide any non-audit services in 2018.

The Audit Committee, having conducted a review of the External Auditor, concluded that the External Auditor has performed in a satisfactory manner and continues to be objective and independent and, therefore, has recommended to the Board that a resolution be put to the shareholders at the 2019 AGM to re-appoint PwC as the External Auditor.

Internal audit function

Each year the Audit Committee reviews the need for an internal audit function and, given the size of the Group, continues to be of the opinion that the internal audit function is best performed by an external audit firm, which complements the services provided by the External Auditor. Following a tender process in 2015, Grant Thornton UK LLP has continued to be used to provide internal audit services in 2018. The Audit Committee agreed the scope for the internal audit, reviewed the report received and discussed the proposals made with management. Grant Thornton UK LLP has not undertaken any other work for the Group and, therefore, the Audit Committee considers them to be independent and objective in their judgement.

Nomination Committee report
The Board recognises the benefit of greater diversity throughout the Group

Dear Shareholder
I am pleased to present my report on the activities of the Nomination Committee in 2018.

2018 saw the retirement of Richard Clowes from the Board and as Senior Independent Director. The Board and I are indebted to Richard for his dedication and wise counsel over the last decade, which has been a transformational period for the Group. In March 2018, the Committee proposed Doug Robertson as Richard's replacement as Senior Independent Director. This was the culmination of the Committee's succession plan for the role which commenced 12 months prior. Doug has already made a significant contribution to the Group as a Non-Executive Director, Chair of the Audit Committee and in his new role as Senior Independent Director.

Jonathan Carling joined the Board in January 2018 as a Non-Executive Director. Jonathan was previously COO, Civil Large Engines at Rolls-Royce plc, COO at Aston Martin Lagonda Limited, and Chief Engineer with Jaguar Land Rover Limited. Jonathan has extensive engineering, operational and multi-national manufacturing experience. Jonathan is a member of the Remuneration, Audit and Nomination Committees.

The Board supports Lord Davies' call for improved female representation at Board level and recognises the benefits of greater diversity on the Board and in management positions throughout the Group. The Board is mindful of the current imbalance of Board Directors. It believes that gender is one, but not the only, indicator of diversity, and will continue to look to strengthen all aspects of diversity in all future Board appointments. This commitment extends to appointments and opportunities at all levels across the Group. Further information on diversity is set out in the Strategic Report on pages 31 to 33.

Succession planning and talent development will continue to be the primary focus of the work of the Committee in 2019.

S P Good
Chair of the Nomination Committee

3 April 2019

Key areas of focus
The Nomination Committee currently comprises the Chair and the three independent Non-Executive Directors.

The Nomination Committee operates within defined Terms of Reference and is responsible for putting in place succession plans for the Board, reviewing the continuation in office of the Directors and managing the recruitment of new Board members within criteria set by the Board. The Committee met twice in 2018, with full attendance at each meeting. The Committee is supported by the Company Secretary in planning its activities, monitoring best practice and meeting its Terms of Reference.

The main responsibilities of the Committee are to:

- Evaluate and review the structure, size and composition of the Board including the balance of skills, knowledge, experience and diversity of the Board, taking into account the Group's risk profile and strategy;
- Identify and nominate suitable candidates for appointment to the Board, including chairmanship of the Board and its Committees, against a specification of the role and capabilities required for the position;
- Assess the independence of each of the Non-Executive Directors;
- Review the external interests and time commitments of the Directors to ensure that each has sufficient time to effectively discharge his/her duties; and
- Monitor succession plans for the appointment of Executive Directors and Non-Executive Directors to the Board.

During 2018, the Committee:

- Planned, considered and recommended to the Board the appointment of Douglas Robertson as Senior Independent Director;
- Considered and recommended to the Board the election/re-election of each Director ahead of their election/re-election by shareholders at the Company's 2018 AGM;
- Reviewed the composition of the Board and its Committees and assessed whether the Board required additional skills and/or experience which would complement those of the existing members having regard to the Group's risk profile and strategy; and
- Initiated a review of the development plans for the Executive Committee and wider senior management team to ensure that a suitable talent pool is in place and continues to be nurtured to meet the Group's strategic objectives.

Remuneration report
Recruiting and retaining is key to delivery of the Group's strategic objectives

Dear Shareholder

I am pleased to present the Remuneration report for the year ended 31 December 2018.

Introduction

2018 was another year of significant financial and strategic progress for Zotefoams, with major investment in the Group's manufacturing capabilities, both in the UK and overseas, funded by an over-subscribed placing of shares in May 2018 and new, increased banking facilities. The Group achieved record levels of sales (£81.04m, +16%) and profit before tax (PBT) (£9.86m, +31%) in 2018. This growth, on top of a 22% increase in sales and profits in 2017, was reflected in the share price, which increased by over 50% in the year. The Committee believes recruiting and retaining the right calibre of Executives is key to sustaining progress and underpinning delivery of the Group's strategic ambition.

Total remuneration opportunity

The current Remuneration Policy, which was approved by shareholders at the 2017 AGM, was developed with the following key principles:

- The Remuneration Policy should support the delivery of the Group's long-term strategic ambitions and operational performance.
- Base salaries should be set to be market-competitive, reflecting the size and complexity of the business and the calibre of individuals in each role.
- A significant element of the total package should be delivered through long-term incentives, increasing the focus on long-term performance and aligning management with growth for the shareholders. Within this:
  - Short-term incentives should continue to focus management on the delivery of annual results.
  - Long-term incentives should focus management on both the delivery of operational performance and the growth potential of the Group.

During the year, as part of a review of the remuneration arrangements for both the Executive team and the wider workforce, the Committee determined that the principles above remain fit for purpose and that the overall remuneration structure currently in place continues to be appropriate for Zotefoams. The Group has, however, increased significantly in terms of both size and complexity in recent years (as demonstrated in the table below), and as such, the Committee felt that due consideration needed to be given to whether the total compensation opportunity, which is driven by base salary, reflects the calibre of the Executive Directors, the growth they have delivered, the scope of their roles (see 5-year growth profile below), and the risks that uncompetitive remuneration arrangements pose to the timely and successful execution of our strategy.

The business is also continuing to invest in its facilities in the UK, primarily to support growth in elastomeric foams used in performance footwear. The next phase of investment in the USA is progressing well, with planned commissioning in 2019, while the announced new capacity in Poland is planned to come on stream in 2020.

In light of the above, the Committee is proposing to increase the base salaries for Executive Directors as follows over the coming two years:

	D B Stirling (Group CEO)	**G C McGrath (Group CFO)**
Current	£253,000	£170,500
With effect from 1 April 2019	£303,000	£200,500
With effect from 1 April 2020[1]	£323,000	£215,000

[1] Subject to continued good individual performance.

Given the performance of the Group and the performance of both the Group CEO (who has been in post since 2000) and the Group CFO (who has been in post since 2016), the Committee believes the increases are appropriate and proportionate. The Company is reliant on the Executive team to deliver the current investment programmes and realise the value creation potential of the Group for the benefit of shareholders. The Committee believes that removing the significant discount to the market on base salaries for the Executives will avoid an unnecessary risk to the execution of our strategy and the delivery of the major investment programmes which underpin it.

5-year growth profile

	CAGR	**2018 £m**	2017 £m	2016 £m	2015 £m	2014 £m
Revenue	13% p.a.	**81.0**	70.1	57.4	53.9	48.9
Operating profit (excluding exceptional item)	20% p.a.	**11.6**	9.4	7.6	6.3	5.6
Profit before tax (excluding exceptional item)	19% p.a.	**10.8**	8.8	7.2	6.0	5.3
Basic earnings per share excluding exceptional item (pence)	15% p.a.	**18.7**	16.0	13.7	11.1	10.7
Average number of employees (Group)	9% p.a.	**416**	360	339	334	300
Percentage of net assets outside the UK*	–	**33%**	47%	28%	35%	31%
Market capitalisation (based on 3 months average to 31 December)	28% p.a.	**£275.5m**	£172.8m	£112.1m	£151.6m	£104.2m

* Note: this will increase to approximately 57% by 2020 when the current investment programmes have been completed.

In making this decision, while not a deciding factor, the Committee considered market positioning data provided by an independent third party. The data confirmed that the increase to each of the Executives' base salaries will result in their total compensation opportunities being positioned between lower quartile and median against other companies of a similar size and complexity to Zotefoams.

The Committee acknowledges that such salary increases are not common in the current climate; however, it considers the changes necessary and in the best interests of the business, to retain talented executives of the calibre to continue to grow the Group.

The Committee consulted extensively with the Group's largest shareholders on the proposed increases and the final proposal reflects the feedback that was received during the consultation. The salary changes will be implemented following the AGM in May, with effect from 1 April 2019. It is intended that future pay reviews will be in line with those of the wider workforce during the next Policy period. On behalf of the Committee, I would like to thank shareholders for their engagement during the process and their support for the proposed approach.

Impact of share placement on LTIP

The Group's Long-Term Incentive Plan (LTIP) is based on two key performance metrics – total shareholder return and earnings per share.

As set out elsewhere in the Annual Report, in May 2018 the Company undertook a share placement, which represented 8.8% of the Company's existing share capital, with the proceeds being used to increase capacity over the long term, including the construction of a facility in south-west Poland. The build is expected to take two years to complete and therefore is expected to be earnings dilutive over the short term.

During the year, the Committee considered the impact of the share placement on the Group's LTIP performance targets. While the total shareholder return targets are not impacted, the Committee is mindful of the impact of the share placement on the earnings per share (EPS) targets attached to outstanding awards made in 2016 and 2017. The Committee has therefore carried out a formulaic adjustment to the EPS targets for outstanding LTIP awards to take into account the dilutive impact of the share placement. The underlying principle agreed by the Committee in relation to the adjustment is that the adjustment should not make the performance targets attached to awards any more or less stretching to achieve than the original intention when they were set.

The Committee has therefore adjusted the base year EPS number to take into account the increased number of shares following the placement. This will ensure that the EPS targets are measured on a like-for-like basis. Details of the updated targets for the 2016 and 2017 awards can be found on page 51. No changes were made to the targets in respect of the 2018 award.

Group performance for 2018 and incentive outcomes

In light of performance delivered in 2018, the Committee determined that 35.1% and 48.6% of the maximum bonus should be paid to the CEO and CFO respectively. A detailed description of performance against the targets is set out on page 50.

With regard to longer-term performance, the Company achieved EPS before exceptional item of 18.7p in 2018 and absolute TSR growth of 20% p.a. over the three-year performance period. The 2016 Long-Term Incentive Plan award will therefore vest in full.

The Committee took into account the underlying financial performance of the Group when considering out-turns against the annual bonus and LTIP and determined that the formulaic outcome was an appropriate reflection of performance delivered.

Implementation of the Policy in 2019 and looking forward

For ease of reference, we have included a short summary of how the Remuneration Policy will be implemented in 2019 on page 48. With regard to the Long-Term Incentive Plan, the Committee considered the EPS range in light of the long-term business plan and market expectations and has determined it would be appropriate to increase the threshold target from 5% p.a. to 8% p.a. The maximum target was considered to be appropriate and represents significant growth at 22% p.a. In addition, in light of the updates to the UK Corporate Governance Code, the Committee has extended the holding period for long-term incentive awards (currently, a phased release between years three to five), such that no shares will normally be released to Executive Directors until the fifth anniversary of grant.

In line with the three-yearly cycle, the current Remuneration Policy is due to come to the end of cycle at the 2020 AGM. The Committee therefore intends to review the Policy to ensure it remains fit for purpose and make any changes required in light of the revised UK Corporate Governance Code over the course of 2019. As part of this review, the Committee plans to review the post-cessation of employment shareholding requirement, which currently applies for one-year post-cessation. As adopted for the Group CFO, pension contributions for new Executive Directors will continue to be set in line with the wider workforce. A new Policy will be put to a vote at the 2020 AGM.

The Committee and I hope you will be able to support the resolutions in respect of the annual Remuneration Report.

I will be available at the AGM to answer any questions you may have.

A C Bromfield
Chair of the Remuneration Committee

3 April 2019

Directors' remuneration report

The Directors' remuneration report has been prepared in accordance with the relevant provisions of the Listing Rules, section 421 of Companies Act 2006 and Schedule 8 to the Large and Medium sized Companies and Groups (Accounts and Reports) (Amendment) Regulations 2013.

Directors' Remuneration Policy and Implementation in 2019

The current Directors' Remuneration Policy (the 'Remuneration Policy') was approved at the 2017 AGM held on 17 May 2017 and is intended to remain in place until the AGM that will be held in 2020. A summary of the Remuneration Policy and how it will be implemented in 2019 has been set out below. The full version may be found on pages 41 to 52 of the 2016 Annual Report. A copy of the 2016 Annual Report may be found by following this link: www.zotefoams.com/wp-content/uploads/2017/04/26470_Zotefoams_AR16_Int-1.pdf

<table>
<tr><th>Element and overview of Policy</th><th>Implementation for 2019</th></tr>
<tr><td>Salary
Positioned at a level needed to recruit and retain Executive Directors of the calibre required to develop and deliver the business strategy.</td><td>As set out in the cover letter from the Chair, salaries will be increased over a two-year period (subject to performance). Salaries effective 1 April 2019, but implemented following the AGM, will be as follows:
– D B Stirling – £303,000
– G C McGrath – £200,500</td></tr>
<tr><td>Benefits
Provide market-competitive benefits for the Executive Directors, to assist in carrying out their duties effectively.</td><td>Benefits to be provided in line with approved policy.</td></tr>
<tr><td>Retirement benefits
Provide competitive post-retirement benefits and reward sustained contribution.</td><td>In line with policy:
– D B Stirling – 15.75% of salary
– G C McGrath – 5% of salary</td></tr>
<tr><td>Annual bonus
Maximum opportunity of 75% of salary.
25% of the bonus is deferred into shares in the Company under the deferred bonus share plan.</td><td>Maximum opportunity – 75% of salary.
For 2019, the bonus will be assessed against the following measures for both Executive Directors:
<table>
<tr><th>Measure</th><th>Weighting</th></tr>
<tr><td>Profit before tax[1]</td><td>60%</td></tr>
<tr><td>Working Capital metrics</td><td>15%</td></tr>
<tr><td>Development of MEL</td><td>5%</td></tr>
<tr><td>Individual objectives</td><td>20%</td></tr>
</table>
[1] The Group uses forward exchange contracts to hedge its foreign currency transaction risk. The Group does not hedge for the translation of its foreign subsidiaries' assets or liabilities. The Committee has set the PBT target at budgeted exchange rates for foreign currency translations.
The underlying performance targets for these measures have not been disclosed in advance as they are considered to be commercially sensitive. Underlying targets will be provided, where appropriate, in next year's Directors' remuneration report.</td></tr>
<tr><td>Long-Term Incentive Plan
Maximum opportunity of 150% of salary.
Awards are subject to a post-vesting holding period of two years.</td><td>Maximum opportunity – 150% of salary.
Awards for 2019 will be granted following the AGM in May and will be subject to a two-year holding period such that no shares will normally be released until the end of year five.
Performance conditions and targets for awards:
<table>
<tr><th>Measure</th><th>Weighting</th><th>Trigger point (20% vesting)</th><th>Maximum (100% vesting)</th></tr>
<tr><td>Relative TSR[1]</td><td>30%</td><td>Median</td><td>Upper quartile</td></tr>
<tr><td>EPS growth</td><td>70%</td><td>8% p.a.</td><td>22% p.a.</td></tr>
</table>
[1] Measured against the FTSE SmallCap Index (excluding investment trusts).</td></tr>
<tr><td>Non-Executive Director fees</td><td>The Non-Executive Directors (including the Chairman) will receive a fee increase of 2.5%, effective 1 April 2019, in line with the general salary increase that was given to the Company's staff in the UK in 2018.</td></tr>
</table>

Single total figure of remuneration (audited)

The following tables set out the single figure for total remuneration for Directors for the 2018 and 2017 financial years.

Executive Directors

	Salary (£)	Benefits (£)	Bonus (£)	LTIP[1] (£)	CSOP (£)	Pension (£)	Total (£)
D B Stirling							
2018	**249,375**	**12,926**	**66,602**	**425,062**	**nil**	**38,332**	**792,297**
2017	235,125	13,251	151,004	241,320	nil	36,116	676,816
G C McGrath							
2018	**167,064**	**11,441**	**62,147**	**276,270**	**29,015**	**17,859**	**563,796**
2017	145,581	11,782	100,261	nil	nil	16,314	273,938

[1] The LTIP awards made in April 2016 are not due to vest until 5 April 2019 but have been included in the table as the three-year performance period ended on 31 December 2018. For the purposes of this table, the award has been valued using the average share price over the three months to 31 December 2018 of £5.705. This compares to a share price of £2.865 at the date of grant. The LTIP award made in March 2015 vested on 30 March 2018 and the 2017 LTIP value for Mr Stirling has been recalculated using the actual market price achieved for the shares when they were awarded (£5.65) on 24 May 2018 (previous value used £3.892 which was the three-month average to 31 December 2017). As the Company was in a Prohibited Period as at the scheduled date of vesting of the 2015 award (30 March 2018), participants were unable to exercise their options until after the Prohibited Period came to an end on 16 May 2018.

Non-Executive Directors

	Fees paid in respect of 2018 (£)	Fees paid in respect of 2017 (£)
A C Bromfield	**40,750**	40,000
J D Carling	**35,693**	nil
R J Clowes[1]	**15,175**	40,000
S P Good	**81,500**	80,000
D G Robertson	**40,750**	16,095

[1] R J Clowes retired from the Board on 16 May 2018.

Note: Non-Executive Directors who also Chair a Board Committee receive an additional fee.

The Non-Executive Directors (including the Chairman) will receive a fee increase, of 2.5% effective 1 April 2019, which will be in line with the general salary increase that was given to the Company's staff in the UK in 2018.

Notes to the table (audited)

Base salary and pension contributions

The Company operates a Defined Contribution ('DC') Pension Plan. Individuals may elect to enter a salary sacrifice arrangement, whereby their salary is reduced, and the Company makes a corresponding contribution into their DC Pension Plan. G C McGrath opted for the salary sacrifice scheme and the amounts shown for his base salary are after salary sacrifice. Similarly, the amounts shown for pension include the amounts of salary that was sacrificed. At 31 December 2018, the base salary (before salary sacrifice) for G C McGrath was £170,500 p.a. (£156,500 p.a. as at 31 December 2017).

As D B Stirling has approached his lifetime pension limit, since September 2016 both he and the Company ceased contributing to his DC Pension Plan. Instead, D B Stirling receives a cash contribution in lieu of pension contributions. At 31 December 2018, the base salary for D B Stirling was £253,000 p.a. (£238,500 p.a. as at 31 December 2017).

Benefits

Benefits include a company car allowance, private medical insurance and the value of the Matching Shares (at dates when awarded) acquired during the year under the Share Incentive Plan (SIP).

Annual bonus 2018

The targets for the annual bonus for 2018 for David Stirling and Gary McGrath are as set out in the below table:

	Weighting (% max)		**Targets**			**Pay-out**	
Measure	**D B Stirling**	**G C McGrath**	**Trigger point**	**Maximum**	**Performance achieved**	**D B Stirling**	**G C McGrath**
Profit before tax	60%	60%	£9.7m	£11m	£9.86[1]m	16.6%	16.6%
T-FIT segment sales growth	10%	5%	45%	160%	9%	Nil	Nil
Development of MEL business	10%	–	See below	See below	See below	Nil	–
Group refinancing	–	15%	See below	See below	See below	–	15%
Personal objectives	20%	20%	See below	See below	See below	18.5%	17%
Total	**100%**	**100%**	**n/a**	**n/a**	**n/a**	**35.1%**	**48.6%**

[1] The Group uses forward exchange contracts to hedge its foreign currency transaction risk. The Group does not hedge for the translation of its foreign subsidiaries' assets or liabilities. The Committee set the targets and assessed the out-turn for the PBT element of the bonus measure at budgeted exchange rates for foreign currency translations. The reported PBT, before exceptional item, was £10.8m.

Remuneration report
Continued

The below table sets out the targets and performance for the Executive Directors for the following measures: Development of the MuCell ('MEL') business; Group refinancing; and personal objectives.

🟢 Achieved in full or predominantly achieved

🟠 Partially achieved

🔴 Not achieved

D B Stirling

Measure	Objective	Performance	Scoring
Development of MEL	Grow royalty and licence income by more than 20%. Grow NPV of licences by at least 20%.	Not achieved	🔴
Personal objectives	25% reduction in reportable accidents	40% reduction in reported incidents achieved	🟢
	Delivery of UK HSE plan	Largely implemented but some actions not fully closed out and embedded by 31 December 2018	🟠
	Development of footwear business	Key strategic options developed and technical milestones achieved. Footwear grew strongly and now represents around half of HPP sales revenue.	🟢
	Delivery of capital projects	Walton capital programme delivered. UK and Poland investment projects on schedule	🟢
	MEL	New management structure put in place to improve clarity over development of new accounts, delivery of machinery, financial control and underpin delivery of agreed strategy	🟢

G C McGrath

Measure	Objective	Performance	Scoring
Group refinancing	Successful completion of debt and equity refinancing within agreed parameters	Achieved in full in May 2018	🟢
Personal objectives	25% reduction in reportable accidents:	40% reduction in reported incidents achieved	🟢
	Delivery of UK HSE plan	Largely implemented but some actions not fully closed out and embedded by 31 December 2018	🟠
	Support capital projects	Created appropriate financing flexibility for core capital programmes and developed modelling to support projects	🟢
	Finance department quality and capability to support growing business	New Financial Controller recruited and team strengthened	🟢
	Working capital management	Progress achieved in developing framework and tools for the management of working capital across the Group	🟠

The annual bonus was based on base salary before salary sacrifice. The maximum opportunity for the bonus was 75% of salary. 25% of the bonus is deferred in shares held in trust for three years under the Deferred Bonus Share Plan ('DBSP'). Full details of the operation of the DBSP are set out in the Directors' Remuneration Policy.

2018	Cash bonus (£)	Deferred bonus (£)	Total bonus (£)
D B Stirling	49,951	16,651	66,602
G C McGrath	46,610	15,537	62,147

The Committee is satisfied with bonus levels, in view of the performance achieved.

LTIP

The LTIP awards made under the Zotefoams plc 2007 Long-Term Incentive Plan are subject to performance and service conditions. 50% of the award is subject to growth in absolute Total Shareholder Return (TSR) and 50% subject to EPS growth. Performance is measured over a three-year period and a proportion of the restricted shares will be released to the participant, to the extent that TSR and EPS targets over the period have been met, together with additional shares that represent the dividends that would have been paid during the performance period on the restricted shares that have been released.

The total award vesting is the sum of the awards for TSR and EPS. If the performance is below the EPS trigger point, then no part of the EPS award vests. If performance is below the TSR trigger point, then no part of the TSR award vests. Between the trigger point and the maximum, the award vests on a sliding scale basis.

As set out in the Chair of the Remuneration Committee's letter, the base year EPS number was adjusted to take into account the increased number of shares following the placement in 2018. The base year EPS was therefore adjusted by 5.4% to reflect that the weighted average number of shares has increased pro-rata in the final year of the performance period (i.e. year ending 31 December 2018). No change was made to the relative stretch in the underlying targets agreed at the outset of the performance period.

The table below summarises the performance criteria for the 2016 award, which is due to vest on 5 April 2019:

	Trigger point		Maximum			
	Performance target	**% of award vesting**	**Performance target**	**% of award vesting**	**Achievement**	**Level of vesting (% maximum)**
Absolute TSR goal[1] (% p.a. growth)	3%	12.5	12%	50	20% p.a.	100%
EPS goal[2]	12.1p	12.5	18.1p	50	18.7p	100%

[1] The absolute TSR growth is from a share price of 247.2p, being the average share price in the final quarter of 2015.

[2] Base year EPS adjusted from 11.1p to 10.5p to reflect the impact of the share placement.

Based on the above level of performance, 100% of the total awarded vested. The Committee considered that the LTIP out-turn was reflective of the underlying performance of the Company and as such determined no discretion should be exercised in relation to the formulaic level of vesting.

The 2016 award is the last operating under the 2007 Long-Term Incentive Plan. All grants thereafter are under the new 2017 Plan, details of which are set out below (Scheme interests granted during 2018).

Company Share Option Plan (CSOP)

Since the adoption of the 2017 Remuneration Policy, Directors have no longer been eligible for the grant of options under the Zotefoams plc CSOP. The final grant made under the previous Policy was made in April 2016 and will vest in April 2019:

	Type of award	Date of grant	Number of shares granted	Face value at grant[1] (£)	Performance condition	Actual performance	Achievement	End of performance period	Date of Vesting
G C McGrath	CSOP	05.04.2016	10,344	£30,000	EPS[2] of 3% p.a. in excess of RPI	34% growth	100%	31/12/2018	05.04.2019

[1] Based on the option price at the date of grant.

[2] From a base EPS measure (2015) of 11.1p. Notwithstanding the dilutive impact on EPS following the placing of shares in May 2018, the Committee has elected not to adjust the base EPS, given that the performance conditions were met in full on either measure.

Scheme interests granted during 2018 (audited)

The table below sets out details of scheme interest granted to the Executive Directors during 2018:

	Type of award	Date of grant	Number of shares granted	Face value[1] (£)	Face value (% of salary)	Performance condition	Trigger point for vesting (% of face value)	End of performance period
D B Stirling	Deferred bonus[4] (Unconditional shares)	24.05.2018	6,656	37,740	n/a	n/a	n/a	n/a
G C McGrath	Deferred bonus[4] (Unconditional shares)	24.05.2018	4,419	25,056	n/a	n/a	n/a	n/a
D B Stirling	LTIP[5] (Conditional shares)	24.05.2018	66,908	379,368	150	30% based on relative TSR growth[2] and 70% annualised EPS growth[3]	6% for relative TSR growth and 14% for annualised EPS growth	31.12.2020
G C McGrath	LTIP[5] (Conditional shares)	24.05.2018	45,090	255,660	150	30% based on relative TSR growth[2] and 70% annualised EPS growth[3]	6% for relative TSR growth and 14% for annualised EPS growth	31.12.2020

[1] Face value calculated using the average of the Company's mid-market price for the five trading days preceding the date of grant (£5.67). The share price was £5.68 on 24 May 2018.

[2] Relative TSR growth is for the three-year period ending 31 December 2020. The trigger point for relative TSR growth is median performance against the FTSE SmallCap Index (excluding investment trusts), where 6% of the award will vest, to upper quartile performance against the FTSE SmallCap Index (excluding investment trusts), where the maximum of 30% of the award will vest.

[3] Annualised EPS growth is from the EPS for 2017. The trigger point is 5% annualised growth, where 14% of the award will vest, to the maximum of 22% annualised growth, where 70% of the award will vest. No adjustments have been made to the EPS targets in light of the share placement.

[4] Awards vest on the third anniversary of grant.

[5] Award subject to three-year performance period and, subject to performance, is released in three equal tranches on the third, fourth and fifth anniversary of grant.

Remuneration report
Continued

Total pension entitlements (audited)

The Zotefoams Defined Benefit Pension Scheme (the 'DB Scheme') was closed to future accrual of benefits as from 31 December 2005. At this time, all active members left the DB Scheme and were granted preserved pensions payable from their normal retirement age (or immediately, if the member had reached normal retirement age).

The following Director was a member of the DB Scheme during the year.

	Accrued pension at 31 December 2018 (£ p.a.)	Gross increase in pension (£)	Increase in accrued pension net of CPI inflation (£)	Change in value over the year (£)
D B Stirling	21,419	130	0	0

Notes

(1) The pension entitlement shown is that which would be paid annually on retirement at normal retirement age (or immediately upon late retirement where applicable), based on service to 31 December 2005 (the date the DB Scheme was closed to future accrual), salary increases to 31 March 2018 (the date salary linkage ceased) and including statutory increases to the year end, but excluding any future increases under the Rules of the Scheme.

(2) As required by the Regulations, the pension input amount has been calculated using the method set out in section 229 of the Finance Act 2004(a) where:

– 'Pension input period' is the year ended 31 December 2018; and

– in the application of section 234 of the Act, the figure 20 is substituted for the figure 16.

The following is additional information relating to the Director's pension from the DB Scheme:

(a) Before the DB Scheme closed, members had the option of paying Additional Voluntary Contributions (AVCs). The value of these AVCs has been excluded from the above figures.

(b) Normal retirement age is 65.

(c) On death before retirement, a spouse's pension is payable of one half of the member's preserved pension at leaving, revalued from leaving to the date of death. On death in retirement, a spouse's pension is payable of one half of the member's pension at death, without reduction for any part of the member's pension commuted for cash at retirement.

(d) Members' Guaranteed Minimum Pensions increase at statutory rates. Other pensions increase in payment at 5% p.a., or the increase in the Retail Prices Index if lower.

(e) From 1 January 2006, active employee members were able to pay contributions to the DC Pension Plan set up by the Company in order to receive retirement benefits. The Company also contributes to this arrangement. Details of the contributions made into this Plan have been disclosed in the single figure calculation and are not included in the above disclosure.

Payments made to past Directors (audited)

No payments were made during 2018.

Payments for loss of office (audited)

No payments were made during 2018.

Statement of Directors' shareholding and share interests (audited)

Executive Directors are required to hold shares in the Company equivalent of 200% of base salary, with a five-year period to build up this holding from: (1) appointment to the Board; or (2) the date of the 2017 AGM (17 May 2017) for the current Executive Directors. The policy also requires the shares to be held for one year following cessation of employment with the Group. Throughout 2018, D B Stirling complied with the policy. G C McGrath, who joined the Group on 1 December 2015, has until 17 May 2022 to build up a shareholding to comply with the policy.

The tables below set out the Directors' interests (including those of their connected persons) in Zotefoams shares as at 31 December 2018:

Executive Directors

	Shares owned outright[1]	Interest in share incentive schemes without performance conditions[2]	Interest in share incentive schemes with performance conditions[3]
D B Stirling	446,443	25,394	257,257
G C McGrath	5,217	11,303	179,874

1 Includes Partnership Shares, Dividend Shares and vested Matching Shares under the SIP.

2 Comprises: vested CSOP awards; DBSP shares; unvested Matching Shares under the SIP; and the unvested 2016 LTIP award that is due to vest on 5 April 2019.

3 Comprises: unvested LTIP shares.

Non-Executive Directors

	Shares owned outright
A C Bromfield	5,145
J D Carling	1,886
S P Good	22,547
D G Robertson	7,302

Scheme interests (audited)

The table below provides details of the current position of outstanding awards made to the Executive Directors who served in the year under review:

	Scheme	As at 31 Dec 2017	Date of exercise or release	Granted during the year	Exercised or released	Lapsed or cancelled	**As at 31 Dec 2018**	Market price on exercise date	Exercise price	Date from which exercisable	Expiry date
D B Stirling	LTIP (2015)	73,880	31.05.2018	–	42,813	31,067	**–**	£5.650	–	24.05.2018	n/a
	LTIP (2016)	74,507	–	–	–	–	**74,507**	–	–	05.04.2019	n/a
	LTIP (2017)[2]	115,842	–	–	–	–	**115,842**	–	–	01.06.2020	n/a
	LTIP (2018)	–	–	66,908	–	–	**66,908**	–	–	24.05.2021	n/a
	DBSP (2014)	8,150	31.05.2018	–	8,150	–	**–**	–	–	30.03.2018	n/a
	DBSP (2015)	8,278	–	–	–	–	**8,278**	–	–	05.04.2019	n/a
	DBSP (2016)	10,061	–	–	–	–	**10,061**	–	–	27.03.2020	n/a
	DBSP (2017)	–	–	6,656	–	–	**6,656**	–	–	24.05.2021	n/a
	SIP[1]	313	–	86	–	–	**399**	–	–	–	n/a
G C McGrath	CSOP	10,344	–	–	–	–	**10,344**	–	£2.900	05.04.2019	05.04.2026
	LTIP (2016)	48,426	–	–	–	–	**48,426**	–	–	05.04.2019	n/a
	LTIP (2017)[2]	76,014	–	–	–	–	**76,014**	–	–	01.06.2020	n/a
	LTIP (2018)	–	–	45,090	–	–	**45,090**	–	–	24.05.2021	n/a
	DBSP (2016)	6,533	–	–	–	–	**6,533**	–	–	27.03.2020	n/a
	DBSP (2017)	–	–	4,419	–	–	**4,419**	–	–	24.05.2021	n/a
	SIP[1]	265	–	86	–	–	**351**	–	–	–	n/a

[1] Matching Shares under the SIP. Participants buy Partnership Shares monthly under the SIP. The Company provides one Matching Share for every four Partnership Shares purchased. These Matching Shares are first available for vesting three years after being awarded or on leaving if the person is considered to be a 'good leaver'.

[2] 30% based on relative TSR. 70% based on EPS growth. As set out in the Chair's letter, the base year EPS number for the 2017 award was adjusted to take into account the increased number of shares following the placement in 2018. The base year EPS was therefore adjusted by 8.7% (from 13.7p to 12.5p) to reflect that the weighted average number of shares has increased in full for the final year of the performance period (i.e. year ending 31 December 2019). No change was made to the relative stretch in the underlying targets agreed at the outset of the performance period – which remain as follows (trigger point of 5% p.a. growth; maximum of 22% p.a. growth).

Details of Directors' service contracts and appointment letters (unaudited)

The following table sets out the details of the service contracts and appointment letters for the Directors as at 31 December 2018:

Director	**Date of current service contract or appointment letter**	**Unexpired terms at 31 December 2018**
A C Bromfield	21 June 2017	1 year and 9 months
J D Carling	20 December 2017	2 years
S P Good[1]	1 February 2016	3 months
G C McGrath	28 October 2015	–
D G Robertson	7 August 2017	1 year and 8 months
D B Stirling	31 July 2014	–

[1] Mr Good was appointed by the Board for a second three-year term in March 2019 and will stand for re-election by shareholders at the AGM.

Copies of the Directors' service contracts and appointment letters are available for inspection at the Company's registered office.

Change in remuneration of the Group CEO (unaudited)

The table below illustrates the percentage change in salary and benefits for the Group CEO and the UK workforce.

The employee subset consists of an average of the UK workforce employees for the period under review.

This group has been selected as the Group CEO is based in the UK and this employee representative group is the largest group of employees within the organisation.

	% change in base salary (2018 to 2017)	**% change in taxable benefits (2018 to 2017)**	**% change in annual bonus (2018 to 2017)**
Group CEO	6	(2)	(56)
Employee subset	2.5	–	(15)

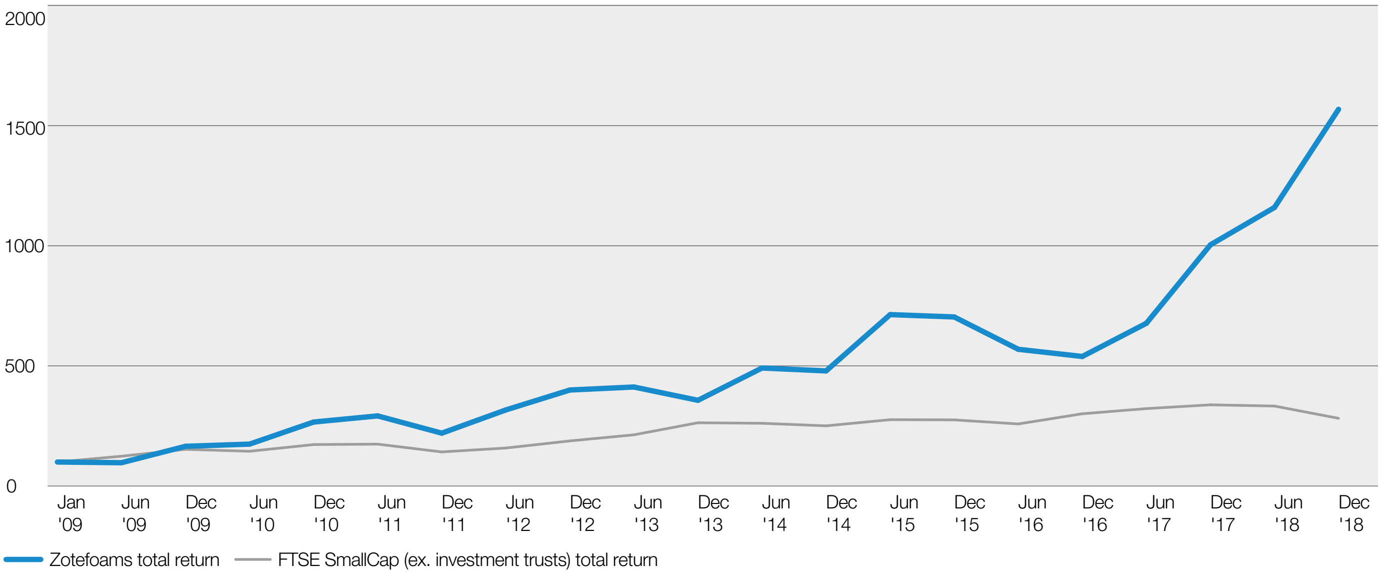
The employees' salary review is negotiated with the unions and a 2.5% increase was agreed in relation to 2018. The 2019 salary review for the employees has not yet been agreed.

The staff bonus in the UK was 5.00% of base salary, in relation to 2017, and 4.25% of base salary for 2018.

Remuneration report
Continued

Historic TSR performance and Group CEO remuneration outcomes (unaudited)

The graph below compared the TSR of Zotefoams against the FTSE SmallCap Index (excluding Investment Trusts) which is considered the most appropriate choice of index by the Remuneration Committee due to the Group's size and membership of this index.



The table below illustrates the Group CEO's single figure for total remuneration, annual bonus pay-out, LTIP vesting as a percentage of maximum opportunity, the EPS and the average share price for the final quarter for the same nine-year period.

	Group CEO's single figure of remuneration (£)	Annual bonus pay-out (% of maximum)	LTIP vesting (% of maximum)	EPS (p)	Average share price for the final quarter (p)
2018	**792,286[2]**	**35.1**	**100**	**18.7**	**570.5**
2017	676,816	84.4	58.0	16.6[1]	389.2
2016	497,545	55.0	37.7	13.7	252.5
2015	418,568	44.4	50.0	11.1	344.3
2014	439,452	44.0	66.0	10.7	237.8
2013	270,687	–	24.8	8.0	182.4
2012	490,715	62.0	84.0	11.8	202.2
2011	572,969	33.3	88.7	11.8	121.1
2010	367,970	46.2	54.9	10.2	136.7
2009	177,562	29.8	–	6.8	90.4

[1] While basic earnings per share before exceptional items for 2017 was 16.04p, the Remuneration Committee decided to eliminate the impact on deferred tax (the net operating losses which are carried forward) due to the change in expected future US corporate tax rates, which resulted in an EPS of 16.59p being used for calculating the satisfaction of the EPS target for the vesting of the 2015 LTIP awards.

[2] 2017 LTIP value has been recalculated using a share price of £5.650 (previously £3.892) as described on page 49.

Relative importance of spend on pay (unaudited)

The below table and chart illustrate the year-on-year change in total Executive Directors' remuneration and Executive Directors' remuneration compared with profit after tax and distributions to shareholders for 2018 and 2017.

	2018	2017
Total remuneration[1] £'000	**18,212**	16,562
Executive Directors' remuneration[2] £'000	**1,356**	885
Profit after tax £'000 (including exceptional item)	**7,852**	6,008
Shareholder distributions[3] £'000	**2,707**	2,547

[1] Social security costs paid by the Group have been excluded from this figure.

[2] 2017 figure includes remuneration for C G Hurst.

[3] Shareholder distributions refer to the dividends paid during the year.

Committee role and advisers (unaudited)

The Group has established a Remuneration Committee, which is constituted in accordance with the recommendations of the UK Corporate Governance Code. A C Bromfield, S P Good, D G Robertson and J D Carling were members of the Committee during 2018 to the date of this report. R J Clowes served on the Committee until his retirement from the Board on 16 May 2018. All the members are independent Non-Executive Directors, with the exception of S P Good, who was independent on appointment as Chairman of the Group. The Committee was chaired by A C Bromfield throughout the year. The Committee's Terms of Reference were last updated in August 2018 and may be found on the Group's website.

None of the Committee members have any personal financial interest (other than fees paid as disclosed on page 49 and as shareholders) in the Company, nor do they have any interests that may conflict with those of the Group, such as cross directorships. None of the Committee members are involved in the day-to-day management of the business. The Committee makes recommendations to the Board on remuneration matters. No Director is involved in any decision concerning his or her own remuneration.

The Remuneration Committee met six times in 2018 with full attendance at each meeting. The Company Secretary acts as secretary to the Committee.

In 2018, the Remuneration Committee considered the following matters:

- completed a review of the remuneration arrangements for the Executive Directors and the wider workforce and consulted with the Group's largest shareholders in relation to proposals arising out of the review;
- approved the 2017 Directors' remuneration report;
- considered and approved the adoption and implementation of the Company Share Option Plan 2018;
- considered and approved the annual bonuses for the Executive team;
- considered and approved the grant of awards under the Long-Term Incentive Plan and the Deferred Bonus Share Plan in 2018 and the vesting of awards made in 2015 under the Long-Term Incentive Plan;
- considered and approved the salary reviews of the Executive Team and the Company Secretary; and
- considered the performance targets for the 2019 Directors' bonus and Long-Term Incentive Plan awards.

Deloitte LLP was engaged in 2016 to assist and provide advice to the Remuneration Committee in creating the new Directors' Remuneration Policy, which was approved at the 2017 AGM. Deloitte LLP's engagement continued into 2018, to advise on remuneration matters more broadly. Deloitte LLP is a member of the Remuneration Consultants Group and adheres to its Code on executive remuneration consulting in the UK.

Total fees for advice provided to the Committee amounted to the following:

	2018 £	2017 £
Deloitte LLP	**18,950**	10,650
Total	**18,950**	10,650

Shareholder voting (unaudited)

The table below sets out the results of the votes received on the 2017 Remuneration Report at the 2018 AGM as well as the latest Directors' Remuneration Policy (approved at the 2017 AGM):

	Directors' Remuneration Policy	**%**	**Annual Report on Remuneration**	**%**
Votes in favour	24,044,881	99.96	27,048,390	91.85
Votes against	279	0.00	2,388,780	8.11
Discretion	9,768	0.04	11,731	0.04
Total votes	24,054,648	100.00	29,448,901	100.00
Votes withheld	5,500	–	5,000	–

Directors' report

The Directors present their Annual Report and audited financial statements for the year ended 31 December 2018

Results and dividends

Profit attributable to shareholders for the year amounted to £7.85m (2017: £6.01m). An interim dividend of 1.97p (2017: 1.91p) per share was paid on 11 October 2018. The Directors recommend that a final dividend of 4.15p (2017: 4.02p) per share be paid on 30 May 2019 to shareholders who are on the Company's register at the close of business on 26 April 2019, taking the total dividend to 6.12p per share for the year (2017: 5.93p).

Directors

The appointment, replacement and powers of the Directors are governed by the Company's Articles of Association (the Articles), the UK Corporate Governance Code, the Companies Act 2006, prevailing legislation and resolutions passed at the Annual General Meeting (AGM) or other general meetings of the Company.

Details of Directors who served during the year are set out on pages 38 and 39. Richard Clowes stood down at the AGM in May 2018 after serving ten years on the Board as a Non-Executive Director. The Articles give the Directors power to appoint and replace Directors. Under the Terms of Reference of the Nomination Committee, any appointment must be recommended by the Nomination Committee for approval by the Board of Directors. The Articles also require Directors to retire and, if they so wish, submit themselves for election at the first AGM following their appointment and normally every three years thereafter. Since 2012, the Board has required Directors to stand for annual re-election each year.

David Stirling and Gary McGrath, the Executive Directors, have service contracts which are terminable on 12 months' written notice. All the other Directors have letters of appointment which are terminable on six months' written notice.

The Company maintained Directors' and Officers' Liability Insurance cover throughout 2018. The Company has issued Deeds of Indemnity in favour of all of the Directors. These Deeds were in force throughout the year ended 31 December 2018 and remain in force as at the date of this report. These Deeds, as well as the service contracts and the Company's Articles of Association, are available for inspection during normal business hours at the Company's registered office and will be available at the AGM.

Conflicts of interest

All Directors submit details to the Company Secretary of any new situations, or changes to existing ones, which may give rise to an actual or potential conflict of interest with those of the Company.

Where an actual, or potential, conflict is approved by the Board, the Board will normally authorise the situation on the condition that the Director concerned abstains from participating in any discussion or decision affected by the conflicted matter. Authorisation of a conflict is only given by Directors who are not interested in the matter. No new conflicts of interest were noted during 2018.

Amendment to the Articles of Association

The Company's Articles of Association may only be amended by a special resolution of the shareholders passed in general meeting.

Corporate governance report

The corporate governance report on page 40 should be read as forming part of the Directors' report.

Employees

To ensure employee welfare, the Group has documented and well-publicised policies on occupational health and safety, the environment and training. The Group operates an equal opportunities, single-status, employment policy together with an open management style.

The Company operates to a number of recognised industry standards, including Quality (ISO 9001), Environmental (ISO 14001) and Occupational Health and Safety (OHSAS 18001).

Zotefoams operates an equal opportunities policy and we believe diversity (ethnicity, age, gender, language, sexual orientation, gender re-orientation, religion, socio-economic status, personality and ability) of the employees promotes a better working environment, which in turn leads to innovation and business success. Applications for employment by disabled persons are always fully considered and, in the event of an employee becoming disabled, every effort is made to ensure that their employment with Zotefoams continues and that appropriate training is provided where necessary. Zotefoams' policy is that the training, career development and promotion of disabled persons should, as far as possible, be identical to that of other employees.

Zotefoams places considerable value on the involvement of its people and holds formal and informal meetings to brief them on matters affecting them as employees and on the various factors affecting the performance of the Group. In the UK, there is a Joint Consultative Committee (JCC), which comprises an employee representative from each department. The JCC meets regularly and considers a wide range of matters affecting the employees' current and future interests. From 1 January 2019, a Non-Executive Director will, where reasonably practical, attend JCC meetings to oversee employee engagement.

In order to encourage employees to share in the success of Zotefoams, an all-employee share incentive scheme was established in 2015 in the UK. Under the scheme, employees can purchase shares each month direct from their salary. For every four shares bought, one further share is awarded. The shares vest on the third anniversary of award and are normally exempt from tax after five years.

Human rights

While Zotefoams does not, at present, have a specific policy on human rights, it recognises and respects all human rights as defined in international conventions. We conduct every aspect of our business with honesty, integrity and openness, respecting human rights and the interests of our employees, customers and other stakeholders, according to the principles set out in our Ethics Policy, which covers:

- ensuring our employees have the freedom to join a union, associate or bargain collectively without fear of discrimination against the exercising of such freedoms;
- not using forced labour or child labour; and
- respecting the rights of privacy of our employees and protecting access and use of their personal information.

The Company operates an Equal Opportunities Policy and a Dignity at Work Policy, which promote the right of every employee to be treated with dignity and respect and not be harassed or bullied. We work hard to ensure that goods and services are from sources that do not jeopardise human rights, safety or the environment, and expect our suppliers to observe business principles consistent with our own.

Business ethics

Zotefoams is committed to high standards of business conduct and seeks to maintain these standards across all of our operations throughout the world. Under our Ethics Policy, we state that we will:

- operate within the law;
- not tolerate any discrimination or harassment;
- not make any political donations;
- not make or receive bribes;
- avoid situations that might give rise to conflicts of interest;
- not enter into any activity that might be considered anti-competitive;
- aim to be a responsible company within our local communities; and
- support and encourage our employees to report, in confidence, any suspicions of wrongdoing.

Supporting our Ethics Policy, we have policies on anti-bribery and corruption, anti-fraud, anti-competitive behaviour, employee share trading and whistleblowing.

Substantial shareholdings

In accordance with the Disclosure and Transparency Rules DTR 5, the Company, as at 2 April 2019, had received notices of the following material interests of 3% or more in the issued ordinary share capital:

	Ordinary share of 5.0p	**Percentage of issued share capital**
Miton Asset Management	5,770,497	11.95%
BlackRock Inc.	4,972,879	10.29%
Schroders Investment Management	4,883,457	10.11%
Canaccord Genuity Wealth Management	4,659,634	9.65%
Oppenheimer Funds	4,026,990	8.34%
Sekisui Alveo AG	3,818,110	7.90%
Legal & General Investment Management	2,206,221	4.57%
Marc and Claire Downes	1,960,019	4.06%
Nicholas Adrian Beaumont-Dark	1,848,352	3.89%

Directors' shareholdings are shown in the Directors' remuneration report on page 52.

Research and development

The amount spent by the Group on R&D in the year was £1,350,000 (2017: £1,363,000). In the opinion of the Directors £243,000 (2017: £156,000) of this expenditure met the requirements for capitalisation under IAS 38, while £1,107,000 (2017: £1,207,000) did not and was consequently expensed in the consolidated income statement.

Share capital and reserves

The Company has one class of ordinary shares, which has no right to fixed income. Each share carries the right, on a poll, to one vote at general meetings of the Company. There are no specific restrictions on the size of a holding nor on the transfer of shares, which are both governed by the general provisions of the Articles of Association and prevailing legislation. The Directors are not aware of any agreements between holders of the Company's shares that may result in restrictions on the transfer of securities or on voting rights. No person has any special rights of control over the Company's share capital and all issued shares are fully paid.

At 31 December 2018, the Zotefoams Employees' Benefit Trust (EBT) held 403,758 shares (approximately 0.8% of issued share capital) (2017: 521,351 shares) to satisfy share plans as described in the Directors' remuneration report. During the year, the EBT released 117,593 shares in respect of these share plans. No shares were acquired by the EBT during the year. In accordance with best practice, the voting rights on the shares held in the EBT are not exercised and the right to receive dividends has been waived.

At the AGM held on 16 May 2018, authority was given to the Directors to allot unissued shares in the Company up to a maximum amount equivalent to approximately two-thirds of the issued share capital of the Company. Authority was also given to the Directors to allot equity securities in the Company for cash without regard to the pre-emption provisions of the Companies Act 2006. Both authorities expire at the AGM to be held on 15 May 2019. The Directors seek new authorities for a further year, in line with market practice.

The Company was given authority at the 2018 AGM to purchase up to 4,441,444 of its ordinary shares. This authority will also expire on 15 May 2019 and, at the date of this Report, had not been used. In accordance with normal practice for listed companies, a special resolution will be proposed at this year's AGM to seek a new authority to make market purchases up to a maximum of 10% of the issued share capital of the Company.

Subsidiaries and branches

Details of the joint ventures, subsidiaries and branches within the Group are given in notes 10 and 13 of the financial statements.

Treasury and financial instruments

Information in respect of the Group's policies on financial risk management objectives, including policies for hedging, as well as an indication of exposure to financial risk, is given in note 21 to the financial statements.

Future developments

Information on future developments for the Group has been set out in an Introduction from our Chairman and the Group CEO's review.

Greenhouse gas emissions

Information on the Group's greenhouse gas emissions may be found in the Sustainability report on page 37.

Pension schemes

Refer to the Pensions section of the Group CFO report and note 23 of the financial statements for information related to the Company's pension schemes

Employees are offered membership of one of a number of defined contribution pension schemes.

Finance costs capitalised

Refer to note 11 of the financial statements for details of borrowing costs capitalised by the Group.

Post-balance sheet events

Refer to note 27 of the financial statements for details of post-balance sheet events affecting the Group since the year-end.

Disclosure of information to Auditor

The Directors who held office at the date of approval of this Directors' report confirm that, in 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 they ought to have taken as a Director to make themselves aware of any relevant audit information and to establish that the Company's Auditors are aware of that information.

Independent auditors

A resolution to re-appoint PricewaterhouseCoopers LLP as the Company's Auditor will be proposed at the forthcoming AGM.

By order of the Board.

G C McGrath
Director

3 April 2019

Statement of Directors’ responsibilities in respect of the financial statements

The Directors consider the Annual Report, taken as a whole, to be fair, balanced and understandable

The Directors are responsible for preparing the Annual Report and the financial statements in accordance with applicable law and regulation.

Company law requires the Directors to prepare financial statements for each financial year. Under that law the Directors have prepared the Consolidated and Company financial statements in accordance with International Financial Reporting Standards (IFRSs) as adopted by the European Union. Under company law the Directors must not approve the financial statements unless they are satisfied that they give a true and fair view of the state of affairs of the Group and Company and of the profit or loss of the Group and Company for that period. In preparing the financial statements, the Directors are required to:

- select suitable accounting policies and then apply them consistently;
- state whether applicable IFRSs as adopted by the European Union have been followed for the Consolidated and Company financial statements, subject to any material departures disclosed and explained in the financial statements;
- make judgements and accounting estimates that are reasonable and prudent; and
- prepare the financial statements on the going concern basis unless it is inappropriate to presume that the Group and Company will continue in business.

The Directors are also responsible for safeguarding the assets of the Group and Company and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

The Directors are responsible for keeping adequate accounting records that are sufficient to show and explain the Group and Company’s transactions and disclose with reasonable accuracy at any time the financial position of the Group and Company and enable them to ensure that the financial statements and the Directors’ remuneration report comply with the Companies Act 2006 and, as regards the Consolidated financial statements, Article 4 of the IAS Regulation.

The Directors are responsible for the maintenance and integrity of the Company’s website. Legislation in the United Kingdom governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

Directors’ confirmations

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

Each of the Directors, whose names and functions are listed on pages 38 and 39 of the Annual Report confirm that, to the best of their knowledge:

- the Consolidated and Company financial statements, which have been prepared in accordance with IFRSs as adopted by the European Union, give a true and fair view of the assets, liabilities, financial position and profit of the Group and Company; and
- the Group CEO’s review includes a fair review of the development and performance of the business and the position of the Group and Company, together with a description of the principal risks and uncertainties that it faces.

Independent auditors' report to the members of Zotefoams plc

Report on the audit of the financial statements

Opinion

In our opinion, Zotefoams plc's Consolidated financial statements and Company financial statements (the "financial statements"):

- give a true and fair view of the state of the Group's and of the Company's affairs as at 31 December 2018 and of the Group's profit and the Group's and the Company's cash flows for the year then ended;
- have been properly prepared in accordance with International Financial Reporting Standards (IFRSs) as adopted by the European Union and, as regards the Company's financial statements, as applied in accordance with the provisions of the Companies Act 2006; and
- have been prepared in accordance with the requirements of the Companies Act 2006 and, as regards the Consolidated financial statements, Article 4 of the IAS Regulation.

We have audited the financial statements, included within the Annual Report, which comprise: the Consolidated and Company statements of financial position as at 31 December 2018; the Consolidated income statement and Consolidated statement of comprehensive income, the Consolidated and Company statements of cash flows, the Consolidated and Company statements of changes in equity for the year then ended; and the notes to the financial statements, which include a description of the significant accounting policies.

Our opinion is consistent with our reporting to the Audit Committee.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) ("ISAs (UK)") and applicable law. Our responsibilities under ISAs (UK) are further described in the Auditors' responsibilities for the audit of the financial statements section of our report. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

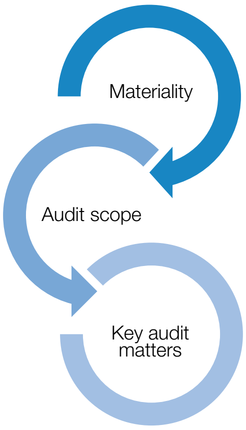
Independence

We remained independent of the Group in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, which includes the FRC's Ethical Standard, as applicable to listed public interest entities, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

To the best of our knowledge and belief, we declare that non-audit services prohibited by the FRC's Ethical Standard were not provided to the Group or the Company.

We have provided no non-audit services to the Group or the Company in the period from 1 January 2018 to 31 December 2018.

Our audit approach



Overview

- Overall Group materiality: £525,000 (2017: £400,000), based on 4.9% of profit before tax and exceptional item.
- Overall Company materiality: £500,000 (2017: £350,000), based on 4.6% of profit before tax and exceptional item.

- There are eight trading companies (including joint ventures) within the Consolidated financial statements, two based in the UK, three in the USA and three in Asia.
- We conducted an audit of full-year financial information on three trading companies, Zotefoams plc in the UK and Zotefoams Inc. and MuCell Extrusion LLC in the USA. We visited these trading companies as part of our audit procedures.
- The trading companies where we performed full audit procedures accounted for 84% of the Group's profit before tax and exceptional item.

- Defined benefit pension scheme assumptions (Group and Company).

The scope of our audit

As part of designing our audit, we determined materiality and assessed the risks of material misstatement in the financial statements. In particular, we looked at where the Directors made subjective judgements, for example in respect of significant accounting estimates that involved making assumptions and considering future events that are inherently uncertain.

Independent auditors' report to the members of Zotefoams plc Continued

Capability of the audit in detecting irregularities, including fraud

Based on our understanding of the Group and industry, we identified that the principal risks of non-compliance with laws and regulations related to the Listing Rules, Pensions legislation, UK tax legislation and equivalent local laws and regulations applicable to the significant components, and we considered the extent to which non-compliance might have a material effect on the financial statements. We also considered those laws and regulations that have a direct impact on the preparation of the financial statements such as the Companies Act 2006. We evaluated management's incentives and opportunities for fraudulent manipulation of the financial statements (including the risk of override of controls), and determined that the principal risks were related to posting inappropriate entries to misstate revenue or reduce expenditure, and management bias in accounting estimates. Audit procedures performed by the Group engagement team included:

- Discussions with management, including consideration of any known or suspected instances of non-compliance with laws and regulation and fraud;
- Challenging assumptions made by management in their significant accounting estimates in particular in relation to defined benefit pensions scheme assumptions (see key audit matters below);
- Identifying and testing journal entries, in particular any journal entries posted with unusual account combinations, journals posted by senior management, and consolidation journals; and
- Review of disclosures included in the financial statements to underlying supporting documentation.

There are inherent limitations in the audit procedures described above and the further removed non-compliance with laws and regulations is from the events and transactions reflected in the financial statements, the less likely we would become aware of it. Also, the risk of not detecting a material misstatement due to fraud is higher than the risk of not detecting one resulting from error, as fraud may involve deliberate concealment by, for example, forgery or intentional misrepresentations, or through collusion.

Key audit matters

Key audit matters are those matters that, in the auditors' professional judgement, were of most significance in the audit of the financial statements of the current period and include the most significant assessed risks of material misstatement (whether or not due to fraud) identified by the auditors, including those which had the greatest effect on: the overall audit strategy; the allocation of resources in the audit; and directing the efforts of the engagement team. These matters, and any comments we make on the results of our procedures thereon, were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters. This is not a complete list of all risks identified by our audit.

Key audit matter	How our audit addressed the key audit matter
Defined benefit pension scheme assumptions The Company's closed defined benefit pension scheme represents one of the largest liabilities on the statement of financial position as at 31 December 2018. The valuation of the scheme's liabilities requires management to apply their judgement in making a number of key assumptions, being the rates of inflation (Consumer Price Index and Retail Price Index), the discount rate and the life expectancy of scheme members. In the prior year, management was required to consider the impact of the apparent failure to break the linkage between accrued benefits and final pensionable salary on closure of the scheme. During the current year, management had to additionally assess the impact of the High Court ruling in respect of Guaranteed Minimum Pensions ('GMP') which confirmed equalisation of pension benefits between males and females and required consideration of various assumptions including an appropriate look-back period per the terms of the pension scheme to determine any additional liability. Due to the sensitive nature of the matters noted above, there is a risk of material misstatement to the liability arising from small changes to key assumptions.	We involved our pensions experts to evaluate and benchmark the key assumptions applied by management in determining the scheme's liabilities. The assumptions applied by management are considered reasonable. We noted that while a majority of the scheme's members agreed to break the linkage between accrued benefits and final pensionable salary on closure of the scheme, certain members have not given their consent to the break the linkage. We noted that the actuarial assumptions for the year adequately consider adjustments for future salary increases for members who have not given their consent to the break. In respect of GMP equalisation, we noted that management's assessment considered multiple look-back periods and their impact on the additional liability to be recognised. We considered the look-back period used by management in determining the additional liability arising from this matter is appropriate. We involved our pension experts to perform independent testing to determine the additional liability arising from this matter and concluded that the assumptions used and liability determined by management are not unreasonable. Based on the procedures performed, we did not identify any material misstatements in the defined benefit pension obligation at the year-end. We reviewed the disclosures made in the financial statements and are satisfied that these disclosures are appropriate.

How we tailored the audit scope

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

All the work was performed by the Group engagement team.

Of the eight trading companies (including joint ventures), three of these are considered to be significant components of the Group, Zotefoams plc in the UK and Zotefoams Inc. and MuCell Extrusion LLC in the USA, on which we have performed full-scope audits, all of which are 100%-owned subsidiaries of the Group.

Materiality

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

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

	Consolidated financial statements	Company financial statements
Overall materiality	£525,000 (2017: £400,000).	£500,000 (2017: £350,000).
How we determined it	4.9% of profit before tax and exceptional item.	4.6% of profit before tax and exceptional item.
Rationale for benchmark applied	Based on the benchmarks used in the Annual Report, profit before tax and exceptional item is the primary measure used by the shareholders in assessing the performance of the Group, and is a generally accepted auditing benchmark.	Based on the benchmarks used in the Annual Report, profit before tax and exceptional item is the primary measure used by the shareholders in assessing the performance of the Company, and is a generally accepted auditing benchmark.

For each component in the scope of our group audit, we allocated a materiality that is less than our overall group materiality. The range of materiality allocated across components was between £225,000 and £500,000. Certain components were audited to a local statutory audit materiality that was also less than our overall group materiality.

We agreed with the Audit Committee that we would report to them misstatements identified during our audit above £26,250 (Group audit) (2017: £20,000) and £26,250 (Company audit) (2017: £20,000) as well as misstatements below those amounts that, in our view, warranted reporting for qualitative reasons.

Going concern

In accordance with ISAs (UK) we report as follows:

Reporting obligation	Outcome
We are required to report if we have anything material to add or draw attention to in respect of the Directors' statement in the financial statements about whether the directors considered it appropriate to adopt the going concern basis of accounting in preparing the financial statements and the directors' identification of any material uncertainties to the Group's and the Company's ability to continue as a going concern over a period of at least twelve months from the date of approval of the financial statements.	We have nothing to report in respect of these matters. However, because not all future events or conditions can be predicted, this statement is not a guarantee as to the Group's and Company's ability to continue as a going concern. For example, the terms on which the United Kingdom may withdraw from the European Union are not clear, and it is difficult to evaluate all of the potential implications on the Group's and Company's trade, customers, suppliers and the wider economy.
We are required to report if the Directors' statement relating to Going Concern in accordance with Listing Rule 9.8.6R(3) is materially inconsistent with our knowledge obtained in the audit.	We have nothing to report.

Independent auditors' report to the members of Zotefoams plc Continued

Reporting on other information

The other information comprises all of the information in the Annual Report other than the financial statements and our auditors' report thereon. The Directors are responsible for the other information. Our opinion on the financial statements does not cover the other information and, accordingly, we do not express an audit opinion or, except to the extent otherwise explicitly stated in this report, any form of assurance thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. If we identify an apparent material inconsistency or material misstatement, we are required to perform procedures to conclude whether there is a material misstatement of the financial statements or a material misstatement of the other information. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report based on these responsibilities.

With respect to the Strategic Report and Directors' report, we also considered whether the disclosures required by the UK Companies Act 2006 have been included.

Based on the responsibilities described above and our work undertaken in the course of the audit, the Companies Act 2006 (CA06), ISAs (UK) and the Listing Rules of the Financial Conduct Authority (FCA) require us also to report certain opinions and matters as described below (required by ISAs (UK) unless otherwise stated).

Strategic Report and Directors' report

In our opinion, based on the work undertaken in the course of the audit, the information given in the Strategic Report and Directors' report for the year ended 31 December 2018 is consistent with the financial statements and has been prepared in accordance with applicable legal requirements. *(CA06)*

In light of the knowledge and understanding of the Group and Company and their environment obtained in the course of the audit, we did not identify any material misstatements in the Strategic Report and Directors' report. *(CA06)*

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

We have nothing material to add or draw attention to regarding:

- The Directors' confirmation on page 42 of the Annual Report that they have carried out a robust assessment of the principal risks facing the Group, including those that would threaten its business model, future performance, solvency or liquidity.
- The disclosures in the Annual Report that describe those risks and explain how they are being managed or mitigated.
- The Directors' explanation on page 30 of the Annual Report as to how they have assessed the prospects of the Group, over what period they have done so and why they consider that period to be appropriate, and their statement as to whether they have a reasonable expectation that the Group will be able to continue in operation and meet its liabilities as they fall due over the period of their assessment, including any related disclosures drawing attention to any necessary qualifications or assumptions.

We have nothing to report having performed a review of the Directors' statement that they have carried out a robust assessment of the principal risks facing the Group and statement in relation to the longer-term viability of the Group. Our review was substantially less in scope than an audit and only consisted of making inquiries and considering the directors' process supporting their statements; checking that the statements are in alignment with the relevant provisions of the UK Corporate Governance Code (the "Code"); and considering whether the statements are consistent with the knowledge and understanding of the Group and Company and their environment obtained in the course of the audit. *(Listing Rules)*

Other Code Provisions

We have nothing to report in respect of our responsibility to report when:

- The statement given by the Directors, on page 58, that they consider the Annual Report taken as a whole to be fair, balanced and understandable, and provides the information necessary for the members to assess the Group's and Company's position and performance, business model and strategy is materially inconsistent with our knowledge of the Group and Company obtained in the course of performing our audit.
- The section of the Annual Report on pages 43 and 44 describing the work of the Audit Committee does not appropriately address matters communicated by us to the Audit Committee.
- The Directors' statement relating to the Company's compliance with the Code does not properly disclose a departure from a relevant provision of the Code specified, under the Listing Rules, for review by the auditors.

Directors' Remuneration

In our opinion, the part of the Directors' Remuneration Report to be audited has been properly prepared in accordance with the Companies Act 2006. *(CA06)*

Responsibilities for the financial statements and the audit

Responsibilities of the Directors for the financial statements

As explained more fully in the Statement of directors' responsibilities set out on page 58, the Directors are responsible for the preparation of the financial statements in accordance with the applicable framework and for being satisfied that they give a true and fair view. The Directors are also responsible for such internal control as they determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Directors are responsible for assessing the Group's and the Company's ability to continue as a going concern, disclosing as applicable, matters related to going concern and using the going concern basis of accounting unless the Directors either intend to liquidate the Group or the Company or to cease operations, or have no realistic alternative but to do so.

Auditors’ responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors’ report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

A further description of our responsibilities for the audit of the financial statements is located on the FRC’s website at: www.frc.org.uk/auditorsresponsibilities. This description forms part of our auditors’ report.

Use of this report

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

Other required reporting

Companies Act 2006 exception reporting

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

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

We have no exceptions to report arising from this responsibility.

Appointment

Following the recommendation of the audit committee, we were appointed by the Directors on 26 July 2012 to audit the financial statements for the year ended 31 December 2012 and subsequent financial periods. The period of total uninterrupted engagement is 7 years, covering the years ended 31 December 2012 to 31 December 2018.

Michael Jones (Senior Statutory Auditor)
for and on behalf of PricewaterhouseCoopers LLP
Chartered Accountants and Statutory Auditors Gatwick
3 April 2019

Consolidated income statement

For the year ended 31 December 2018

	Note	**2018** **£'000**	2017 £'000
Group revenue	3	**81,037**	70,146
Cost of sales		**(52,034)**	(44,659)
Gross profit		**29,003**	25,487
Distribution costs		**(7,193)**	(5,754)
Administrative expenses before exceptional item		**(10,236)**	(10,359)
Exceptional item	4	**(950)**	(1,265)
Total administrative expenses	5	**(11,186)**	(11,624)
Operating profit		**10,624**	8,109
Operating profit before exceptional item		**11,574**	9,374
Finance costs	7	**(753)**	(508)
Share of loss from joint venture	10	**(16)**	(53)
Profit before income tax		**9,855**	7,548
Profit before income tax and exceptional item		**10,805**	8,813
Income tax expense	8	**(2,003)**	(1,540)
Profit for the year		**7,852**	6,008
Profit for the year before exceptional item		**8,641**	7,033
Attributable to:			
Equity holders of the Company		**7,852**	6,008
		7,852	6,008
Earnings per share:			
Basic (p)	9	**16.96**	13.70
Diluted (p)	9	**16.69**	13.52

All activities of the Group are continuing.

The notes on pages 72 to 107 form an integral part of these financial statements.

The Company has elected to take the exemption under section 408 of the Companies Act 2006 from presenting the Company income statement and other comprehensive income.

Company number: 2714645

Consolidated statement of comprehensive income

For the year ended 31 December 2018

	Note	**2018** **£'000**	2017 £'000
Profit for the year		**7,852**	6,008
Other comprehensive income/(expense)			
Items that will not be reclassified to profit or loss			
Actuarial (losses)/gains on defined benefit schemes	23	**(1,449)**	2,080
Tax relating to items that will not be reclassified		**246**	(502)
Total items that will not be reclassified to profit or loss		**(1,203)**	1,578
Items that may be reclassified subsequently to profit or loss			
Foreign exchange translation gains/(losses) on investment in foreign subsidiaries		**1,442**	(3,336)
Change in fair value of hedging instruments		**(1,467)**	1,171
Hedging gains/(losses) reclassified to profit or loss		**920**	(663)
Tax relating to items that may be reclassified		**93**	(93)
Total items that may be reclassified subsequently to profit or loss		**988**	(2,921)
Other comprehensive expense for the year, net of tax		**(215)**	(1,343)
Total comprehensive income for the year		**7,637**	4,665
Attributable to:			
Equity holders of the Company		**7,637**	4,665
Total comprehensive income for the year		**7,637**	4,665

The notes on pages 72 to 107 form an integral part of these financial statements.

Consolidated statement of financial position

As at 31 December 2018

	Note	**2018** **£'000**	2017 £'000
Non-current assets			
Property, plant and equipment	11	**67,608**	54,116
Intangible assets	12	**6,515**	6,681
Investments in joint venture	10	**73**	89
Trade and other receivables	15	**439**	–
Deferred tax assets	19	**923**	362
Total non-current assets		**75,558**	61,248
Current assets			
Inventories	14	**17,893**	14,710
Trade and other receivables	15	**26,371**	19,733
Derivative financial instruments	21	**6**	213
Cash and cash equivalents	16	**7,073**	4,360
Total current assets		**51,343**	39,016
Total assets		**126,901**	100,264
Current liabilities			
Trade and other payables	17	**(11,328)**	(10,429)
Derivative financial instruments	21	**(399)**	(59)
Current tax liability		**(1,978)**	(1,662)
Interest-bearing loans and borrowings	18	**(14,500)**	(11,316)
Bank overdraft	16	**–**	(2,550)
Total current liabilities		**(28,205)**	(26,016)
Non-current liabilities			
Interest-bearing loans and borrowings	18	**(5,537)**	(8,450)
Deferred tax liabilities	19	**–**	(540)
Post-employment benefits	23	**(8,078)**	(6,168)
Total non-current liabilities		**(13,615)**	(15,158)
Total liabilities		**(41,820)**	(41,174)
Total net assets		**85,081**	59,090
Equity			
Issued share capital	20	**2,415**	2,221
Share premium	20	**44,178**	24,340
Own shares held		**(21)**	(26)
Capital redemption reserve		**15**	15
Translation reserve		**4,053**	2,611
Hedging reserve		**(358)**	96
Retained earnings		**34,799**	29,833
Total equity		**85,081**	59,090

The notes on pages 72 to 107 form an integral part of these financial statements.

These financial statements on pages 64 to 71 were authorised for issue by the board of directors on 3 April 2019 and were signed on its behalf by:

G C McGrath
Group CFO

Company number: 2714645

Company statement of financial position

As at 31 December 2018

	Note	2018 £'000	2017 £'000
Non-current assets			
Property, plant and equipment	11	**36,603**	28,198
Intangible assets	12	**1,773**	1,905
Investment in subsidiaries	13	**23,549**	23,546
Trade and other receivables	15	**439**	–
Deferred tax assets	19	**292**	–
Total non-current assets		**62,656**	53,649
Current assets			
Inventories	14	**13,444**	11,400
Trade and other receivables	15	**37,121**	19,971
Derivative financial instruments	21	**6**	213
Cash and cash equivalents	16	**5,626**	2,956
Total current assets		**56,197**	34,540
Total assets		**118,853**	88,189
Current liabilities			
Trade and other payables	17	**(8,206)**	(7,890)
Derivative financial instruments	21	**(399)**	(59)
Current tax liability		**(1,797)**	(1,561)
Interest-bearing loans and borrowings	18	**(14,500)**	(10,786)
Bank overdraft	16	**–**	(2,550)
Total current liabilities		**(24,902)**	(22,846)
Non-current liabilities			
Interest-bearing loans and borrowings	18	**(5,537)**	(4,030)
Deferred tax liabilities	19	**–**	(540)
Post-employment benefits	23	**(8,078)**	(6,168)
Total non-current liabilities		**(13,615)**	(10,738)
Total liabilities		**(38,517)**	(33,584)
Total net assets		**80,336**	54,605
Equity			
Issued share capital	20	**2,415**	2,221
Share premium	20	**44,178**	24,340
Own shares held		**(21)**	(26)
Capital redemption reserve		**15**	15
Hedging reserve		**(358)**	96
Retained earnings			
At 1 January		**27,959**	22,069
Profit for the year attributable to the owners		**9,034**	6,275
Other changes in retained earnings		**(2,886)**	(385)
		34,107	27,959
Total equity attributable to the equity holders of the Company		**80,336**	54,605

The notes on pages 72 to 107 form an integral part of these financial statements.

These financial statements on pages 64 to 71 were authorised for issue by the board of directors on 3 April 2019 and were signed on its behalf by:

G C McGrath
Group CFO

Company number: 2714645

Consolidated statement of cash flows

For the year ended 31 December 2018

	Note	2018 £'000	2017 £'000
Cash flows from operating activities			
Profit for the year		**7,852**	6,008
Adjustments for:			
Depreciation and amortisation	11/12	**5,082**	3,496
Finance costs	7	**753**	508
Share of loss from joint venture	10	**16**	53
Employee defined benefit service charges	4	**950**	1,235
Equity-settled share-based payments		**822**	459
Taxation	8	**2,003**	1,540
Cash generated from operations before changes in working capital and provisions		**17,478**	13,299
Increase in trade and other receivables		**(6,361)**	(99)
Increase in inventories		**(3,751)**	(2,795)
Increase in trade and other payables		**366**	190
Employee defined benefit contributions	23	**(619)**	(619)
Cash generated from operations		**7,113**	9,976
Interest paid		**(516)**	(301)
Income tax paid, net of refunds		**(2,136)**	(943)
Net cash generated from operating activities		**4,461**	8,732
Cash flows from investing activities			
Purchases of intangibles	12	**(294)**	(360)
Proceeds from disposal of property, plant and equipment	11	**3**	4
Purchases of property, plant and equipment	11	**(15,796)**	(11,385)
Net cash used in investing activities		**(16,087)**	(11,741)
Cash flows from financing activities			
Proceeds from options exercised and issue of share capital		**31**	30
Proceeds of share issue, net of expenses		**20,078**	–
Repayment of borrowings		**(45,055)**	(1,309)
Proceeds from borrowings		**44,576**	6,605
Dividends paid to equity holders of the Company	9	**(2,707)**	(2,547)
Net cash generated from financing activities		**16,923**	2,779
Net increase/(decrease) in cash and cash equivalents		**5,297**	(230)
Cash and cash equivalents at 1 January		**1,810**	2,063
Exchange losses on cash and cash equivalents		**(34)**	(23)
Cash and cash equivalents at 31 December	16	**7,073**	1,810

Cash and cash equivalents comprises cash at bank, short-term highly liquid investments with a maturity date of less than three months and bank overdraft.

Refer to note 18 for a reconciliation of liabilities arising from financing activities.

The notes on pages 72 to 107 form an integral part of these financial statements.

Company statement of cash flows

For the year ended 31 December 2018

	Note	**2018 £'000**	2017 £'000
Cash flows from operating activities			
Profit for the year		**9,034**	6,275
Adjustments for:			
Depreciation and amortisation	11/12	**3,040**	2,745
Finance costs		**469**	508
Employee defined benefit service charges	4	**950**	1,235
Equity-settled share-based payments		**822**	459
Taxation		**1,959**	1,074
Cash generated from operations before changes in working capital and provisions		**16,274**	12,296
Increase in trade and other receivables		**(10,194)**	(7,254)
Increase in inventories		**(2,044)**	(2,119)
Increase in trade and other payables		**181**	1,297
Employer defined benefit contributions	23	**(619)**	(619)
Cash generated from operations		**3,598**	3,601
Interest paid		**(471)**	(283)
Income tax paid, net of refunds		**(2,039)**	(970)
Net cash generated from operating activities		**1,088**	2,348
Cash flows from investing activities			
Investment in subsidiaries		**(3)**	(305)
Interest received		**102**	–
Loans given to subsidiaries, net of repayments		**(6,828)**	–
Purchases of intangibles	12	**(251)**	(253)
Proceeds from disposal of property, plant and equipment	11	**1**	4
Purchases of property, plant and equipment	11	**(10,928)**	(3,660)
Net cash used in investing activities		**(17,907)**	(4,214)
Cash flows from financing activities			
Proceeds from options exercised and issue of share capital		**31**	30
Proceeds of share issue, net of expenses		**20,078**	–
Repayment of borrowings		**(39,922)**	(822)
Proceeds from borrowings		**44,576**	6,605
Dividends paid to equity holders of the Company	9	**(2,707)**	(2,547)
Net cash generated from financing activities		**22,056**	3,266
Net increase in cash and cash equivalents		**5,237**	1,400
Cash and cash equivalents at 1 January		**406**	(805)
Exchange losses on cash and cash equivalents		**(17)**	(189)
Cash and cash equivalents at 31 December	16	**5,626**	406

Cash and cash equivalents comprises cash at bank, short-term highly liquid investments with a maturity date of less than three months and bank overdraft.

Refer to note 18 for a reconciliation of liabilities arising from financing activities.

The notes on pages 72 to 107 form an integral part of these financial statements.

Consolidated statement of changes in equity

For the year ended 31 December 2018

	Note	Share capital £'000	Share premium £'000	Own shares held £'000	Capital redemption reserve £'000	Translation reserve £'000	Hedging reserve £'000	Retained earnings £'000	Total equity £'000
Balance as at 1 January 2017		2,221	24,340	(31)	15	5,947	(319)	24,210	56,383
Foreign exchange translation losses on investment in subsidiaries		–	–	–	–	(3,336)	–	–	(3,336)
Change in fair value of hedging instruments recognised in other comprehensive income		–	–	–	–	–	1,171	–	1,171
Reclassification to income statement – administrative expenses		–	–	–	–	–	(663)	–	(663)
Tax relating to effective portion of changes in fair value of cash flow hedges, net of reclassification to income statement		–	–	–	–	–	(93)	–	(93)
Actuarial gain on defined benefit pension scheme		–	–	–	–	–	–	2,080	2,080
Tax relating to actuarial gain on defined benefit pension scheme	23	–	–	–	–	–	–	(502)	(502)
Profit for the year		–	–	–	–	–	–	6,008	6,008
Total comprehensive (expense)/income for the year		–	–	–	–	(3,336)	415	7,586	4,665
Transactions with owners of the Company:									
Options exercised		–	–	5	–	–	–	25	30
Equity-settled share-based payments, net of tax		–	–	–	–	–	–	559	559
Dividends paid	9	–	–	–	–	–	–	(2,547)	(2,547)
Total transactions with owners of the Company		–	–	5	–	–	–	(1,963)	(1,958)
Balance as at 31 December 2017		2,221	24,340	(26)	15	2,611	96	29,833	59,090
Balance as at 1 January 2018		**2,221**	**24,340**	**(26)**	**15**	**2,611**	**96**	**29,833**	**59,090**
Foreign exchange translation gains on investment in subsidiaries		**–**	**–**	**–**	**–**	**1,442**	**–**	**–**	**1,442**
Change in fair value of hedging instruments recognised in other comprehensive income		**–**	**–**	**–**	**–**	**–**	**(1,467)**	**–**	**(1,467)**
Reclassification to income statement – administrative expenses		**–**	**–**	**–**	**–**	**–**	**920**	**–**	**920**
Tax relating to effective portion of changes in fair value of cash flow hedges, net of reclassification to income statement		**–**	**–**	**–**	**–**	**–**	**93**	**–**	**93**
Actuarial loss on defined benefit pension scheme	23	**–**	**–**	**–**	**–**	**–**	**–**	**(1,449)**	**(1,449)**
Tax relating to actuarial loss on defined benefit pension scheme		**–**	**–**	**–**	**–**	**–**	**–**	**246**	**246**
Profit for the year		**–**	**–**	**–**	**–**	**–**	**–**	**7,852**	**7,852**
Total comprehensive income/(expense) for the year		**–**	**–**	**–**	**–**	**1,442**	**(454)**	**6,649**	**7,637**
Transactions with owners of the Company:									
Options exercised		**–**	**–**	**5**	**–**	**–**	**–**	**26**	**31**
Proceeds from shares issued, net of expenses		**194**	**19,838**	**–**	**–**	**–**	**–**	**–**	**20,032**
Equity-settled share-based payments, net of tax		**–**	**–**	**–**	**–**	**–**	**–**	**998**	**998**
Dividends paid	9	**–**	**–**	**–**	**–**	**–**	**–**	**(2,707)**	**(2,707)**
Total transactions with owners of the Company		**194**	**19,838**	**5**	**–**	**–**	**–**	**(1,683)**	**18,354**
Balance as at 31 December 2018		**2,415**	**44,178**	**(21)**	**15**	**4,053**	**(358)**	**34,799**	**85,081**

The aggregate current and deferred tax relating to items that are debited to equity is £515k (2017: credit of £309k).

The notes on pages 72 to 107 form an integral part of these financial statements.

Company statement of changes in equity

For the year ended 31 December 2018

	Note	Share Capital £'000	Share premium £'000	Own shares held £'000	Capital redemption reserve £'000	Hedging reserve £'000	Retained earnings £'000	Total Equity £'000
Balance as at 1 January 2017		2,221	24,340	(31)	15	(319)	22,069	48,295
Change in fair value of hedging instruments recognised in other comprehensive income		–	–	–	–	1,171	–	1,171
Reclassification to income statement – administrative expenses		–	–	–	–	(663)	–	(663)
Tax relating to effective portion of changes in fair value of cash flow hedges, net of reclassification		–	–	–	–	(93)	–	(93)
Actuarial gain on defined benefit pension scheme	23	–	–	–	–	–	2,080	2,080
Tax relating to actuarial gain on defined benefit pension scheme		–	–	–	–	–	(502)	(502)
Profit for the year		–	–	–	–	–	6,275	6,275
Total comprehensive income for the year		–	–	–	–	415	7,853	8,268
Transactions with owners of the Company								
Options exercised		–	–	5	–	–	25	30
Equity-settled share-based payments, net of tax		–	–	–	–	–	559	559
Dividends paid	9	–	–	–	–	–	(2,547)	(2,547)
Total transactions with owners of the Company		–	–	5	–	–	(1,963)	(1,958)
Balance as at 31 December 2017		2,221	24,340	(26)	15	96	27,959	54,605
Balance as at 1 January 2018		**2,221**	**24,340**	**(26)**	**15**	**96**	**27,959**	**54,605**
Change in fair value of hedging instruments recognised in other comprehensive income		**–**	**–**	**–**	**–**	**(1,467)**	**–**	**(1,467)**
Reclassification to income statement – administrative expenses		**–**	**–**	**–**	**–**	**920**	**–**	**920**
Tax relating to effective portion of changes in fair value of cash flow hedges, net of reclassification		**–**	**–**	**–**	**–**	**93**	**–**	**93**
Actuarial loss on defined benefit pension scheme	23	**–**	**–**	**–**	**–**	**–**	**(1,449)**	**(1,449)**
Tax relating to actuarial loss on defined benefit pension scheme		**–**	**–**	**–**	**–**	**–**	**246**	**246**
Profit for the year		**–**	**–**	**–**	**–**	**–**	**9,034**	**9,034**
Total comprehensive (expense)/income for the year		**–**	**–**	**–**	**–**	**(454)**	**7,831**	**7,377**
Transactions with owners of the Company:		**–**	**–**	**–**	**–**	**–**	**–**	**–**
Options exercised		**–**	**–**	**5**	**–**	**–**	**26**	**31**
Proceeds from shares issued, net of expenses		**194**	**19,838**	**–**	**–**	**–**	**–**	**20,032**
Equity-settled share-based payments, net of tax		**–**	**–**	**–**	**–**	**–**	**998**	**998**
Dividends paid	9	**–**	**–**	**–**	**–**	**–**	**(2,707)**	**(2,707)**
Total transactions with owners of the Company		**194**	**19,838**	**5**	**–**	**–**	**(1,683)**	**18,354**
Balance as at 31 December 2018		**2,415**	**44,178**	**(21)**	**15**	**(358)**	**34,107**	**80,336**

The aggregate current and deferred tax relating to items that are debited to equity is £515k (2017: credit of £309k).

The notes on pages 72 to 107 form an integral part of these financial statements.

Notes

1. General information

Zotefoams plc (the 'Company') is a public limited company, which is listed on the London Stock Exchange and incorporated and domiciled in the UK. The registered office of the Company is 675 Mitcham Road, Croydon CR9 3AL.

The Company, its subsidiaries and joint venture (together referred to as the 'Group') is engaged in the manufacturing and sale of high-performance foams and licensing of related technology for specialist markets worldwide.

2. Significant accounting policies

The principal accounting policies applied in the preparation of these financial statements are set out below. These policies have been consistently applied to all of the years presented, unless otherwise stated.

2.1 Basis of preparation

The financial statements of Zotefoams plc have been prepared in accordance with International Financial Reporting Standards (IFRS) and IFRS Interpretations Committee (IFRS IC) interpretations, as adopted by the European Union and with the Companies Act 2006 applicable to companies reporting under IFRS. The financial statements have been prepared under the historical cost convention except for derivative financial instruments, which are measured at fair value through profit or loss.

The preparation of financial statements in conformity with IFRS requires the use of certain critical accounting estimates. It also requires management to exercise its judgement in the process of applying the Group's accounting policies. The areas involving a higher degree of judgement or complexity, or areas where assumptions and estimates are significant to the financial statements, are disclosed in note 26.

The Group has adopted IFRS 15 'Revenue from Contracts with Customers' which replaces existing accounting standards. It provides enhanced detail on the principle of recognising revenue to reflect the transfer of goods and services to customers at a value which the Group expects to be entitled to receive. The standard also updates revenue disclosure requirements. The standard has not had a material impact on the Group's revenue streams. The timing of the recognition of revenue for the Group's goods and services under IAS 18 is consistent with those adopted under IFRS 15.

The adoption of IFRS 9 'Financial Instruments' from 1 January 2018 has resulted in certain changes to the Group's accounting policies. IFRS 9 replaced the provisions of IAS 39 that relate to the recognition, classification and measurement of financial assets and financial liabilities, derecognition of financial instruments, impairment of financial assets and hedge accounting. In accordance with the transitional provisions in IFRS 9, comparative figures have not been restated and the Group has identified that there was no material impact on the Group's Retained earnings as at 1 January 2018. On the date of initial application, 1 January 2018, the Group's management has assessed which business models apply to the financial assets and financial liabilities held by the Group and has classified its financial instruments into the appropriate IFRS 9 categories. There were no material changes noted to the classes of financial assets and financial liabilities held by the Group. The Group's risk management strategies and hedge documentation are aligned with the requirements of IFRS 9. All hedge relationships designated under IAS 39 are treated as continuing hedges under IFRS 9 and there was no impact from the adoption of IFRS 9 on prior periods. The Group has financial assets that are subject to the new IFRS 9 expected credit loss model and the Group was required to revise its impairment methodology under IFRS 9 for these assets. The identified impairment change at 1 January 2018 was immaterial and the impact of the change in impairment methodology on the Group's Retained earnings was assessed as nil. From 1 January 2018, the Group assesses on a forward looking basis the expected credit losses associated with its financial assets carried at amortised cost. In the prior year, the impairment of trade receivables was assessed based on the incurred loss model. The Group established an allowance for impairment that represented its estimate of incurred losses where it was deemed that a receivable may not have been recoverable. When the asset was deemed irrecoverable the allowance account was written off against the underlying receivable.

i) Going concern

The Group meets its day-to-day working capital requirements through its banking facilities. The Group's forecasts and projections, taking account of reasonably possible changes in trading performance, show that the Group should be able to operate within the level of its current facilities. Having assessed the principal risks and the other matters discussed in connection with the Viability Statement, the Directors considered it appropriate to adopt the going concern basis of accounting in preparing the financial statements. Further information on the Group's borrowings is given in note 18.

2.2 Basis of consolidation

i) Subsidiaries

Subsidiaries are all entities over which the Group has control. The Group controls an entity when the Group is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. Subsidiaries are fully consolidated from the date on which control is transferred to the Group. They are deconsolidated from the date on which that control ceases.

ii) Transactions eliminated on consolidation

Intra-group balances and transactions, including any unrealised gains and losses or income and expenses arising from such transactions, are eliminated in preparing the consolidated financial statements. Unrealised losses are eliminated in the same way as unrealised gains, but only to the extent that there is no evidence of impairment. Where necessary, amounts reported by subsidiaries have been adjusted to conform with the Group's accounting policies.

iii) Acquisitions and disposals of non-controlling interests

Acquisitions and disposals of non-controlling interests that do not result in a change of control are accounted for as transactions with owners in their capacity as owners and therefore no goodwill is recognised as a result of such transactions. The adjustments to non-controlling interests are based on a proportionate amount of the net assets of the subsidiary. Any difference between the price paid or received and the amount by which non-controlling interests are adjusted is recognised directly in equity and attributed to the owners of the Company.

iv) Joint arrangements

The Group applies IFRS 11 to its joint arrangement. Under IFRS 11, investments in joint arrangements are classified as either joint operations or joint ventures, depending on the contractual rights and obligations of each investor. The Group has assessed the nature of its joint arrangement and determined it to be a joint venture.

Interest in the joint venture is accounted for using the equity method, after initially being recognised at cost.

Equity method

Under the equity method of accounting, the investment is initially recognised at cost and the carrying amount is increased or decreased to recognise the investor's share of the change in net assets of the investee after the date of acquisition.

If the ownership interest in the joint venture is reduced but joint control is retained, only a proportionate share of the amounts previously recognised in other comprehensive income is reclassified to profit or loss where appropriate.

The Group's share of post-acquisition profit or loss is recognised in the income statement, and its share of post-acquisition movements in other comprehensive income is recognised with a corresponding adjustment to the carrying amount of the investment. Where the Group's share of losses in the joint venture equals or exceeds its interest in the joint venture, including any other unsecured receivables, the Group does not recognise further losses, unless it has incurred legal or constructive obligations or made payments on behalf of the joint venture. Distributions received from the joint venture reduce the carrying amount of the investment.

2. Significant accounting policies (continued)

The Group determines at each reporting date whether there is any objective evidence that the investment in the joint venture is impaired. If this is the case, the Group calculates the amount of impairment as the difference between the recoverable amount of the joint venture and its carrying value, and it recognises the amount adjacent to 'share of profit/(loss) of joint venture' in the income statement.

Gains and losses resulting from upstream and downstream transactions between the Group and the joint venture are recognised in the Group's financial statements only to the extent of an unrelated investor's interests in the joint venture. Unrealised losses are eliminated unless the transaction provides evidence of an impairment of the asset transferred. Accounting policies of the joint venture have been aligned where necessary to ensure consistency with the policies adopted by the Group.

v) Accounting for business combinations

Business combinations are accounted for using the acquisition method as at the acquisition date, which is the date on which control is transferred to the Group. Control is the power to govern the financial and operating policies of an entity so as to obtain benefits from the activities. In assessing control, the Group takes into consideration potential voting rights that currently are exercisable.

For acquisitions on or after 1 January 2010, the Group measures goodwill at the acquisition date as:

- The fair value of the consideration transferred; plus
- The recognised amount of any non-controlling interests in the acquiree; plus
- If the business combination is achieved in stages, the fair value re-measured at acquisition date of the existing equally interest in the acquiree; less
- The net recognised amount (generally in fair value) of the identifiable assets acquired and liabilities assumed.

When the excess is negative, a bargain purchase gain is recognised immediately in the income statement. The consideration transferred does not include amounts related to the settlement of pre-existing relationships. Such amounts are generally recognised in the income statement. Costs related to the acquisition, other than those associated with the issue of debt or equity securities, that the Group incurs in connection with a business combination are expenses as incurred.

Any contingent consideration payable is recognised at fair value at the acquisition date. If the contingent consideration is classified as equity, it is not re-measured, and settlement is accounted for within equity. Otherwise, subsequent changes to the fair value of the contingent consideration are recognised in the income statement.

When share-based payment awards (replacement awards) are required to be exchanged for awards held by the acquire employees (acquiree awards) and relate to past services, then all or a portion of the amount of the acquirer replacement awards are included in measuring the consideration transferred in the business combination. This determination is based on the market-based value of the replacement awards compared with the market-based value of the acquiree awards and the extent to which the replacement awards relate to past and/or future services.

2.3 Foreign currency

i) Functional and presentation currency

Items included in the financial statements of each of the Group's entities are measured using the currency of the primary economic environment in which each entity operates ('the functional currency'). The consolidated financial statements are presented in sterling, which is the Group's presentation currency.

The Company's financial statements are prepared and presented in sterling, which is its functional currency.

ii) Transaction and balances

Foreign currency transactions are translated into the functional currency using the exchange rates prevailing at the dates of the transactions or valuation (where items are remeasured). Foreign exchange gains and losses resulting from the settlement of monetary assets and liabilities denominated in foreign currencies are recognised in the income statement, except when deferred in other comprehensive income as qualifying cash flow hedges. All foreign exchange gains and losses are presented in the income statement within administrative expenses.

Translation differences related to items classified through other comprehensive income are recognised in other comprehensive income, while remaining translation differences are recognised in the income statement.

iii) Group companies

The results and financial position of all of the Group entities (none of which has the currency of a hyper-inflationary economy) that have a functional currency different from the presentation currency are translated into the presentation currency as follows:

- assets and liabilities for each statement of financial position presented are translated at the closing rate at the date of that statement of financial position;
- income and expenses for each income statement are translated at average exchange rates (unless this average is not a reasonable approximation of the cumulative effect of the rates prevailing on the transaction dates, in which case income and expenses are translated at the rate on the dates of each transaction); and
- all resulting exchange differences are recognised in other comprehensive income.

Goodwill and fair value adjustments arising on the acquisition of a foreign entity are treated as assets and liabilities of the foreign entity, and they are translated at the closing rate. Exchange differences arising are recognised in other comprehensive income.

2.4 Derivative financial instruments

The Group uses derivative financial instruments to hedge its exposure to foreign exchange risks arising from operational, financing and investment activities. In accordance with its treasury policy, the Group does not hold or issue derivative financial instruments for trading purposes. However, derivatives that do not qualify for hedge accounting are accounted for as trading instruments.

Derivatives are initially recognised at fair value on the date when a derivative contract is entered into, and they are subsequently remeasured at their fair value. The method of recognising the resulting gain or loss depends on whether the derivative is designated as a hedging instrument and, if so, the nature of the item being hedged. The Group designates all derivatives as hedges of a particular risk associated with a recognised asset or liability or a highly probable forecast transaction (cash flow hedge).

At the inception of the transaction, the Group documents the relationship between hedging instruments and hedged items, as well as its risk management objectives and strategy for undertaking various hedging transactions. The Group also documents its assessment, both at hedge inception and on an ongoing basis, of whether the derivatives that are used in hedging transactions are highly effective in offsetting changes in fair values or cash flows of hedged items.

The fair values of various derivative instruments used for hedging purposes are disclosed in note 21. Movements on the hedging reserve in other comprehensive income are shown in note 21. The full fair value of a hedging derivative is classified as a non-current asset or liability where the remaining maturity of the hedged item is more than 12 months, and as a current asset or liability where the remaining maturity of the hedged item is less than 12 months. Trading derivatives are classified as a current asset or liability.

The fair value of forward exchange contracts is their quoted market price at the statement of financial position date, being the present value of the quoted forward price.

2. Significant accounting policies (continued)

i) Cash flow hedging

The effective portion of changes in the fair value of derivatives that are designated and qualify as cash flow hedges is recognised in other comprehensive income. The gain or loss relating to the ineffective portion is recognised immediately in the income statement within administrative expenses.

When a hedging instrument expires or is sold, terminated or exercised, or the entity revokes designation of the hedge relationship but the hedged forecast transaction is still expected to occur, the cumulative gain or loss at that point remains in equity and is recognised in accordance with the above policy when the transaction occurs. If the hedged transaction is no longer expected to occur the cumulative gain or loss that was reported in equity is immediately transferred to the income statement within administrative expenses.

2.5 Investments in subsidiaries and joint arrangements

The Company's investments in subsidiaries and joint arrangements are stated at cost less provision for impairment.

2.6 Property, plant and equipment

i) Owned assets

Items of property, plant and equipment are stated at cost or deemed cost less accumulated depreciation and any impairment losses.

When parts of an item of property, plant and equipment have different useful lives, those components are accounted for as separate items of property, plant and equipment.

Subsequent costs are included in the asset's carrying amount or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Group and the cost of the item can be measured reliably. The carrying amount of the replaced part is derecognised. All other repairs and maintenance are charged to the income statement during the financial year in which they are incurred.

The cost of assets under construction includes the cost of materials and direct labour, and any other costs directly attributable to bringing the asset to a working condition for its intended use.

ii) Depreciation

Land is not depreciated. Depreciation is charged to the income statement on a straight-line basis over the estimated useful lives of each part of the item of property, plant and equipment. The estimated useful lives are as follows:

Buildings	20 years
Plant and equipment	5–15 years
Fixtures and fittings	3–5 years

Assets under construction are depreciated from the beginning of the following quarter once the asset is ready for its intended use.

The assets' residual values and useful lives are reviewed, and adjusted if appropriate, at the end of each reporting period.

2.7 Intangible assets

i) Research and development

Expenditure on research activities undertaken with the prospect of gaining new scientific or technical knowledge and understanding is recognised in the income statement as an expense as incurred.

Development costs that are directly attributable to the design and testing of identifiable and unique products controlled by the Group are recognised as intangible assets where the following criteria are met:

- it is technically feasible to complete the asset so that it will be available for use;
- management intends to complete the asset and use or sell it;
- there is an ability to use or sell the asset;
- it can be demonstrated how the asset will generate probable future economic benefits;
- adequate technical, financial and other resources to complete the development and to use or sell the asset are available; and
- the expenditure attributable to the asset during its development can be reliably measured.

Directly attributable costs that are capitalised as part of the asset include the product development employee costs and an appropriate portion of relevant overheads.

Other development expenditures that do not meet these criteria are recognised as an expense as incurred. Development costs previously recognised as an expense are not recognised as an asset in a subsequent period.

ii) Goodwill

Goodwill represents the excess of the cost of acquisition over the fair value of the Group's interest in the identifiable assets, liabilities and contingent liabilities acquired in a business combination. Goodwill is stated at the amount recognised on acquisition date less any accumulated impairment losses. Goodwill is tested annually for impairment or more frequently if there are indications that goodwill may be impaired.

iii) Software

Acquired computer software licences are capitalised on the basis of the costs incurred to acquire and bring to use the specific software.

iv) Other intangible assets

Intangible assets acquired from a business combination are capitalised at fair value as at the date of acquisition and amortised over their estimated useful economic life. Their carrying value is the fair value at acquisition less cumulative amortisation and any impairment. An intangible asset acquired as part of a business combination is recognised outside goodwill if the asset is separable or arises from contractual or other legal rights and its fair value can be measured reliably.

Development costs that are directly attributable to the design and development of internally generated intangible assets controlled by the group are recognised when the relevant criteria is met. Internally generated intangible assets are amortised from the point at which the asset is ready for use.

Expenditure on internally generated goodwill and brands is recognised in the income statement as an expense as incurred. Research expenditure and development expenditure that do not meet the criteria above are recognised as an expense as incurred. Development costs previously recognised as an expense are not recognised as an asset in a subsequent period.

2. Significant accounting policies (continued)

v) Amortisation

The estimated useful lives of the Group's intangible assets are as follows:

Marketing related	5–15 years
Customer related	2–10 years
Technology related	5–20 years
Software related	3–10 years
Capitalised development	3–10 years, from the date the patent is granted

Amortisation methods, useful lives and residual values are reviewed at each reporting date and adjusted if appropriate.

2.8 Financial assets

i) Classifications

Until 31 December 2017, the Group classified its financial assets in the following categories: a) financial assets at fair value through profit or loss; and b) loans and receivables. From 1 January 2018 the Group classifies its financial assets in the following categories: a) those to be measured subsequently at fair value; and b) those to be measured at amortised cost.

The classification depends on the purpose for which the financial assets were acquired. Management determines the classification of its financial assets at initial recognition.

a) Financial assets subsequently measured at fair value through profit or loss

Financial assets at fair value through profit or loss are financial assets held for trading. A financial asset is classified in this category if acquired principally for the purpose of selling in the short term. Derivatives are also categorised as held for trading, unless they are designated as hedges. Assets in this category are classified as current assets if expected to be settled within 12 months, otherwise they are classified as non-current assets.

b) Financial assets at amortised cost

Financial assets at amortised cost are held for collection of contractual cash flows where those cash flows represent solely payments of principal and interest are measured at amortised cost.

ii) Recognition and measurement

Financial assets not carried at fair value through profit or loss are initially recognised at fair value plus transaction costs. Financial assets carried at fair value through profit or loss are initially recognised at fair value, and transaction costs are expensed in the income statement. Financial assets are derecognised when the rights to receive cash flows from the investments have expired or have been transferred, and the Group has transferred substantially all risks and rewards of ownership. Interest income from financial assets at amortised cost is included in finance income using the effective interest rate method. Any gain or loss arising on derecognition is recognised directly in profit or loss and presented in other gains/(losses) together with foreign exchange gains and losses. Impairment losses are presented as separate line item in the statement of profit or loss.

Gains or losses arising from changes in the fair value of the 'financial assets at fair value through profit or loss' category are presented in the income statement within administrative expenses in the period in which they arise.

iii) Offsetting financial instruments

Financial assets and liabilities are offset, and the net amount is reported in the statement of financial position, when there is a legally enforceable right to offset the recognised amounts and there is an intention to settle on a net basis or realise the asset and settle the liability simultaneously. The legally enforceable right must not be contingent on future events, and it must be enforceable in the normal course of business and in the event of default, insolvency or bankruptcy of the Group or the counterparty.

iv) Impairment of financial assets carried at amortised cost

Until 31 December 2017 the Group assessed at the end of each reporting period whether there was objective evidence that a financial asset or group of financial assets was impaired. A financial asset or a group of financial assets were impaired and impairment losses were incurred only if there was objective evidence of impairment as a result of one or more events that occurred after the initial recognition of the asset (a 'loss event'), and that loss event (or events) had an impact on the estimated future cash flows of the financial asset or group of financial assets that would be reliably estimated.

Evidence of impairment might include indications that the debtors or a group of debtors were experiencing significant financial difficulty, default or delinquency in interest or principal payments, the probability that they might enter bankruptcy or other financial reorganisation, and where observable data indicated that there was a measurable decrease in the estimated future cash flows, such as changes in arrears or economic conditions that correlate with defaults.

For loans and receivables, the amount of the loss was measured as the difference between the asset's carrying amount and the present value of estimated future cash flows (excluding future credit losses that had not been incurred) discounted at the financial asset's original effective interest rate. The carrying amount of the asset was reduced and the amount of the loss recognised in the income statement.

If, in a subsequent period, the amount of the impairment loss decreased and the decrease could be related objectively to an event occurring after the impairment was recognised (such as an improvement in the debtor's credit rating), the reversal of the previously recognised impairment loss was recognised in the income statement.

From 1 January 2018, the Group assesses on a forward looking basis the expected credit losses associated with its debt instruments carried at amortised cost. The impairment methodology applied depends on whether there has been a significant increase in credit risk. For trade receivables, the Group applies the simplified approach permitted by IFRS 9, which requires expected lifetime losses to be recognised from initial recognition of the receivables. Further details are provided in note 21.

2.9 Trade and other receivables

Trade receivables are amounts due from customers for goods sold or services performed in the ordinary course of business. If collection is expected in one year or less (or in the normal operating cycle of the business, if longer), they are classified as current assets. If not, they are presented as non-current assets.

Trade receivables are recognised initially at fair value and subsequently measured at amortised cost using the effective interest method, less provision for impairment.

2.10 Inventories

Inventories are stated at the lower of cost and net realisable value. Net realisable value is the estimated selling price in the ordinary course of business, less the estimated costs of completion and selling expenses.

In determining the cost of raw materials, consumables and goods purchased for resale, the weighted average purchase price is used. The cost of finished goods and work in progress comprises design costs, raw materials, direct labour, other direct costs and related production overheads (based on normal operating capacity), but excludes borrowing costs. For work in progress and finished goods manufactured by the Group, cost is taken as production cost, which includes an appropriate proportion of attributable overheads.

2.11 Cash and cash equivalents

Cash and cash equivalents comprise cash balances and short-term highly liquid investments with an original maturity of three months or less. Bank overdrafts that are repayable on demand and form an integral part of the Group's cash management are included as a component of cash and cash equivalents for the purposes of the statement of cash flows.

2. Significant accounting policies (continued)

2.12 Impairment of non-financial assets

The carrying amounts of the Group's non-financial assets are reviewed at each statement of financial position date where there is an indication that the asset may be impaired. If any such indication exists, the asset's recoverable amount is estimated (see below).

For goodwill, property, plant and equipment and intangible assets that have indefinite useful lives or that are not yet available for use, the recoverable amount is estimated each year at the same time. An impairment loss is recognised if the carrying amount of an asset or its related cash-generating unit ('CGU') exceeds its estimated recoverable amount.

i) Calculation of recoverable amount

The recoverable amount of an asset or CGU is the greater of its value in use and its fair value less costs to sell. In assessing value in use, the estimated future cash flows are discounted to their present value using a discount rate that reflects current market assessments of the time value of money and the risks specific to the asset or CGU. For the purpose of impairment testing, assets that cannot be tested individually are grouped together into the smallest group of assets that generates cash inflows from continuing use that are largely independent of the cash inflows of other assets or CGUs. Subject to an operating segment ceiling test, for the purposes of goodwill impairment testing, CGUs to which goodwill has been allocated are aggregated so that the level at which impairment testing is performed reflects the lowest level at which goodwill is monitored for internal reporting purposes. Goodwill acquired in a business combination is allocated to groups of CGUs that are expected to benefit from the synergies of the combination.

The Group's corporate assets do not generate separate cash inflows and are utilised by more than one CGU. Corporate assets are allocated to CGUs on a reasonable and consistent basis and tested for impairment as part of the testing of the CGU to which the corporate asset is allocated.

ii) Impairment losses

Impairment losses are recognised in the income statement. Impairment losses recognised in respect of CGUs are allocated first to reduce the carrying amount of any goodwill allocated to the CGU (or group of CGUs), and then to reduce the carrying amounts of the other assets in the CGU (or group of CGUs) on a pro rata basis.

iii) Reversal of impairment

An impairment loss in respect of goodwill is not reversed. In respect of other assets, impairment losses recognised in prior years are assessed at each reporting date for any indications that the loss has decreased or no longer exists. An impairment loss is reversed if there has been a change in the estimates used to determine the recoverable amount. An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortisation, if no impairment loss had been recognised.

2.13 Dividends

Final dividends are recognised as a liability in the period in which they are approved. Interim dividends are recognised when paid.

2.14 Interest-bearing loans and borrowings

Interest-bearing borrowings are recognised initially at fair value less attributable transaction costs. Subsequent to initial recognition, interest-bearing borrowings are stated at amortised cost with any differences between cost and redemption values being recognised in the income statement over the period of the borrowings on an effective interest basis, where material.

2.15 Employee benefits

i) Defined contribution plans

A defined contribution plan is a pension plan under which the Group pays fixed contributions into a separate entity. The Group has no legal or constructive obligations to pay further contributions if the fund does not hold sufficient assets to pay all employees the benefits relating to employee service in the current and prior periods. Obligations for contributions to defined contribution pension plans are recognised as an expense in the income statement as incurred.

For defined contribution plans, the Group pays contributions to publicly or privately administered pension insurance plans on a mandatory, contractual or voluntary basis. The Group has no further payment obligations once the contributions have been paid. The contributions are recognised as employee benefit expense when they are due. Prepaid contributions are recognised as an asset to the extent that a cash refund or a reduction in the future payments is available.

ii) Defined benefits plans

A defined benefit plan is a pension plan that is not a defined contribution plan. Typically, defined benefit plans define an amount of pension benefit that an employee will receive on retirement, usually dependent on one or more factors, such as age, years of service and compensation.

The liability recognised in the statement of financial position in respect of defined benefit pension plans is the present value of the defined benefit obligation at the end of the reporting period, less the fair value of plan assets. The defined benefit obligation is calculated annually by independent actuaries using the projected unit credit method. The present value of the defined benefit obligation is determined by discounting the estimated future cash outflows using AA credit rate bonds that have terms to maturity approximating to the terms of the related pension obligation.

The current service cost of the defined benefit plan, recognised in 'staff expenses' in the income statement, except where included in the cost of an asset, reflects the increase in the defined benefit obligation resulting from service in the current year, benefit changes, curtailments and settlements.

Past service costs are recognised immediately in the income statement.

The net interest cost is calculated by applying the discount rate to the net balance of the defined benefit obligation and the fair value of plan assets. This cost is included in finance costs in the income statement.

Actuarial gains and losses arising from experience adjustments and changes in actuarial assumptions are charged or credited to equity in other comprehensive income in the period in which they arise.

2. Significant accounting policies (continued)

2.16 Share-based payment transactions

The Company operates a number of equity-settled, share-based compensation plans, under which the entity receives services from employees as consideration for equity instruments (share awards) of the Company. The fair value of the employee services received in exchange for the grant of the share awards is recognised as an expense. The total amount to be expensed is determined by reference to the fair value of the share awards granted:

- including any market performance conditions (for example, an entity's share price);
- excluding the impact of any service and non-market performance vesting conditions (for example, profitability, sales growth targets, and remaining an employee of the entity over a specified time period); and
- including the impact of any non-vesting conditions (for example, the requirement for employees to save or hold shares for a specific period of time).

Share awards granted since 1 January 2006 are valued using a Black-Scholes model.

At the end of each reporting period, the Company revises its estimates of the number of share awards that are expected to vest based on the non-market vesting conditions and service conditions. It recognises the impact of the revision to original estimates, if any, in the income statement, with a corresponding adjustment to equity.

In addition, in some circumstances, employees might provide services in advance of the grant date, and so the grant date fair value is estimated for the purposes of recognising the expense during the period between service commencement and grant date.

When the share awards vest or are exercised, the Employee Benefit Trust (EBT) will normally release the shares to the participant. This may involve selling all, or a portion of, the shares. The proceeds received from the sale, net of any directly attributable transaction costs, are credited to share capital (nominal value) and share premium.

The grant by the Company of share awards over its equity instruments to the employees of subsidiary undertakings in the Group is treated as a capital contribution. The fair value of employee services received, measured by reference to the grant date fair value, is recognised over the vesting period as an increase to investment in subsidiary undertakings, with a corresponding credit to equity in the parent entity accounts.

Any social security contributions payable in connection with the grant of the share awards are considered an integral part of the grant itself, and the charge will be treated as a cash-settled transaction.

Own shares held by Employee Benefit Trust (EBT)

Transactions of the Company-sponsored EBT are treated as being those of the Company and are therefore reflected in the financial statements. In particular, the EBT's purchase and sale of shares in the Company are debited and credited directly to equity.

2.17 Trade and other payables

Trade and other payables are obligations to pay for goods or services that have been acquired in the ordinary course of business from suppliers.

Trade and other payables are classified as current liabilities if payment is due within one year or less (or in the normal operating cycle of the business, if longer). If not, they are presented as non-current liabilities. Trade and other payables are stated at cost.

Trade and other payables are recognised initially at fair value and subsequently measured at amortised cost using the effective interest method.

2.18 Borrowing costs

General and specific 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 get ready for their intended use or sale, are added to the cost of those assets, until such time as the assets are substantially ready for their intended use or sale.

Investment income earned on the temporary investment of specific borrowings, pending their expenditure on qualifying assets, is deducted from the borrowing costs eligible for capitalisation. All other borrowing costs are recognised in the income statement in the period in which they are incurred.

2.19 Revenue

Revenue comprises of sale of foam, sale of equipment and licence and royalty income. All these revenue streams are revenues arising from contracts with customers. The recognition and measurement principles of IFRS 15 are applied as set out below.

Revenue excludes inter-company revenues and value added taxes and are stated net of discounts and returns.

i) Sale of foam

Revenue from sale of foam is recognised when the control of the goods has been transferred to a third party. This usually occurs when title passes to the customer, either on shipment or on receipt of goods by the customer, depending on agreed trading terms.

ii) Sale of equipment

Revenue from sale of equipment is recognised when the control of the goods has been transferred to a third party. This usually occurs when title passes to the customer, either on shipment or on receipt of goods by the customer, depending on agreed trading terms.

iii) Licence and royalty income

Revenue from usage-based royalties in exchange for a licence of the Group's technology is recognised at the later of when the performance obligation is satisfied and when the sale or usage occurs. Licence revenue from contracts to provide access to the Group's technology are recognised over time.

2.20 Leases

i) Operating lease payments

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

ii) Finance lease payments

The Group leases certain property, plant and equipment. Leases of property, plant and equipment, where the Group has substantially all of the risks and rewards of ownership, are classified as finance leases. Finance leases are capitalised, at the lease's commencement, at the lower of the fair value of the leased property and the present value of the minimum lease payments.

Each lease payment is allocated between the liability and finance charges. The corresponding rental obligations, net of finance charges, are included in other long-term payables. The interest element of the finance cost is charged to the income statement over the lease period so as to produce a constant periodic rate of interest on the remaining balance of the liability for each period. The property, plant and equipment acquired under finance leases is depreciated over the shorter of the useful life of the asset and the lease term.

2. Significant accounting policies (continued)

2.21 Current and deferred tax

Tax expense for the period comprises current and deferred tax. Tax is recognised in the income statement except to the extent that it relates to items recognised directly in other comprehensive income or directly in equity, in which case it is recognised in other comprehensive income or directly in equity, respectively.

The current tax charge is calculated on the basis of the tax laws enacted at the statement of financial position date in the countries where the Group operates and generates taxable income. Management periodically evaluates positions taken in tax returns with respect to situations in which applicable tax regulation is subject to interpretation. It establishes provisions, where appropriate, on the basis of amounts expected to be paid to the tax authorities.

Deferred tax is recognised on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the financial statements. However, deferred tax liabilities are not recognised if they arise from the initial recognition of goodwill; deferred tax is not accounted for if it arises from initial recognition of an asset or liability in a transaction other than a business combination that, at the time of the transaction, affects neither accounting nor taxable profit or loss. Deferred tax is determined using tax rates (and laws) that have been enacted or substantively enacted by the statement of financial position date and are expected to apply when the related deferred tax asset is realised or the deferred tax liability is settled.

Deferred tax assets are recognised only to the extent that it is probable that future taxable profit will be available against which the temporary differences can be utilised.

Deferred tax liabilities are provided on taxable temporary differences arising from investments in subsidiaries and joint arrangements, except for any deferred tax liability where the timing of the reversal of the temporary difference is controlled by the Group and it is probable that the temporary difference will not reverse in the foreseeable future.

Deferred tax assets are recognised on deductible temporary differences arising from investments in subsidiaries and joint arrangements only to the extent that it is probable that the temporary difference will reverse in the future and there is sufficient taxable profit available against which the temporary difference can be utilised.

Deferred tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets against current tax liabilities and when the deferred tax assets and liabilities relate to income taxes levied by the same taxation authority on either the same taxable entity or different taxable entities and there is an intention to settle the balances on a net basis.

2.22 Share capital

Ordinary shares are classified as equity. Incremental costs directly attributable to the issue of new ordinary shares or options are shown in equity as a deduction, net of tax, from the proceeds.

Where any group company purchases the Company's equity share capital (treasury shares), the consideration paid, including any directly attributable incremental costs (net of income tax) is deducted from equity attributable to the Company's equity holders until the shares are cancelled or reissued. Where such ordinary shares are subsequently reissued, any consideration received, net of any directly attributable incremental transaction costs and the related income tax effects, is included in equity attributable to the Company's equity holders.

2.23 Exceptional items

Exceptional items are disclosed separately in the financial statements, where it is necessary to do so to provide further understanding of the financial performance of the Group. Theses are items that are material, either because of their size or their nature, or that are non-recurring, and are presented within the line items to which they best relate.

2.24 New standards and interpretations not yet adopted

The IASB and IFRS Interpretations Committee have issued the following standards and interpretations with an effective date of implementation for accounting periods beginning after the date on which the Group's financial statements for the current year commenced.

Effective after 31 December 2018	Effective for accounting periods beginning on or after	Endorsed by the EU
New standards		
IFRS 16 'Leases'	1 January 2019	Yes
IFRS 17 'Insurance contracts'	1 January 2021	No

	Effective for accounting periods beginning on or after	Endorsed by the EU
Amendments		
IFRS 9 'Financial instruments'	1 January 2019	Yes
IAS 28 'Investments in associates'	1 January 2019	Yes
IFRIC 23 'Uncertainty over income tax'	1 January 2019	Yes
IAS 19 'Employee benefits'	1 January 2019	No
IFRS 3 'Business combinations'	1 January 2019	No
IFRS 11 'Joint arrangements'	1 January 2019	No
IAS 12 'Income taxes'	1 January 2019	No
IAS 23 'Borrowing costs'	1 January 2019	No
IAS 1 'Presentation of financial statements'	1 January 2020	No
IAS 8 'Accounting policies'	1 January 2020	No
References to the Conceptual Framework in IFRS Standards	1 January 2020	No

IFRS 16 will be implemented by the Group from 1 January 2019. The Standard will replace IAS 17 'Leases' and will require lease liabilities and 'right of use' assets to be recognised on the balance sheet for almost all leases. The potential impact of IFRS 16 for the Group has been assessed as immaterial.

IFRS 17 is not applicable to the Group, as it does not issue insurance or investment contracts.

3. Segment reporting

The Group's operating segments are reported in a manner consistent with the internal reporting provided to and regularly reviewed by the Group Chief Executive Officer, David Stirling, who is considered to be the 'chief operating decision maker' for the purpose of evaluating segment performance and allocating resources. The Group Chief Executive Officer primarily uses a measure of profit for the year (before exceptional item) to assess the performance of the operating segments.

The Group manufactures and sells high-performance foams and licenses related technology for specialist markets worldwide. Zotefoams' activities are categorised as follows:

- Polyolefin foams: these foams are made from olefinic homopolymer and copolymer resin. The most common resin used is polyethylene.
- High-Performance Products ('HPP'): these foams exhibit high performance on certain key properties, such as improved chemical, flammability, temperature or energy management performance. Turnover in the segment is currently mainly derived from products manufactured from three main polymer types: PVDF fluoropolymer, polyamide (nylon) and polyether block amide (PEBA). Foams are sold under the brand name ZOTEK®, while technical insulation products manufactured from certain materials are branded as T-FIT®.
- MuCell Extrusion LLC ('MEL'): licenses microcellular foam technology and sells related machinery.

	Polyolefin foams		HPP		MEL		Eliminations		Consolidated	
	2018 £'000	2017 £'000	**2018 £'000**	2017 £'000	**2018 £'000**	2017 £'000	**2018 £'000**	2017 £'000	**2018 £'000**	2017 £'000
Group revenue	**57,158**	52,821	**22,009**	13,148	**1,945**	4,254	**(75)**	(77)	**81,037**	70,146
Segment profit/(loss) pre-amortisation	**9,448**	10,291	**5,814**	3,157	**(1,628)**	(1,031)	**–**	–	**13,634**	12,417
Amortisation of acquired intangible assets	**–**	–	**–**	–	**(262)**	(327)	**–**	–	**(262)**	(327)
Segment profit/(loss)	**9,448**	10,291	**5,814**	3,157	**(1,890)**	(1,358)	**–**	–	**13,372**	12,090
Foreign exchange gains/(losses)	**–**	–	**–**	–	**–**	–	**–**	–	**818**	(319)
Unallocated central costs	**–**	–	**–**	–	**–**	–	**–**	–	**(2,616)**	(2,397)
Operating profit before exceptional item									**11,574**	9,374
Financing costs	**–**	–	**–**	–	**–**	–	**–**	–	**(753)**	(508)
Share of loss from joint venture	**(16)**	(53)	**–**	–	**–**	–	**–**	–	**(16)**	(53)
Taxation (before exceptional item)	**–**	–	**–**	–	**–**	–	**–**	–	**(2,164)**	(1,780)
Profit for the year (before exceptional item)									**8,641**	7,033
Segment assets	**94,663**	76,400	**22,826**	15,071	**7,922**	8,342	**–**	–	**125,411**	99,813
Unallocated assets	**–**	–	**–**	–	**–**	–	**–**	–	**1,490**	451
Total assets									**126,901**	100,264
Segment liabilities	**(37,114)**	(37,280)	**(1,714)**	(1,101)	**(447)**	(591)	**–**	–	**(39,275)**	(38,972)
Unallocated liabilities	**–**	–	**–**	–	**–**	–	**–**	–	**(2,545)**	(2,202)
Total liabilities									**(41,820)**	(41,174)
Depreciation	**3,894**	2,563	**339**	191	**83**	39	**–**	–	**4,316**	2,793
Amortisation	**384**	376	**–**	–	**382**	327	**–**	–	**766**	703
Capital expenditure:										
Property, plant and equipment (PPE)	**15,243**	10,921	**989**	673	**62**	255	**–**	–	**16,294**	11,849
Intangible assets	**17**	97	**243**	156	**34**	107	**–**	–	**294**	360

Unallocated assets and liabilities are made up of prepayments, corporation tax and deferred tax assets and liabilities.

Segment profit/(loss) is made up of operating profit/(loss) before foreign exchange gains/(losses) and unallocated central costs. Unallocated central costs are not directly attributable or cannot be allocated to a segment.

Segment profit/(loss) pre-amortisation only excludes amortisation on acquired intangible assets.

3. Segment reporting (continued)

Geographical segments

Polyolefin foams, HPP and MEL are managed on a worldwide basis but operate from UK, US and Asian locations. In presenting information on the basis of geographical segments, segmental revenue is based on the geographical location of customers. Segment assets are based on the geographical location of assets.

	United Kingdom £'000	Continental Europe £'000	North America £'000	Rest of the world £'000	Total £'000
For the year ended 31 December 2018					
Group revenue from external customers	**13,137**	**29,342**	**21,340**	**17,218**	**81,037**
Non-current assets	**38,816**	**1,488**	**33,842**	**416**	**74,562**
Capital expenditure – PPE	**11,048**	**1,488**	**3,677**	**81**	**16,294**
For the year ended 31 December 2017					
Group revenue from external customers	12,679	26,201	21,104	10,162	70,146
Non-current assets	30,028	–	30,372	397	60,797
Capital expenditure – PPE	3,708	–	7,744	397	11,849

Non-current assets do not include deferred tax assets or investments in joint ventures.

Major customer

Revenues from one customer of the Group located in 'Rest of the World' contributes £10,092k (2017: £5,510k) to the Group's revenue.

Analysis of revenue by category

Breakdown of revenues by products and services for the Group:

	2018 £'000	2017 £'000
Sale of foam	**79,167**	65,969
Licence and royalty income	**895**	1,008
Sale of equipment	**1,050**	3,246
Less: eliminations	**(75)**	(77)
Group revenue	**81,037**	70,146

Of the above, licence and royalty income includes £295k (2017: £349k) recognised over time, while remaining revenue of £80,742k (2017: £69,797k) was recognised at a point in time. Contract assets and liabilities related to contracts with customers are not considered material at the year end (2017: immaterial).

4. Exceptional item

	2018 £'000	2017 £'000
Increase in past service costs	**950**	1,265

During the current year, following a High Court ruling regarding GMP equalisation, the Company has provided £940k for additional liabilities in its defined benefit pension scheme based on calculations by the Company's actuaries and £10k for related expenses. This cost has been included in the income statement as an exceptional operating item.

In the prior year, following legal advice received by the pension trustees and an estimate calculated by the actuaries, the Company provided £1,235k for potential additional liabilities in its defined benefit pension scheme and £30k for related expenses. This cost was included in the income statement as an exceptional operating item.

5. Expenses by nature

	2018 £`000	2017 £`000
Included in profit for the year are:		
Changes in inventories of finished goods and work in progress	**1,197**	2,290
Operating lease charges (note 22)	**415**	633
Amortisation (note 12)	**766**	701
Depreciation (note 11)	**4,316**	2,793
Research and development costs expensed	**1,107**	1,207
Development costs capitalised	**(243)**	(156)
Net exchange (gains)/losses	**(818)**	319
External auditors' remuneration:		
Group – Fees payable to the Group's external auditors and its associates for the audit of the Company and consolidated financial statements*	**205**	106
Fees payable to the external auditors and its associates in respect of other services:		
– audit-related assurance services	**17**	17
Total cost of sales, distribution costs and administrative expenses	**70,413**	62,037

* Includes fees of £60k for the audit of the financial statements for the year ended 31 December 2017 (2017: £nil).

6. Staff numbers and expenses

The average number of people employed by the Group and Company (including Executive Directors) during the year, analysed by category, was as follows:

	Number of employees			
	Group		Company	
	2018	2017	**2018**	2017
Production	**204**	179	**148**	140
Maintenance	**28**	21	**22**	15
Distribution and marketing	**74**	61	**44**	37
Administration and technical	**110**	99	**86**	76
	416	360	**300**	268

The aggregate payroll costs of these persons were as follows:

	Group		Company	
	2018 £'000	2017 £'000	**2018 £'000**	2017 £'000
Wages and salaries*	**17,090**	15,529	**12,425**	11,870
Social security costs*	**2,108**	1,758	**1,225**	1,198
Share options granted to directors and employees (note 24)	**822**	459	**696**	391
Pension costs, including past service costs (note 23)	**2,072**	2,115	**1,948**	1,968
	22,092	19,861	**16,294**	15,427
* Net of directly attributable costs capitalised	**668**	693	**287**	73

Notes Continued

6. Staff numbers and expenses (continued)

Details of aggregate directors' emoluments are provided below:

	2018 £'000	2017 £'000
Aggregate emoluments	**568**	657
Aggregate gains made on the exercise of the share options	**306**	98
Aggregate amounts receivable under long-term incentive schemes	**730**	231
Company contribution to money purchase pension scheme	**56**	52
	1,660	1,038

Further details on directors' emoluments, including details of the highest-paid director, are included in the Remuneration report on pages 46 to 55.

7. Finance costs

	2018 £'000	2017 £'000
On bank loans and overdrafts	**613**	315
Interest on defined benefit pension obligation	**140**	193
	753	508

8. Income tax expense

	Note	2018 £'000	2017 £'000
UK corporation tax		**2,452**	1,556
Overseas tax		**20**	14
Adjustment in respect of prior years		**117**	–
Total current tax		**2,589**	1,570
Deferred tax	19	**(586)**	(30)
Income tax expense		**2,003**	1,540

Factors affecting the tax charge

The weighted average applicable tax rate for the Group is 17.99% (2017: 18.54%). Differences arise on account of the following factors:

	2018 £'000	2017 £'000
Tax reconciliation		
Profit before tax	**9,855**	7,548
Tax at 17.99% (2017: 18.54%)	**1,773**	1,400
Effects of:		
Expenses not deductible for tax purposes	**13**	17
Research and development and other tax credits	**(171)**	(229)
Overseas tax losses for which no deferred income tax asset recognised	**344**	334
Re-measurement of deferred tax – change in tax rate	**–**	18
Other differences	**(73)**	–
Adjustments to prior year UK corporation tax charge	**117**	–
	2,003	1,540

8. Income tax expense (continued)

Changes to the UK corporation tax rates were enacted as part of the Finance Bill 2017. These include reductions to the main rate to reduce the rate to 17% from 1 April 2020. Deferred taxes at the statement of financial position date have been measured using these enacted tax rates and reflected in these financial statements.

The Tax Cuts and Jobs Act ("US Tax Reform"), enacted on 22 December 2017, reduced the US federal corporate income tax rate from 35% to 21%. Deferred taxes at the statement of financial position date have been measured using these enacted tax rates and reflected in these financial statements.

The Group has not identified any uncertain tax positions as at 31 December 2018 (2017: none).

9. Dividends and earnings per share

	2018 **£'000**	2017 £'000
Prior year final dividend of 4.02p (2016: 3.90p) per 5.0p ordinary share	**1,763**	1,710
Interim dividend of 1.97p (2017: 1.91p) per 5.0p ordinary share	**944**	837
Dividends paid during the year	**2,707**	2,547

The proposed final dividend for the year ended 31 December 2018 of 4.15p per share (2017: 4.02p) is subject to approval by shareholders at the AGM and has not been recognised as a liability in these financial statements. The proposed dividend would amount to £1,988k if paid to all shareholders on the Company register at the close of business on 26 April 2019.

Earnings per ordinary share

Earnings per ordinary share is calculated by dividing consolidated profit after tax attributable to equity holders of the Company of £7,852k (2017: £6,008k) by the weighted average number of shares in issue during the year, excluding own shares held by the EBT which are administered by independent trustees. The number of shares held in the trust at 31 December 2018 was 403,758 (2017: 521,351). Distribution of shares from the trust is at the discretion of the trustees. Diluted earnings per ordinary share adjusts for the potential dilutive effect of share option schemes in accordance with IAS 33 Earnings per Share.

	2018	2017
Weighted average number of ordinary shares in issue	**46,310,356**	43,845,843
Adjustments for share options	**722,503**	585,512
Diluted number of ordinary shares issued	**47,032,859**	44,431,355

10. Investments in joint venture

During 2013 the Group entered into joint-venture arrangements with INOAC Corporation. As a result the Group has a 50% interest in Azote Asia Limited (a private company incorporated in Hong Kong) and Inoac Zotefoams Korea Limited (incorporated in South Korea). Azote Asia Limited commenced trading in 2014 and is the exclusive distributor of Zotefoams' AZOTE® products in the Far East. The registered address is 1318-22, Park-In Commercial Centre, 56 Dundas Street, Kowloon, Hong Kong. Inoac Zotefoams Korea Limited remains non-trading. Azote Asia Limited is the exclusive distributor of Zotefoams' Azote® products in the Far East. Azote Asia Limited works closely with its customers to develop products and find innovative solutions to meet their business needs through an ongoing commitment to quality, sustained value and customer service. As at the end of the year there were no contingent liabilities relating to the Group's interest in the joint venture.

The joint venture has share capital consisting solely of ordinary shares, which is held directly by the Group. Azote Asia Limited is a private company and there is no quoted market price available for its shares.

A summarised statement of financial position of Inoac Zotefoams Korea Limited is not presented as the company is dormant.

Set out below is the summarised financial information for Azote Asia Limited, which is accounted for using the equity method.

Summarised statement of financial position:

	As at 31 December	
	2018 **£'000**	2017 £'000
Cash and cash equivalents	**730**	1,155
Other current assets (excluding cash)	**1,009**	566
Total current assets	**1,739**	1,721
Financial liabilities (excluding trade payables)	**(12)**	(19)
Other current liabilities (including trade payables)	**(1,581)**	(1,524)
Total current liabilities	**(1,593)**	(1,543)
Net assets	**146**	178

10. Investments in joint venture (continued)

Summarised statement of comprehensive income:

	As at 31 December	
	2018 **£'000**	2017 £'000
Revenue	**3,169**	3,180
Finance costs	**(2)**	(1)
Loss before tax	**(32)**	(106)
Income tax expense	**–**	–
Loss after tax	**(32)**	(106)
Other comprehensive income	**–**	–
Total comprehensive expense	**(32)**	(106)
Dividend received from joint venture	**–**	–

The information above reflects the amounts presented in the financial statements of the joint venture. There are no material differences in accounting policies between the Group and the joint venture.

Reconciliation of the summarised financial information presented to the carrying amount of the interest in the joint venture is provided below:

	2018 **£'000**	2017 £'000
Opening net assets	**178**	284
Loss for the year	**(32)**	(106)
Other comprehensive income	**–**	–
Closing net assets	**146**	178
Interest in joint venture @ 50%	**73**	89

	2018 **£'000**	2017 £'000
Information of the joint venture		
Carrying value at 1 January	**89**	142
Share of loss for the year	**(16)**	(53)
Carrying value at 31 December	**73**	89

11. Property, plant and equipment

Group

	Land and buildings £'000	Plant and equipment £'000	Fixtures and fittings £'000	Leased machinery £'000	Under construction £'000	Total £'000
Cost						
Balance at 1 January 2017	16,587	56,061	7,115	–	27,011	106,774
Additions	801	1,489	11	432	9,116	11,849
Disposals	–	(1,276)	–	–	–	(1,276)
Reclassifications from under construction	–	7,041	347	–	(7,388)	–
Effect of movement in foreign exchange	(732)	(1,022)	(72)	–	(1,489)	(3,315)
Balance at 31 December 2017	16,656	62,293	7,401	432	27,250	114,032
Balance at 1 January 2018	**16,656**	**62,293**	**7,401**	**432**	**27,250**	**114,032**
Additions	**–**	**1,670**	**155**	**–**	**14,468**	**16,294**
Disposals	**(920)**	**(4,062)**	**(2,474)**	**–**	**–**	**(7,456)**
Reclassifications from under construction	**2,768**	**18,415**	**640**	**–**	**(21,823)**	**–**
Transfers	**–**	**–**	**(2,469)**	**–**	**2,469**	**–**
Effect of movement in foreign exchange	**480**	**2,497**	**44**	**–**	**358**	**3,379**
Balance at 31 December 2018	**18,984**	**80,813**	**3,297**	**432**	**22,722**	**126,249**
Accumulated depreciation						
Balance at 1 January 2017	10,935	44,341	3,998	–	–	59,274
Depreciation charge for the year	487	2,015	242	49	–	2,793
Disposals	–	(1,270)	–	–	–	(1,270)
Effect of movement in foreign exchange	(374)	(389)	(118)	–	–	(881)
Balance at 31 December 2017	11,048	44,697	4,122	49	–	59,916
Balance at 1 January 2018	**11,048**	**44,697**	**4,122**	**49**	**–**	**59,916**
Depreciation charge for the year	**611**	**3,229**	**399**	**77**	**–**	**4,316**
Disposals	**(920)**	**(4,059)**	**(2,474)**	**–**	**–**	**(7,453)**
Effect of movement in foreign exchange	**222**	**1,574**	**66**	**–**	**–**	**1,862**
Balance at 31 December 2018	**10,961**	**45,441**	**2,113**	**126**	**–**	**58,641**
Net book value						
At 1 January 2017	5,652	11,720	3,117	–	27,011	47,500
At 31 December 2017 and 1 January 2018	5,608	17,596	3,279	383	27,250	54,116
At 31 December 2018	**8,023**	**35,372**	**1,184**	**306**	**22,722**	**67,608**

Depreciation is included in cost of sales in the income statement.

Lease rental expenses amounting to £116k (2017: £106k) and £299k (2017: £377k) relating to the lease of machinery and property, respectively, are included in the income statement (note 22).

During the year, the Group has capitalised borrowing costs amounting to £31k (2017: £219k) on qualifying assets. Borrowing costs were capitalised at the rate of its specific borrowings of 3.95% (2017: 3.95%)

Bank borrowings are secured on property, plant and equipment. Refer note 18 for details.

11. Property, plant and equipment (continued)

Company

	Land and buildings £'000	Plant and equipment £'000	Fixtures and fittings £'000	Leased machinery £'000	Under construction £'000	Total £'000
Cost						
Balance at 1 January 2017	10,590	48,707	6,349	–	10,374	76,020
Additions	–	1,310	2	432	2,348	4,092
Disposals	–	(31)	–	–	–	(31)
Reclassifications from under construction	–	7,041	347	–	(7,388)	–
Balance at 31 December 2017	10,590	57,027	6,698	432	5,334	80,081
Balance at 1 January 2018	**10,590**	**57,027**	**6,698**	**432**	**5,334**	**80,081**
Additions	**–**	**169**	**31**	**–**	**10,863**	**11,063**
Disposals	**(920)**	**(4,056)**	**(2,455)**	**–**	**–**	**(7,431)**
Reclassifications from under construction	**28**	**1,804**	**542**	**–**	**(2,374)**	**–**
Transfers	**–**	**–**	**(2,469)**	**–**	**2,469**	**–**
Balance at 31 December 2018	**9,698**	**54,944**	**2,347**	**432**	**16,292**	**83,713**
Accumulated depreciation						
Balance at 1 January 2017	7,350	38,776	3,417	–	–	49,543
Depreciation charge for the year	240	1,886	196	49	–	2,371
Disposals	–	(31)	–	–	–	(31)
Balance at 31 December 2017	7,590	40,631	3,613	49	–	51,883
Balance at 1 January 2018	**7,590**	**40,631**	**3,613**	**49**	**–**	**51,883**
Depreciation charge for the year	**226**	**2,043**	**311**	**77**	**–**	**2,657**
Disposals	**(920)**	**(4,055)**	**(2,455)**	**–**	**–**	**(7,430)**
Balance at 31 December 2018	**6,896**	**38,619**	**1,469**	**126**	**–**	**47,110**
Net book value						
At 1 January 2017	3,240	9,931	2,932	–	10,374	26,477
At 31 December 2017 and 1 January 2018	3,000	16,396	3,085	383	5,334	28,198
At 31 December 2018	**2,802**	**16,325**	**878**	**306**	**16,292**	**36,603**

12. Intangible assets

Group

	Marketing related £'000	Customer related £'000	Technology related £'000	Software related £'000	Goodwill £'000	Capitalised development £'000	Total £'000
Cost							
Balance at 1 January 2017	263	340	5,127	2,469	2,490	198	10,887
Additions	–	–	107	97	–	156	360
Effect of movement in foreign exchange	(23)	(29)	(533)	–	(235)	–	(820)
Balance at 31 December 2017	240	311	4,701	2,566	2,255	354	10,427
Balance at 1 January 2018	**240**	**311**	**4,701**	**2,566**	**2,255**	**354**	**10,427**
Additions	**–**	**–**	**34**	**17**	**–**	**243**	**294**
Effect of movement in foreign exchange	**8**	**85**	**195**	**(9)**	**126**	**–**	**405**
Balance at 31 December 2018	**248**	**396**	**4,930**	**2,574**	**2,381**	**597**	**11,126**
Accumulated amortisation							
Balance at 1 January 2017	160	340	2,199	641	–	–	3,340
Charge for the year	–	5	322	374	–	–	701
Effect of movement in foreign exchange	(29)	(60)	(206)	–	–	–	(295)
Balance at 31 December 2017	131	285	2,315	1,015	–	–	3,746
Balance at 1 January 2018	**131**	**285**	**2,315**	**1,015**	**–**	**–**	**3,746**
Charge for the year	**24**	**–**	**358**	**384**	**–**	**–**	**766**
Effect of movement in foreign exchange	**56**	**111**	**(68)**	**–**	**–**	**–**	**99**
Balance at 31 December 2018	**211**	**396**	**2,605**	**1,399**	**–**	**–**	**4,611**
Net book value							
At 1 January 2017	103	–	2,928	1,828	2,490	198	7,547
At 31 December 2017 and 1 January 2018	109	26	2,386	1,551	2,255	354	6,681
At 31 December 2018	**37**	**–**	**2,325**	**1,175**	**2,381**	**597**	**6,515**

Amortisation is included in cost of sales in the income statement.

Goodwill arising on acquisition is allocated to the cash generating unit ('CGU') that is expected to benefit, being MEL. The recoverable amount of the CGU has been determined based on value-in-use calculations. These calculations use pre-tax cash flow projections based on financial forecasts approved by management covering a five-year period. Cash flows beyond the five-year period are extrapolated using the estimated growth rates stated below. The growth rate does not exceed the long-term average growth rate for the business in which the CGU operates.

The key assumptions of long-term growth rate and discount rate used in the value-in-use calculations are as follows.

Key assumptions:

Sales growth and forecast contribution margin
This is based on past performance and management's expectations of market development over the five-year forecast period.

Other operating costs
These are the fixed costs of the CGU, which do not vary significantly with sales volumes or prices. Management forecasts these costs based on the current structure of the business, adjusting for inflationary increases, and these do not reflect any future restructurings or cost-saving measures.

Long-term growth rate 2.5%
This growth rate is based on a prudent assessment of past experience and future estimations of market expectations.

Discount rate 12%
The pre-tax discount rate applied to the cash flow forecasts for the CGU is derived from the estimated pre-tax weighted average cost of capital for the MEL CGU.

Sensitivity to changes in assumptions
There is sufficient headroom for the MEL CGU such that management believe no reasonable change in any of the above assumptions would cause the carrying value of MEL goodwill to exceed its recoverable amount.

12. Intangible assets (continued)

Company

	Customer related £'000	Software related £'000	Capitalised development £'000	Total £'000
Cost				
Balance at 1 January 2017	121	2,469	198	2,788
Additions	–	97	156	253
Balance at 31 December 2017	121	2,566	354	3,041
Balance at 1 January 2018	**121**	**2,566**	**354**	**3,041**
Additions	**–**	**8**	**243**	**251**
Balance at 31 December 2018	**121**	**2,574**	**597**	**3,292**
Accumulated amortisation				
Balance at 1 January 2017	121	641	–	762
Charge for the year	–	374	–	374
Balance at 31 December 2017	121	1,015	–	1,136
Balance at 1 January 2018	**121**	**1,015**	**–**	**1,136**
Charge for the year	**–**	**383**	**–**	**383**
Balance at 31 December 2018	**121**	**1,398**	**–**	**1,519**
Net book value				
At 1 January 2017	–	1,828	198	2,026
At 31 December 2017 and 1 January 2018	–	1,551	354	1,905
At 31 December 2018	**–**	**1,176**	**597**	**1,773**

13. Investment in subsidiaries

Company

	2018 £'000	2017 £'000
Shares in Group undertakings – at cost	**26,840**	26,840
Additions during the year	**3**	–
Provision against the value of investment in subsidiary	**(3,294)**	(3,294)
	23,549	23,546

During the year the Company, through its subsidiary Zotefoams International Limited, incorporated a new subsidiary Zotefoams Poland Sp. z.o.o on 7 June 2018.

13. Investment in subsidiaries (continued)

The following is a complete list of the subsidiary undertakings of the Company:

	Registered office	Ownership	Incorporated in:
Zotefoams International Limited	675 Mitcham Road, Croydon CR9 3AL	100%	Great Britain
Zotefoams Pension Trustees Limited	675 Mitcham Road, Croydon CR9 3AL	100%	Great Britain
Zotefoams Inc. (indirectly owned)	Corporation Trust Center, 1209 Orange Street, Wilmington, New Castle, Delaware	100%	USA
Zotefoams Midwest LLC (indirectly owned)	Corporation Trust Center, 1209 Orange Street, Wilmington, New Castle, Delaware	100%	USA
MuCell Extrusion LLC (indirectly owned)	Corporation Trust Center, 1209 Orange Street, Wilmington, New Castle, Delaware	100%	USA
Zotefoams Operations Limited (indirectly owned)	675 Mitcham Road, Croydon CR9 3AL	100%	Great Britain
Zotefoams Technology Limited (indirectly owned)	675 Mitcham Road, Croydon CR9 3AL	100%	Great Britain
KZ Trading and Investment Limited (indirectly owned)	15/F OTB Building, 160 Gloucester Road, Hong Kong	100%	Hong Kong
Kunshan Zotek King Lai Limited (indirectly owned)	181 Huanlou Road, Kunshan, Jiangsu	100%	China
Zotefoams France SAS (indirectly owned)	29 Boulevard Albert Einstein, Nantes	100%	France
Zotefoams Poland Sp. z o.o. (indirectly owned)	Al. Jerozolimskie 56C, 00-803, Warsaw	100%	Poland

On 29 January 2019, the Company, through its subsidiary Zotefoams International Limited, incorporated a new subsidiary in India, T-FIT insulation Solutions India Private Limited.

The principal activities of the subsidiary undertakings are as follows: Zotefoams Inc. purchases, manufactures and distributes cross-linked block foams. Zotefoams International Limited is a holding company. MuCell Extrusion LLC holds and develops microcellular foam technology which it licenses to customers. Zotefoams Pension Trustees Limited and Zotefoams Technology Limited are currently inactive. Zotefoams Operations Limited is a trading company and operated a branch in Thailand. KZ Trading and Investment Limited is a holding and trading company for Kunshan Zotek King Lai Limited, which is a trading company with operations in China. Zotefoams Midwest LLC, based in Oklahoma, USA is a trading company with operations in Oklahoma, USA and supplies specialist materials, based on AZOTE® foams, for the construction industry. Zotefoams France SAS is a wholly-owned subsidiary of Zotefoams International Limited and did not engage in any trading activities in 2018. Zotefoams Poland Sp. z.o.o, formed in 2018 is a wholly-owned subsidiary of Zotefoams International Limited and did not engage in any trading activities in 2018. In the opinion of the Directors the investments in the Company's subsidiary undertakings are worth at least the amount at which they are stated in the statement of financial position.

Zotefoams Employee Benefit Trust (EBT) is a wholly owned entity with its registered office at 3rd Floor, 37 Esplanade, St Helier, Jersey, Channel Islands, JE1 1AD. The EBT releases shares in the Company when share awards vest or are exercised.

Zotefoams International Limited, Zotefoams Technology Limited and Zotefoams Operations Limited are relying upon the exemption from audit of individual financial statements as permitted by section 479A of the Companies Act 2006. All outstanding liabilities as at 31 December 2018 of these companies have been guaranteed by the Company and no liability is expected to arise under this guarantee.

The Company has a representative office in China and a branch in Germany.

14. Inventories

	Group		Company	
	2018 £'000	2017 £'000	**2018 £'000**	2017 £'000
Raw materials and consumables	**8,047**	6,061	**6,905**	5,088
Work in progress	**5,561**	4,141	**3,450**	3,296
Finished goods	**4,285**	4,508	**3,089**	3,016
	17,893	14,710	**13,444**	11,400
Inventories are shown net of:				
Provision for impairment losses	**2,232**	1,973	**1,784**	1,608

In 2018 the value of inventory recognised by the Group as an expense in cost of goods sold was £40,318k (2017: £38,870k).

15. Trade and other receivables

	Group		Company	
	2018 £'000	2017 £'000	**2018 £'000**	2017 £'000
Amounts falling due over one year:				
Prepayments and accrued income	**439**	–	**439**	–
Amounts falling due within one year:				
Trade receivables	**23,753**	17,710	**16,575**	11,704
Amounts owed by Group undertakings	**–**	–	**18,686**	7,263
Other receivables	**2,240**	1,528	**1,732**	818
Prepayments and accrued income	**378**	495	**128**	186
	26,810	19,733	**37,560**	19,971

Amounts owed by Group undertakings are payable on demand. The trading portion does not attract any interest. Unsecured loans provided to Zotefoams Inc. and MuCell Extrusion LLC during the year total £6,828k (2017: £nil) and attract an interest charge of 3.90% and 3.54% respectively (2017: nil).

Bank borrowings are secured on the trade receivables of the Group. Refer to note 18 for details.

16. Cash and cash equivalents

	Group		Company	
	2018 £'000	2017 £'000	**2018 £'000**	2017 £'000
Cash at bank and in hand	**7,073**	4,360	**5,626**	2,956
Bank overdraft	**–**	(2,550)	**–**	(2,550)
Cash and equivalents per statement of cash flows	**7,073**	1,810	**5,626**	406

During the year, the Group completed a debt refinancing. Refer to note 18 for details.

17. Trade and other payables

	Group		Company	
	2018 £'000	2017 £'000	**2018 £'000**	2017 £'000
Trade payables	**6,301**	5,688	**4,587**	4,392
Other taxation and social security	**463**	641	**356**	259
Amounts owed to Group undertakings	**–**	–	**–**	165
Other payables	**1,441**	2,044	**1,055**	1,640
Accruals and deferred income	**3,123**	2,056	**2,208**	1,434
	11,328	10,429	**8,206**	7,890

Amounts owed to Group undertakings are unsecured, repayable on demand and attract no interest.

18. Interest-bearing loans and borrowings

		Group		Company	
	Note	**2018 £'000**	2017 £'000	**2018 £'000**	2017 £'000
Current bank borrowings		**14,500**	11,316	**14,500**	10,786
Non-current bank borrowings		**5,231**	8,067	**5,231**	3,647
Non-current lease liabilities		**306**	383	**306**	383
	21	**20,037**	19,766	**20,037**	14,816

In May 2018 the Group completed a debt refinancing to enable it to continue to grow capacity and meet its expected demand growth. Switching to Handelsbanken plc and National Westminster Bank plc, the Group secured increased facilities of £57.5m (up 64% from previous facility of approximately £35m) at improved pricing. These facilities are secured against the property, plant and equipment and trade receivables of the Group. The facility comprises a £25 million multi-currency term loan, repayable in two equal instalments of £5m during year four and year five, with the remainder at the end of year five, a £25 million multi-currency revolving credit facility, repayable at the end of five years and a further £7.5 million sterling term loan, renewable annually and repayable over five years in equal quarterly repayments over the term. The negotiated facility also includes a £25 million accordion feature to provide additional flexibility to pursue further investment opportunities in the future.

The Group and the Company have the following undrawn borrowing facilities:

	2018 £'000	2017 £'000
Floating rate:		
Expiring within one year	**–**	–
Expiring beyond one year	**37,030**	3,000
Total	**37,030**	3,000

Reconciliation of liabilities arising from financing activities:

			Non-cash changes		
Group	2017	Net cash inflows/ (outflows)	Recognition of lease liabilities	Foreign exchange movement	**2018**
Long-term borrowings	8,155	(3,028)	–	104	**5,231**
Short-term borrowings	11,228	3,155	–	117	**14,500**
Non-current lease liabilities	383	(77)	–	–	**306**
Total liabilities	19,766	50	–	221	**20,037**

			Non-cash changes		
Group	2016	Net cash inflows/ (outflows)	Recognition of lease liabilities	Foreign exchange movement	2017
Long-term borrowings	5,464	3,215	–	(524)	8,155
Short-term borrowings	9,156	2,130	–	(58)	11,228
Non-current lease liabilities	–	(49)	432	–	383
Total liabilities	14,620	5,296	432	(582)	19,766

18. Interest-bearing loans and borrowings (continued)

Company	2017	Net cash inflows/ (outflows)	Non-cash changes Recognition of lease liabilities	Non-cash changes Foreign exchange movement	**2018**
Long-term borrowings	3,735	1,392	–	104	**5,231**
Short-term borrowings	10,698	3,685	–	117	**14,500**
Non-current lease liabilities	383	(77)	–	–	**306**
Total liabilities	14,816	5,000	–	221	**20,037**

Company	2016	Net cash inflows/ (outflows)	Non-cash changes Recognition of lease liabilities	Non-cash changes Foreign exchange movement	2017
Long-term borrowings	–	3,735	–	–	3,735
Short-term borrowings	8,594	2,097	–	7	10,698
Non-current lease liabilities	–	(49)	432	–	383
Total liabilities	8,594	5,783	432	7	14,816

19. Deferred tax assets and liabilities

Recognised deferred tax assets and liabilities – Group

Deferred tax assets and liabilities are attributable to the following:

	Assets		Liabilities		Net	
	2018 £'000	2017 £'000	**2018 £'000**	2017 £'000	**2018 £'000**	2017 £'000
Property, plant and equipment	**–**	–	**1,121**	1,335	**1,121**	1,335
Rolled-over gain	**–**	–	**548**	548	**548**	548
Inventories	**(277)**	(146)	**–**	–	**(277)**	(146)
Derivatives financial instruments	**(67)**	(26)	**–**	–	**(67)**	(26)
Defined benefit pension scheme	**(1,373)**	(1,049)	**–**	–	**(1,373)**	(1,049)
Share option charges	**(521)**	(268)	**–**	–	**(521)**	(268)
Tax value of recognised losses carried forward	**(354)**	(216)	**–**	–	**(354)**	(216)
	(2,592)	(1,705)	**1,669**	1,883	**(923)**	178
Set off	**1,669**	1,343	**(1,669)**	(1,343)	**–**	–
Deferred tax (assets)/liabilities	**(923)**	(362)	**–**	540	**(923)**	178

Unrecognised deferred tax assets

The Group has tax losses carried forward in the USA of $3,295k (2017: $3,242k) which expire between 2022 and 2037 under prevailing tax legislation. In addition to this the Group has further tax losses in the USA of $880k (2017: nil) which are carried forward indefinitely. At year-end exchange rates, these tax losses translate to £3,251k (2017: £2,402k). Of the above, the Board expects to utilise only tax losses of £1,685k (2017: £1,026k) in the upcoming years based on projections. Applying the enacted tax rate of 21% (2017: 21%), the Group has recognised a deferred tax asset of £354k (2017: £216k) on such tax losses expected to be utilised in future periods.

19. Deferred tax assets and liabilities (continued)

Movement in deferred tax

	Property, plant and equipment £'000	Rolled-over gain £'000	Inventories £'000	Derivative financial instruments £'000	Defined benefit pension scheme £'000	Share option charges £'000	Tax value of recognised losses carried forward £'000	Total £'000
Balance at 1 January 2017	1,465	613	(350)	67	(1,413)	(124)	(359)	(101)
(Credited)/charged to the income statement	(130)	(65)	204	–	(138)	(44)	143	(30)
Recognised in other comprehensive income and equity	–	–	–	(93)	502	(100)	–	309
Balance at 31 December 2017	1,335	548	(146)	(26)	(1,049)	(268)	(216)	178
Balance at 1 January 2018	**1,335**	**548**	**(146)**	**(26)**	**(1,049)**	**(268)**	**(216)**	**178**
(Credited)/charged to the income statement	**(214)**	**–**	**(131)**	**52**	**(78)**	**(77)**	**(138)**	**(586)**
Recognised in other comprehensive income and equity	**–**	**–**	**–**	**(93)**	**(246)**	**(176)**	**–**	**(515)**
Balance at 31 December 2018	**1,121**	**548**	**(277)**	**(67)**	**(1,373)**	**(521)**	**(354)**	**(923)**

Deferred tax assets and liabilities – Company

Deferred tax assets and liabilities are attributable to the following:

	Assets		Liabilities		Net	
	2018 £'000	2017 £'000	**2018 £'000**	2017 £'000	**2018 £'000**	2017 £'000
Property, plant and equipment	**–**	–	**1,121**	1,335	**1,121**	1,335
Rolled-over gain	**–**	–	**548**	548	**548**	548
Derivative financial instruments	**(67)**	(26)	**–**	–	**(67)**	(26)
Defined benefit pension scheme	**(1,373)**	(1,049)	**–**	–	**(1,373)**	(1,049)
Share option charges	**(521)**	(268)	**–**	–	**(521)**	(268)
	(1,961)	(1,343)	**1,669**	1,883	**(292)**	540
Set off	**1,669**	1,343	**(1,669)**	(1,343)	**–**	–
Deferred tax (assets)/liabilities	**(292)**	–	**–**	540	**(292)**	540

Movement in deferred tax

	Property, plant and equipment £'000	Rolled-over gain £'000	Derivative financial instruments £'000	Defined benefit pension scheme £'000	Share option charges £'000	Total £'000
Balance at 1 January 2017	1,465	613	67	(1,413)	(124)	608
Charged/(credited) to the income statement	(130)	(65)	–	(138)	(44)	(377)
Recognised in other comprehensive income and equity	–	–	(93)	502	(100)	309
Balance at 31 December 2017	1,335	548	(26)	(1,049)	(268)	540
Balance at 1 January 2018	**1,335**	**548**	**(26)**	**(1,049)**	**(268)**	**540**
Charged/(credited) to the income statement	**(214)**	**–**	**52**	**(78)**	**(77)**	**(317)**
Recognised in other comprehensive income and equity	**–**	**–**	**(93)**	**(246)**	**(176)**	**(515)**
Balance at 31 December 2018	**1,121**	**548**	**(67)**	**(1,373)**	**(521)**	**(292)**

20. Issued share capital

	Number of shares	Par value £'000	Share premium £'000	Total £'000
Opening balance 1 January 2017	44,414,442	2,221	24,340	26,561
Movements during the year	–	–	–	–
Closing balance 31 December 2017	44,414,442	2,221	24,340	26,561
Opening balance 1 January 2018	**44,414,442**	**2,221**	**24,340**	**26,561**
Rights issue	**3,886,792**	**194**	**20,406**	**20,600**
	48,301,234	**2,415**	**44,746**	**47,161**
Less: Transaction costs arising on rights issue	**–**	**–**	**(568)**	**(568)**
Closing balance 31 December 2018	**48,301,234**	**2,415**	**44,178**	**46,593**

In May 2018 the Company raised £20,032k of equity, net of fees, through a placing of 3,886,792 shares at £5.30 per share.

Details of share options are provided in note 24.

The holders of ordinary shares are entitled to receive dividends as declared from time to time and are entitled, on a poll, to one vote per share at meetings of the Company.

21. Financial instruments and financial risk management

Policy

The Group's and Company's principal financial instruments include cash in hand and at bank and interest-bearing loans and borrowings, the main purpose of which is to provide finance for the Group's and Company's operations. Foreign exchange derivatives are used to help manage the Group's and Company's currency exposure. Per the Group's and Company's policy, no trading in financial instruments is undertaken.

The main risks arising from the Group's and Company's financial instruments are credit risk, interest rate risk, liquidity risk and foreign currency risk. The Board reviews and agrees policies for managing each of these risks and they are summarised below. These policies have remained consistent throughout the year.

Credit risk

Credit risk is managed on a Group basis, except for credit risk relating to accounts receivable balances. Each local entity is responsible for managing and analysing the credit risk for each of their new clients before standard payment and delivery terms and conditions are offered. Credit risk arises from cash and cash equivalents and derivative financial instruments with banks and financial institutions, as well as credit exposures to customers, including outstanding receivables and committed transactions.

Management has a credit policy in place and the exposure to credit risk is monitored on an ongoing basis. Credit evaluations are performed for customers offered credit over a certain amount. The Group and Company do not require collateral in respect of financial assets.

At the statement of financial position date there were no significant concentrations of credit risk. The maximum exposure to credit risk is represented by the carrying amount of each financial asset, including derivative financial instruments, in the statement of financial position.

Credit quality of financial assets

	Group		Company	
Counterparties without external credit rating:	**2018 £'000**	2017 £'000	**2018 £'000**	2017 £'000
Existing customers with no defaults in the past	**23,484**	17,473	**16,306**	11,649
Existing customers with some defaults in the past, net of impairment allowance	**269**	237	**269**	55
	23,753	17,710	**16,575**	11,704

	Group		Company	
Cash at bank	**2018 £'000**	2017 £'000	**2018 £'000**	2017 £'000
Moody's P-1	**7,073**	4,360	**5,626**	2,956

	Group		Company	
Derivative financial assets	**2018 £'000**	2017 £'000	**2018 £'000**	2017 £'000
Moody's P-1	**6**	213	**6**	213

21. Financial instruments and financial risk management (continued)

Trade receivables are analysed as follows:

	Group		Company	
	2018 **£'000**	2017 £'000	**2018** **£'000**	2017 £'000
Gross carrying amount	**23,778**	17,840	**16,600**	11,776
– due for less than 60 days	**22,688**	16,960	**16,306**	11,329
– due for more than 60 days	**1,090**	880	**294**	447
Expected loss rate				
– due for less than 60 days	**0.00%**	0.00%	**0.00%**	0.00%
– due for more than 60 days	**2.29%**	14.77%	**8.50%**	16.10%
Loss allowance	**25**	130	**25**	72
Trade receivables net of allowances	**23,753**	17,710	**16,575**	11,704

Loss allowances analysed as follows:

	Group £'000	Company £'000
At 1 January 2017	199	166
Increase in loss allowance recognised in profit or loss during the year	37	–
Receivable written off during the year as uncollectible	(6)	(6)
Reversal of loss allowance on collection of dues	(100)	(88)
At 31 December 2017	130	72
At 1 January 2018	**130**	**72**
Increase in loss allowance recognised in profit or loss during the year	**46**	**46**
Receivable written off during the year as uncollectible	**(59)**	**(59)**
Reversal of loss allowance on collection of dues	**(92)**	**(34)**
At 31 December 2018	**25**	**25**

The normal terms of trade are between 30–90 days from the end of the month of invoice.

The credit quality of trade receivables that are neither past due nor impaired is assessed individually based on credit history and experience. In 2018 and 2017, the Group and Company insured a significant portion of its trade receivable balances to mitigate credit risk. The uninsured exposure as at 31 December 2018 for the Group was £11,984k (2017: £5,718k) and for the Company was £7,463k (2017: £2,499k). The Group and the Company make provisions against trade receivables, such provisions being based on the debtor's prior credit history and knowledge of any adverse conditions affecting the debtor (e.g. receivership or liquidation). The Directors believe an adequate provision has been made for trade receivables at the year end.

None of the amounts owed by Group undertakings are impaired.

21. Financial instruments and financial risk management (continued)

Interest rate risk

The Group's and Company's interest rate risk arises from long-term borrowings and short-term borrowings. Borrowings issued at variable rates expose the Group and Company to cash flow interest rate risk. Borrowings issued at fixed rates expose the Group to fair value interest rate risk.

The Group and Company has strong cash generation from its operations and closely monitors its borrowing levels to manage the interest rate risk.

The interest rate profile of the Group's and Company's borrowings at 31 December is shown below:

	2018			2017		
Group	**Effective interest rate %**	**Fixed rates £'000**	**Variable rates £'000**	Effective interest rate %	Fixed rates £'000	Variable rates £'000
Dollar short-term borrowings	**3.98%**	**–**	**8,065**	–	–	–
Sterling short-term borrowings	**2.55%**	**–**	**6,435**	–	–	–
Dollar long-term borrowings	**3.98%**	**–**	**5,231**	3.95%	4,950	–
Sterling long-term borrowings	**–**	**–**	**–**	2.79%	–	4,500
Multi currency RCF	**–**	**–**	**–**	2.50%	–	9,933
Bank overdraft	**–**	**–**	**–**	2.29%	–	2,550
Total		**–**	**19,731**		4,950	16,983

	2018			2017		
Company	**Effective interest rate %**	**Fixed rates £'000**	**Variable rates £'000**	Effective interest rate %	Fixed rates £'000	Variable rates £'000
Dollar short-term borrowings	**3.98%**	**–**	**8,065**	–	–	–
Sterling short-term borrowings	**2.55%**	**–**	**6,435**	–	–	–
Dollar long-term borrowings	**3.95%**	**–**	**5,231**	–	–	–
Sterling long-term borrowings	**–**	**–**	**–**	2.79%	–	4,500
Multi currency RCF	**–**	**–**	**–**	2.50%	–	9,933
Bank overdraft	**–**	**–**	**–**	2.29%	–	2,550
Total		**–**	**19,731**		–	16,983

The impact on post tax profit of a 1% shift in the variable rate borrowings would be immaterial (2017: immaterial).

Liquidity risk

Group Finance performs cash flow forecasting in the operating entities of the Group, which is then aggregated. Group Finance monitors rolling forecasts of the Group's liquidity requirements to ensure that it has sufficient cash to meet operational needs, while maintaining sufficient headroom on its undrawn committed borrowing facilities (note 18) at all times, so that the Group does not breach borrowing limits or covenants (where applicable) on any of its borrowing facilities. Such forecasting takes into consideration the Group's debt financing plans, covenant compliance, compliance with internal balance sheet ratio targets and any applicable external regulatory or legal requirements.

The following are the contractual maturities of financial liabilities, including estimated payments and excluding the effect of netting agreements:

	2018					2017				
Group	**Carrying amount £'000**	**Contractual cash flows £'000**	**1 year or less £'000**	**1 to 2 years £'000**	**More than 2 years £'000**	Carrying amount £'000	Contractual cash flows £'000	1 year or less £'000	1 to 2 years £'000	More than 2 years £'000
Non-derivative financial liabilities										
Interest-bearing loans and borrowings	**(20,037)**	**(20,037)**	**(14,500)**	**–**	**(5,537)**	(19,766)	(19,766)	(11,554)	(1,621)	(6,591)
Bank overdraft	**–**	**–**	**–**	**–**	**–**	(2,550)	(2,550)	(2,550)	–	–
Trade and other payables	**(7,742)**	**(7,742)**	**(7,742)**	**–**	**–**	(7,732)	(7,732)	(7,732)	–	–
Total non-derivative financial liabilities	**(23,779)**	**(27,779)**	**(22,242)**	**–**	**(5,537)**	(30,048)	(30,048)	(21,836)	(1,621)	(6,591)
Derivative financial liabilities	**(399)**	**(399)**	**(399)**	**–**	**–**	(59)	(59)	(59)	–	–

21. Financial instruments and financial risk management (continued)

Company	2018 Carrying amount £'000	2018 Contractual cash flows £'000	2018 1 year or less £'000	2018 1 to 2 years £'000	2018 More than 2 years £'000	2017 Carrying amount £'000	2017 Contractual cash flows £'000	2017 1 year or less £'000	2017 1 to 2 years £'000	2017 More than 2 years £'000
Non-derivative financial liabilities										
Interest-bearing loans and borrowings	**(20,037)**	**(20,037)**	**(14,500)**	**–**	**(5,537)**	(14,816)	(14,816)	(10,833)	(900)	(3,083)
Bank overdraft	**–**	**–**	**–**	**–**	**–**	(2,550)	(2,550)	(2,550)	–	–
Trade and other payables	**(5,642)**	**(5,642)**	**(5,642)**	**–**	**–**	(6,197)	(6,197)	(6,197)	–	–
Amounts owed to Group undertakings	**–**	**–**	**–**	**–**	**–**	(165)	(165)	(165)	–	–
Total non-derivative financial liabilities	**(25,679)**	**(25,679)**	**(20,142)**	**–**	**(5,537)**	(23,728)	(23,728)	(19,745)	(900)	(3,083)
Derivative financial liabilities	**(399)**	**(399)**	**(399)**	**–**	**–**	(59)	(59)	(59)	–	–

Foreign currency risk

The Group and Company operate internationally and are exposed to foreign exchange risk arising from various currency exposures, primarily with respect to the US dollar and euros. Foreign exchange risk arises from recognised assets and liabilities and future commercial transactions.

Foreign exchange risk is managed centrally by Group Finance. Foreign exchange risk arises when future commercial transactions or recognised assets or liabilities are denominated in a currency that is not the Company's functional currency.

The Group's and Company's treasury risk management policy is to hedge approximately two-thirds of anticipated cash flows (mainly sales and purchases) in US dollar and euros for the subsequent 9-12 months. The Group and the Company use forward exchange contracts to hedge their foreign currency risk. Group Finance monitors cash flows to ensure that there is sufficient liquidity when forward currency contracts mature.

The euro and US dollar rates used in preparing the financial statements are as follows:

	2018 Average	2018 Closing	2017 Average	2017 Closing
Euro/sterling	**0.88**	**0.90**	0.88	0.89
US dollar/sterling	**0.75**	**0.78**	0.78	0.74

In respect of other monetary assets and liabilities held in currencies other than the euro and the US dollar, the Group and the Company ensure that the net exposure is kept to a manageable level by buying or selling foreign currencies at spot rates, where necessary, to address short-term imbalances.

Where possible the Group tries to hold a majority of its cash and cash equivalent balances in the local currency of the respective entity or, for borrowings, in a currency which provides an offset, albeit often partial, against monetary working capital net assets in that currency.

21. Financial instruments and financial risk management (continued)

Recognised assets and liabilities

The table below shows non-derivative financial instruments of the Group and Company in currencies other than sterling:

Group – 2018	**Euro £'000**	**US dollar £'000**	**Other £'000**	**Total £'000**
Cash and cash equivalents	**1,730**	**2,046**	**301**	**4,077**
Trade receivables	**5,585**	**11,876**	**2,632**	**20,093**
Trade payables	**(2,868)**	**(915)**	**(847)**	**(4,630)**

Group – 2017	Euro £'000	US dollar £'000	Other £'000	Total £'000
Cash and cash equivalents	(712)	(1,003)	649	(1,066)
Trade receivables	4,707	10,329	334	15,370
Trade payables	(2,573)	(1,146)	(70)	(3,789)

Company – 2018	**Euro £'000**	**US dollar £'000**	**Other £'000**	**Total £'000**
Cash and cash equivalents	**1,679**	**932**	**43**	**2,655**
Trade receivables	**4,706**	**6,100**	**2,103**	**12,909**
Trade payables	**(2,867)**	**(47)**	**(27)**	**(2,941)**

Company – 2017	Euro £'000	US dollar £'000	Other £'000	Total £'000
Cash and cash equivalents	(712)	(1,838)	80	(2,470)
Trade receivables	4,700	3,378	267	8,345
Trade payables	(2,573)	(136)	(6)	(2,715)

Forecast transactions

The Group and the Company classify their forward exchange contracts used to hedge forecast transactions as cash flow hedges. The fair value of such forward exchange contracts is shown in the table below:

31 December 2018	**Level 1 £'000**	**Level 2 £'000**	**Level 3 £'000**	**Total £'000**
Assets				
Forward exchange contracts	**–**	**6**	**–**	**6**
Total assets	**–**	**6**	**–**	**6**
Liabilities				
Forward exchange contracts	**–**	**(399)**	**–**	**(399)**
Total liabilities	**–**	**(399)**	**–**	**(399)**

21. Financial instruments and financial risk management (continued)

31 December 2017	Level 1 £'000	Level 2 £'000	Level 3 £'000	Total £'000
Assets				
Forward exchange contracts	–	213	–	213
Total assets	–	213	–	213
Liabilities				
Forward exchange contracts	–	(59)	–	(59)
Total liabilities	–	(59)	–	(59)

The hedged highly probable forecast transactions denominated in foreign currency are expected to occur at various dates during the next 12 months. Gains and losses recognised in the hedging reserve in equity on forward foreign exchange contracts as of 31 December 2018 are recognised in the income statement in the period or periods during which the hedged forecast transaction affects the income statement. This is generally within 12 months of the end of the reporting period.

Hedge ineffectiveness

Hedge effectiveness is determined at the inception of the hedge relationship, and through periodic prospective effectiveness assessments to ensure that an economic relationship exists between the hedged item and hedging instrument. In hedges of forward exchange contracts, ineffectiveness mainly arises if the timing of the forecast transaction changes from what was originally estimated. There was no ineffectiveness during 2018 or 2017 in relation to the forward exchange contracts.

Estimation of fair values

The following summarises the major methods and assumptions used in estimating fair values of financial instruments reflected in the table above. They are classified according to the following fair value hierarchy:

- Level 1: quoted process (unadjusted) in active markets for identical assets or liabilities
- Level 2: inputs other than quoted process included within Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (derived from prices)
- Level 3: inputs for the asset or liability that are not based on observable market data (unobservable inputs)

Derivative financial instruments are valued using Handelsbanken and NatWest mid-market rate (2017: Barclays mid-market rate) at the statement of financial position date.

The maturity profile of the forward contracts as at 31 December is as follows:

	2018				2017			
Group and Company:	**Foreign currency £'000**	**Contract value £'000**	**Transaction fair value £'000**	**Contract fair value £'000**	Foreign currency £'000	Contract value £'000	Transaction fair value £'000	Contract fair value £'000
Sell EUR	**€1,100**	**998**	**992**	**6**	€5,147	4,598	4,589	9
Buy EUR	**–**	**–**	**–**	**–**	€1,500	(1,349)	(1,334)	(15)
Sell USD	**$17,450**	**13,184**	**13,583**	**(399)**	$13,345	9,985	9,824	160
Buy USD	**–**	**–**	**–**	**–**	–	–	–	–

Sensitivity analysis

In managing currency risks the Group and Company aim to reduce the impact of short-term fluctuations on their earnings. Over the longer-term, however, changes in foreign exchange would have an impact on earnings.

At 31 December 2018 it is estimated that an increase of one percentage point in the value of sterling against the euro would decrease the Group's profit before tax by approximately £42k (2017: £3k) before forward exchange contracts and £14k (2017: £1k) after forward exchange contracts are included.

At 31 December 2018 it is estimated that an increase of one percentage point in the value of sterling against the US dollar would decrease the Group's profit before tax by approximately £302k (2017: £175k) before forward exchange contracts and £101k (2017: £158k) after forward exchange contracts are included.

Notes Continued

21. Financial instruments and financial risk management (continued)

Financial instruments by category

		2018			2017		
Group		**Financial assets at amortised cost £'000**	**Derivatives used for hedging £'000**	**Financial liabilities at amortised cost £'000**	Loans and receivables £'000	Derivatives used for hedging £'000	Financial liabilities at amortised cost £'000
Trade and other receivables		**25,993**	**–**	**–**	19,238	–	–
Cash and cash equivalents		**7,073**	**–**	**–**	4,360	–	–
Bank overdraft		**–**	**–**	**–**	–	–	(2,550)
Derivative financial instruments	– assets	**–**	**6**	**–**	–	213	–
	– liabilities	**–**	**(399)**	**–**	–	(59)	–
Interest-bearing loans and borrowings		**–**	**–**	**(20,037)**	–	–	(19,766)
Trade and other payables		**–**	**–**	**(7,742)**	–	–	(7,732)

		2018			2017		
Company		**Financial assets at amortised cost £'000**	**Derivatives used for hedging £'000**	**Financial liabilities at amortised cost £'000**	Loans and receivables £'000	Derivatives used for hedging £'000	Financial liabilities at amortised cost £'000
Trade and other receivables		**36,993**	**–**	**–**	19,785	–	–
Cash and cash equivalents		**5,626**	**–**	**–**	2,956	–	–
Bank overdraft		**–**	**–**	**–**	–	–	(2,550)
Derivative financial instruments	– assets	**–**	**6**	**–**	–	213	–
	– liabilities	**–**	**(399)**	**–**	–	(59)	–
Interest-bearing loans and borrowings		**–**	**–**	**(20,037)**	–	–	(14,816)
Trade and other payables		**–**	**–**	**(5,642)**	–	–	(6,197)

Capital management

The Group's objectives, when managing capital, are to safeguard the Group's ability to continue as a going concern in order to provide returns for shareholders and benefits for other stakeholders, and to maintain an optimal capital structure to reduce the cost of capital. In order to maintain or adjust the capital structure, the Group can adjust the amount of dividends paid to shareholders or manage investments in new assets to reduce debt.

The Group defines its return on capital as operating profit before exceptional items divided by the average sum of its equity, net debt and other non-current liabilities. This measure excludes acquired intangible assets and their amortisation costs. The Group also excludes significant capacity investments under construction until they enter production. In 2018 the return on capital was 16.5% (2017: 15.5%). If the significant capacity investments were included, the return on capital was 12.8% (2017: 12.1%).

22. Commitments – Group

	Group		Company	
	2018 **£'000**	2017 £'000	**2018** **£'000**	2017 £'000
Capital expenditure contracted for at the end of the reporting period but not yet incurred is as follows:				
Property, plant and equipment	**4,054**	3,284	**1,540**	1,766

	Group		Company	
Operating lease commitments – Group and Company as lessee	**2018** **£'000**	2017 £'000	**2018** **£'000**	2017 £'000
No later than 1 year	**142**	159	**51**	159
Later than 1 year and no later than 5 years	**431**	413	**74**	413
Later than 5 years	**89**	169	**–**	169
Total	**662**	741	**125**	741

During the year ended 31 December 2018 £415k was recognised as an expense in the income statement in respect of operating leases (2017: £633k).

	Group		Company	
Finance lease commitments – Group and Company as lessee	**2018** **£'000**	2017 £'000	**2018** **£'000**	2017 £'000
No later than 1 year	**108**	87	**108**	87
Later than 1 year and no later than 5 years	**202**	247	**202**	247
Total	**310**	334	**310**	334

23. Post employment benefits

Defined benefit pension plans

The Company operates a UK registered trust-based pension scheme that provides defined benefits. Pension benefits are linked to the members' final pensionable salaries and service at their retirement (or date of leaving if earlier). The Trustees are responsible for running the Scheme in accordance with the Scheme's Trust Deed and Rules, which set out their powers. The Trustees of the Scheme are required to act in the best interests of the beneficiaries of the Scheme. There is a requirement that one-third of the Trustees are nominated by the members of the Scheme.

There are two categories of pension scheme members:

- Deferred members: former and current employees of the Company; and
- Pensioner members: in receipt of pension.

The defined benefit obligation is valued by projecting the best estimate of future benefit outgoings (allowing for revaluation to retirement for deferred members and annual pension increases for all members) and then discounting to the statement of financial position date. The majority of benefits received increases in line with inflation (subject to a cap of no more than 5% per annum). The valuation method is known as the Projected Unit Method. The approximate overall duration of the Scheme's defined benefit obligation as at 31 December 2018 was 18 years (2017: 18 years).

Since 1 October 2001 the Scheme has been closed to new members and, from 31 December 2005, the future accrual of benefits for existing members of the Scheme ceased.

Future funding obligation

A full actuarial valuation of the DB Scheme was completed as at 5 April 2017, in line with the requirement to have a triennial valuation. The outcome, on a Statutory Funding Objective basis, calculated a deficit for the Pension Scheme of £4.18m. As a result, the Company agreed with the Trustees to make contributions to the DB Scheme of £43,300 per month to meet the shortfall by 31 October 2026, up from £41,000 per month previously. In addition, the Company pays the ongoing DB Scheme expenses of £15,000 per month (previously £10,600 per month) to cover death-in-service insurance premiums, the expenses of administering the Scheme and Pension Protection Fund levies.

23. Post employment benefits (continued)

Risks

Through the Scheme, the Company is exposed to a number of risks:

- Asset volatility: the Scheme's defined benefit obligation is calculated using a discount rate set with reference to corporate bond yields, however the Scheme invests significantly in equities and other growth assets. These assets are expected to outperform corporate bonds in the long term, but subject to increased volatility and risk in the short term.
- Changes in bond yields: a decrease in corporate bond yields would increase the Scheme's defined benefit obligation, however this would be partially offset by an increase in the value of the Scheme's bond holdings.
- Inflation risk: a significant proportion of the Scheme's defined benefit obligation is linked to inflation, therefore higher inflation will result in a higher defined benefit obligation (subject to the appropriate caps in place). The majority of the Scheme's assets are either unaffected by inflation, or only loosely correlated with inflation, therefore an increase in inflation would also increase the deficit.
- Life expectancy: if Scheme members live longer than expected, the Scheme's benefits will need to be paid for longer, increasing the Scheme's defined benefit obligation.

The Trustees and Company manage risks in the Scheme through the following strategies:

- Diversification: investments are well diversified, such that the failure of any single investment would not have a material impact on the overall level of assets.
- Investment strategy: the Trustees are required to review their investment strategy on a regular basis.

The Company has recognised all actuarial gains and losses immediately in other comprehensive income. The initial results calculated as part of the formal actuarial valuation as at 5 April 2017 by a qualified independent actuary. The major assumptions used by the actuary were (in nominal terms) as follows:

	As at 31 December 2018	As at 31 December 2017
Discount rate	**2.70%**	2.40%
RPI inflation (before retirement)	**3.20%**	2.90%
CPI inflation (before retirement)	**2.20%**	1.90%
RPI inflation (after retirement)	**3.20%**	3.10%
CPI inflation (after retirement)	**2.20%**	2.10%

Assumptions regarding future mortality are set based on actuarial advice in accordance with published statistics and experience in each territory. These assumptions translate into an average life expectancy, in years, for a pensioner retiring at age 65, of:

	2018	2017
For an individual aged 65		
– Male	**22**	22
– Female	**24**	24
At age 65 for an individual aged 45		
– Male	**23**	24
– Female	**25**	25

23. Post employment benefits (continued)

The table below outlines where the Company's post-employment amounts and activity are included in the financial statements.

	2018 £'000	2017 £'000
Statement of financial position for:		
– Defined benefit pension scheme obligations	**(8,078)**	(6,168)
Income statement charge for:		
– Defined benefit pension interest cost	**(140)**	(193)
– Defined benefit pension past service costs	**(940)**	(1,235)
Actuarial (losses)/gains recognised in other comprehensive income for:		
– Defined benefit pension scheme	**(1,449)**	2,080

The amounts recognised in the statement of financial position are determined as follows:

	2018 £'000	2017 £'000
Market value of plan assets	**25,650**	27,312
Present value of defined benefit pension scheme obligation	**(33,728)**	(33,480)
Deficit – recognised as a liability in the statement of financial position	**(8,078)**	(6,168)

The movement in the defined benefit obligation over the year is as follows:

	2018 £'000	2017 £'000
Value of defined benefit obligation at the start of the year	**33,480**	33,056
Interest cost	**792**	878
Benefits paid	**(943)**	(1,109)
Past service costs (refer to note 4)	**940**	1,235
Actuarial losses/(gains): experience differing from that assumed	**452**	(241)
Actuarial (gains): changes in financial assumptions	**(993)**	(339)
Value of defined benefit obligation at the end of the year	**33,728**	33,480

The movement in the value of the plan assets over the year is as follows:

	2018 £'000	2017 £'000
Market value of plan assets at the start of the year	**27,312**	25,617
Interest income	**652**	685
Actual return on plan assets	**(1,990)**	1,500
Employer contributions	**619**	619
Benefits paid	**(943)**	(1,109)
Market value of assets at the end of the year	**25,650**	27,312

23. Post employment benefits (continued)

The sensitivity of the defined benefit obligation to changes in the weighted principal assumptions is:

	Change in assumption	Change in defined benefit obligation
Discount rate	+0.5%/–0.5% pa	–8%/+9%
RPI inflation	+0.5% pa/–0.5% pa	+7%/–7%
Assumed life expectancy	+1 year	+3%

The above sensitivity analyses are based on a change in an assumption while holding all other assumptions constant. In practice, this is unlikely to occur, and changes in some of the other assumptions may be correlated. When calculating the sensitivity of the defined benefit obligation to significant actuarial assumptions the same method – present value of the defined benefit obligation calculated with the projected unit credit method at the end of the reporting period, has been applied as when calculating the pension liability recognised within the statement of financial position. The assets of the Scheme are invested as follows:

	Year ended 31 December 2018		Year ended 31 December 2017	
Asset class	**Market value £'000**	**% of total Scheme assets**	Market value £'000	% of total Scheme assets
Equities and other growth assets	**16,245**	**63%**	17,357	64%
Corporate bonds	**4,959**	**19%**	5,251	19%
Gilts	**3,029**	**12%**	3,132	11%
Cash	**888**	**4%**	921	3%
Insured pensioners	**529**	**2%**	651	2%
Total	**25,650**	**100%**	27,312	100%
Actual return on assets over the year	**(1,338)**		2,185	

Other pension schemes

On 1 January 2006 a separate stakeholder scheme was set up for those employees who were originally in the closed defined benefit pension scheme. In addition to the above, the Company created two further stakeholder schemes for future joiners. The contributions paid by the Company in 2018 were £971k (2017: £733k).

For certain non UK based employees of the Company, the Company makes contributions into individual schemes. The contributions paid by the Company in 2018 were £16k (2017: £2k).

For USA based employees, Zotefoams Inc. operates a 401(k) plan. The contributions paid by Zotefoams Inc. in 2018 were £153k (2017: £145k).

24. Share-based payments

The Company has a share option scheme that entitles senior management personnel to purchase shares in the Company. Options are exercisable at a price equal to the lower of the mid-market price of the Company's shares the day before the option is granted or the average mid-market price for the three dealing days before the option is granted. The vesting period is three years. If the options remain unexercised after a period of 10 years from the date of grant, the options will expire. Depending on the circumstances options are normally forfeited if the employee leaves the Group before the options vest.

In 2007 the Company introduced a LTIP scheme for senior management personnel. Shares are awarded in the Company and vest after three years to the extent performance conditions are met. Dependent on the circumstances awards are normally forfeited if the employee leaves the Group before the award vests. A new LTIP scheme was introduced in 2017, which operates in a similar way to the LTIP scheme introduced in 2007. No new awards are made under the 2007 scheme. Depending on the circumstances options are normally forfeited if the employee leaves the Group before the options vest.

In 2007 the Company introduced a Deferred Bonus Share Plan. Originally under the Plan executive bonuses over 40% of eligible salary were held as deferred shares for three years. In 2014 the Remuneration Committee amended the Deferred Bonus Plan for bonuses awarded since 2014, where 25% of executive bonuses are held as deferred shares for three years. Depending on the circumstances awards are normally forfeited if the employee leaves the Group before the award vests. A new Deferred Bonus Share Plan scheme was introduced in 2017, which operates in a similar way to the old Plan introduced in 2007. No new awards are made under the 2007 Plan. Depending on the circumstances awards are normally forfeited if the employee leaves the Group before the award vests.

Details of the vesting conditions for the share, share option and LTIP awards are given in the Remuneration Report on pages 46 to 55.

24. Share-based payments (continued)

Movements in share options during the year are as follows:

	2018		2017	
	Number of share options	**Weighted average exercise price (p)**	Number of share options	Weighted average exercise price (p)
Outstanding at beginning of the year	**166,229**	**278**	181,152	119
Exercised during the year	**(36,574)**	**220**	(37,271)	142
Granted during the year	**–**	**–**	43,197	313
Forfeited during the year	**(13,457)**	**297**	(20,849)	291
Outstanding at the end of the year	**116,198**	**292**	166,229	278
Exercisable at the end of the year	**24,204**	**268**	19,741	171

The options outstanding at 31 December 2018 have an exercise price of between 245.7p and 327.5p (2017: 106.7p and 327.5p) and a weighted contractual life of 8 years (2017: 10 years).

The fair value received in return for share options granted is measured by reference to the fair value of share options granted using a Black-Scholes model. The contractual life of the option (10 years) is used as an input into this model. No allowance is made for early leavers.

Movements in LTIP awards during the year are as follows:

	2018		2017	
	Number of share options	**Weighted average exercise price (p)**	Number of share options	Weighted average exercise price (p)
Outstanding at beginning of the year	**660,089**	**–**	470,886	–
Exercised during the year	**(85,118)**	**–**	(74,512)	–
Granted during the year	**193,667**	**–**	380,087	–
Forfeited during the year	**(61,770)**	**–**	(116,372)	–
Outstanding at the end of the year	**706,868**	**–**	660,089	–
Exercisable at the end of the year	**–**	**–**	–	–

Movement in Deferred Bonus Plan awards during the year are as follows:

	2018		2017	
	Number of share options	**Weighted average exercise price (p)**	Number of share options	Weighted average exercise price (p)
Outstanding at beginning of the year	**46,520**	**–**	24,389	–
Exercised during the year	**(12,169)**	**–**	–	–
Granted during the year	**16,445**	**–**	22,131	–
Outstanding at the end of the year	**50,796**	**–**	46,520	–
Exercisable at the end of the year	**–**	**–**	–	–

24. Share-based payments (continued)

Fair value of share options and assumptions

The expected volatility is based on historic volatility for a three-year period prior to the award.

	30 Mar 2015	17 Aug 2015	05 Apr 2016	27 Mar 2017	24 Aug 2017
Share price (p)	285	310	290	305.5	305.5
Exercise price (p)	285	301.7	290	305.5	327.5
Expected volatility	35%	35%	35%	35%	35%
Option life	Five years	Five years	Five years	Five years	Five years
Expected dividends (p) (assumed to be increasing at 2.5% pa)	5.5	5.5	5.6	5.7	5.7
Risk free interest rate (based on national government bonds)	2.00%	2.00%	2.00%	2.00%	2.00%
Fair value at grant date (p)	80	90	80	103.1	111.1

The share option awards are granted under a service condition and a performance condition. There are no market conditions associated with the share options. The LTIP awards are granted under a service condition and a performance condition, part of which is a market condition. The Deferred Bonus Plan awards are granted under a service condition.

The amounts recognised in the income statement for equity-settled share-based payments are as follows:

		2018 £'000	2017 £'000
Within administrative expenses	– share-based payment charge	**822**	459
	– related National Insurance	**222**	83

Of the above, amounts relating to Directors of Zotefoams plc aggregate to £644k (2017: £255k).

25. Related parties

Directors

The Directors of the Company as at 31 December 2018 and their immediate relatives control approximately 1.0% (2017: 1.1%) of the voting shares of the Company. Details of Directors' pay and remuneration are given in the Remuneration Report on pages 46 to 55. Executive Directors are considered to be the only key management personnel. Details of compensation paid to key management personnel are included in note 6.

Subsidiaries and joint venture

Details of the subsidiaries and joint venture of the Company are set out in notes 10 and 13. These companies are considered to be related parties.

The following material transactions were carried out with related parties:

	2018 £'000	2017 £'000
Sale of goods: subsidiaries of the Company	**9,892**	13,405
Sale of services: subsidiaries of the Company	**165**	410
Loans given (net of repayments): subsidiaries of the Company	**6,828**	–
Interest income: subsidiaries of the Company	**95**	–
Sale of goods: joint venture of the Company	**2,938**	2,565
Total	**19,918**	16,380

25. Related parties (continued)

Balances between the Company and its active subsidiaries and joint venture are as follows:

	Receivable from/(payable to)		Investment in	
	2018 £'000	2017 £'000	**2018 £'000**	2017 £'000
Zotefoams Inc	**14,166**	5,490	**–**	–
KZ Trading and Investment Ltd	**2,133**	1,434	**–**	–
Azote Asia Limited	**1,601**	1,542	**73**	89
MuCell Extrusion LLC	**877**	(13)	**–**	–
Zotefoams International Limited	**–**	–	**23,549**	23,546
Zotefoams Operations Limited	**–**	187	**–**	–
Kunshan Zotek King Lai Limited	**53**	–	**–**	–
Zotefoams Poland Sp. z o.o.	**1,566**	–	**–**	–

26. Accounting estimates and judgements for the Group and Company

In the application of the Group's accounting policies, which are described in note 2, the Directors are required to make judgements, estimates and assumptions about the carrying amounts of assets and liabilities which are not readily apparent from other sources. The estimates and associated assumptions are based on historical experience and other facts that are considered relevant. Actual amounts may differ from these estimates.

Estimates and judgements are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances.

Key sources of estimation uncertainty

The key assumptions concerning the future and other key sources of estimation uncertainty at the statement of financial position date that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are disclosed below.

i) Estimated impairment of goodwill and intangibles

The Group tests annually whether goodwill has suffered any impairment, in accordance with the accounting policy stated in note 2.12. The recoverable amounts of cash-generating units (CGUs) have been determined based on value-in-use calculations. These calculations require the use of estimates (see note 12).

The determination of impairment in the carrying value of goodwill and intangible assets requires judgements to be made by Directors. These assets are assessed on an ongoing basis to determine whether circumstances exist that could lead to the conclusion that the carrying value of such assets is not supportable. Such calculations require judgement relating to the appropriate discount factors and long-term growth prevalent in particular markets as well as estimation of short-term business performance. The Directors also draw upon experience in making these judgements.

ii) Pensions assumptions

The present value of the defined benefit pension obligations depends on a number of factors that are determined on an actuarial basis using a number of assumptions. Any changes in these assumptions will impact the carrying amount of pension obligations. The Company engages an independent actuary to perform the valuation and assist in determining appropriate assumptions at the end of each year. The valuation is prepared by an independent qualified actuary, but significant judgements are required in relation to the assumptions for pension increases, inflation, the discount rate applied, investment returns and member longevity, which underpin the valuations. Note 23 contains information about the assumptions relating to retirement benefit obligations.

Key judgements

i) Joint ventures

The Group holds 50% of the voting rights of its joint arrangement. The Group has joint control over this arrangement because, under the contractual agreements, unanimous consent is required from all parties to the agreements for all relevant activities. The Group's joint arrangement is structured as a limited company and provides the Group and the parties to the agreements with rights to the net assets of the limited company under the arrangements. It was concluded that the contracts entered into for a sales and a manufacturing joint-venture with INOAC Corporation constituted joint-venture agreements, and therefore these investments have been accounted for under the equity method.

ii) Exceptional item

Due to the material and non-recurring nature of the items, the Group has disclosed the increase in past service costs as an exceptional item in 2018 (2017: past service costs).

27. Events after the reporting period

There are no events after the reporting period affecting these financial statements, other than those disclosed in notes 9 and 13.

Five-year trading summary

	2018 £m	2017 £m	2016 £m	2015 £m	2014 £m
Group revenue	**81.0**	70.1	57.4	53.9	48.9
Operating profit (excluding exceptional item)	**11.6**	9.4	7.6	6.3	5.6
Profit before tax (excluding exceptional item)	**10.8**	8.8	7.2	6.0	5.3
Profit before tax	**9.9**	7.5	7.0	6.0	4.0
Profit after tax	**7.9**	6.0	5.7	4.8	3.3
Capital expenditure (including intangibles)	**16.1**	12.2	12.6	9.1	7.6
Cash generated from operations	**7.1**	10.0	6.4	8.4	6.0
Basic earnings per share excluding exceptional item (p)	**18.66**	16.04	13.69	11.07	10.69
Basic earnings per share (p)	**16.96**	13.70	13.25	11.07	8.20
Dividends per ordinary share (p)	**6.12**	5.93	5.75	5.60	5.45

Notice of the 2019 Annual General Meeting

THIS DOCUMENT IS IMPORTANT AND REQUIRES YOUR IMMEDIATE ATTENTION

If you are in any doubt as to the action you should take, you should consult your stockbroker, accountant or other independent professional adviser authorised under the Financial Services and Markets Act 2000.

If you have sold or otherwise transferred your shares in Zotefoams plc, you should forward this document and other documents enclosed as soon as possible to the stockbroker, bank or other agent through whom the sale or transfer was arranged for transmission to the purchaser or transferee.

Notice is hereby given that the Annual General Meeting (the 'AGM') of Zotefoams plc (the 'Company') will be held at the registered office of the Company, **675 Mitcham Road, Croydon, CR9 3AL on Wednesday, 15 May 2019 at 10.00 am** for the following purposes.

All resolutions will be proposed as ordinary resolutions, save for resolutions 13, 14, 15 and 16, which will be proposed as special resolutions.

Ordinary resolutions

1. To receive the Annual Report of the Company for the year ended 31 December 2018.
2. To approve the Annual Statement by the Chair of the Remuneration Committee and the Annual Report on Remuneration for the year ended 31 December 2018 set out on pages 46 to 55 of the Annual Report.
3. To declare a final dividend for the year ended 31 December 2018 of 4.15 pence per ordinary share, such dividend to be payable on 30 May 2019 to shareholders on the register of members of the Company at the close of business on 26 April 2019.
4. To re-elect S P Good as a Director.
5. To re-elect D B Stirling as a Director.
6. To re-elect G C McGrath as a Director.
7. To re-elect A C Bromfield as a Director.
8. To re-elect D G Robertson as a Director.
9. To re-elect J D Carling as a Director.
10. That PricewaterhouseCoopers LLP be and is hereby re-appointed as Auditor of the Company to hold office from the conclusion of the AGM until the conclusion of the next general meeting at which accounts are laid before the Company.
11. To authorise the Audit Committee to determine the Auditor's remuneration.
12. That, in substitution for any equivalent authorities and powers granted to the Directors prior to the passing of this resolution, the Directors be and are generally and unconditionally authorised pursuant to Section 551 of the Companies Act 2006 (the 'Act'):

    (a) to exercise all powers of the Company to allot shares in the Company, and grant rights to subscribe for or to convert any security into shares of the Company (such shares, and rights to subscribe for or to convert any security into shares of the Company being 'relevant securities') up to an aggregate nominal amount of £805,020 (such amount to be reduced by the nominal amount of any allotments or grants made under paragraph (b) below in excess of £805,020); and further

    (b) to allot equity securities (as defined in Section 560 of the Act) up to an aggregate nominal amount of £1,610,040 (such amount to be reduced by the nominal amount of any allotments or grants made under paragraph (a) above) in connection with an offer by way of rights issue:

      (i) in favour of holders of ordinary shares in the capital of the Company, where the equity securities respectively attributable to the interests of all such holders are proportionate (as nearly as practicable) to the respective number of ordinary shares in the capital of the Company held by them; and

      (ii) to holders of any other equity securities as required by the rights of those securities or as the Directors otherwise consider necessary,

    but subject to such exclusions or other arrangements as the Directors may deem necessary or expedient to deal with treasury shares, fractional entitlements or legal, regulatory or practical problems arising under the laws or requirements of any overseas territory or by virtue of shares being represented by depository receipts or the requirements of any regulatory body or stock exchange or any other matter whatsoever;

    (c) provided that, unless previously revoked, varied or extended, this authority shall expire on the earlier of 30 June 2020 and the conclusion of the next Annual General Meeting of the Company, except that the Company may at any time before such expiry make an offer or agreement which would or might require relevant securities to be allotted after such expiry and the Directors may allot relevant securities in pursuance of such an offer or agreement as if this authority had not expired.

Notice of the 2019 Annual General Meeting
Continued

Special resolutions

13. That if resolution 12 is passed, the Directors be authorised to allot equity securities (as defined in Section 560 of the Act) for cash under the authority given by that resolution and/or to sell ordinary shares held by the Company as treasury shares for cash as if Section 561 of the Act did not apply to any such allotment or sale, such authority to be limited:

    (a) in favour of holders of ordinary shares in the capital of the Company, where the equity securities respectively attributable to the interests of all such holders are proportionate (as nearly as practicable) to the respective number of ordinary shares in the capital of the Company held by them; and

    (b) to the allotment of equity securities or sale of treasury shares (otherwise than under paragraph (a) above) up to a nominal amount of £120,750,

    such authority to expire at the conclusion of the next Annual General Meeting of the Company (or, if earlier, on 30 June 2020) but, in each case, prior to its expiry the Company may make offers, and enter into agreements, which would, or might, require equity securities to be allotted (and treasury shares to be sold) after the authority expires and the Directors may allot equity securities (and sell treasury shares) under any such offer or agreement as if the authority had not expired.

14. That if resolution 12 is passed, the Directors be authorised in addition to any authority granted under resolution 13 to allot equity securities (as defined in Section 560 of the Act) for cash under the authority given by that resolution and/or to sell ordinary shares held by the Company as treasury shares for cash as if Section 561 of the Act did not apply to any such allotment or sale, such authority to be:

    a) limited to the allotment of equity securities or sale of treasury shares up to a nominal amount of £120,750; and

    (b) used only for the purposes of financing (or refinancing, if the authority is to be used within six months after the original transaction) a transaction which the Directors determine to be an acquisition or other capital investment of a kind contemplated by the Statement of Principles on Disapplying Pre-Emption Rights most recently published by the Pre-Emption Group prior to the date of this notice,

    such authority to expire at the conclusion of the next Annual General Meeting of the Company (or, if earlier, on 30 June 2020) but, in each case, prior to its expiry the Company may make offers, and enter into agreements, which would, or might, require equity securities to be allotted (and treasury shares to be sold) after the authority expires and the Directors may allot equity securities (and sell treasury shares) under any such offer or agreement as if the authority had not expired.

15. That the Company be and is hereby unconditionally and generally authorised for the purposes of Section 701 of the Act to make market purchases (within the meaning of Section 693(4) of the Act) of its ordinary shares of 5 pence each (‘ordinary shares’) provided that:

    (a) the maximum number of ordinary shares authorised to be purchased is 4,830,123, representing approximately 10% of the issued ordinary share capital as at 1 April 2019;

    (b) the minimum price which may be paid for any such ordinary share is 5 pence;

    (c) the maximum price which may be paid for an ordinary share shall be an amount equal to 105% of the average middle market quotations for an ordinary share as derived from the London Stock Exchange Daily Official List for the five business days immediately preceding the day on which the ordinary share is contracted to be purchased; and

    (d) this authority shall, unless previously renewed, revoked or varied, expire on the earlier of 30 June 2020 and the conclusion of the next Annual General Meeting, but the Company may enter into a contract for the purchase of ordinary shares before the expiry of this authority which would or might be completed (wholly or partly) after its expiry.

16. That a general meeting other than an Annual General Meeting may be called on not less than 14 clear days’ notice.

Dated: 3 April 2019

By order of the Board

Registered Office:
675 Mitcham Road
Croydon
CR9 3AL

James Adams
Company Secretary

Notes

(i) Pursuant to Part 13 of the Companies Act 2006 and to Regulation 41 of the Uncertificated Securities Regulations 2001 (as amended), only those members registered in the register of members of the Company at the close of business on 13 May 2019 (or if the AGM is adjourned, 48 hours before the time fixed for the adjourned AGM) shall be entitled to attend and vote at the AGM in respect of the number of shares registered in their name at that time. In each case, changes to the register of members after such time shall be disregarded in determining the rights of any person to attend or vote at the AGM.

(ii) If you wish to attend the AGM in person please bring some form of identification (such as driver's licence or bankcard) and present this to the Company's reception desk on arrival.

(iii) A member who is entitled to attend, speak and vote at the AGM may appoint a proxy to attend, speak and vote instead of him or her. A member may appoint more than one proxy provided each proxy is appointed to exercise rights attached to different shares (so a member must have more than one share to be able to appoint more than one proxy). A proxy need not be a member of the Company but must attend the AGM in order to represent you. A proxy must vote in accordance with any instructions given by the member by whom the proxy is appointed. Appointing a proxy will not prevent a member from attending in person and voting at the AGM (although voting in person at the AGM will terminate the proxy appointment). A proxy form is enclosed or has been sent to you separately. The notes to the proxy form include instructions on how to appoint the Chairman of the AGM or another person as a proxy. You can only appoint a proxy using the procedures set out in these notes and in the notes to the proxy form.

(iv) To be valid, a proxy form, and the original or duly certified copy of the power of attorney or other authority (if any) under which it is signed or authenticated, should reach the Company's registrars, Computershare Investor Services plc, The Pavilions, Bridgwater Road, Bristol BS99 6ZY, by no later than 10.00 am on 13 May 2019.

(v) The proxy form includes details on how to vote electronically. The notes to the proxy form also include instructions on how to appoint a proxy by using the CREST proxy appointment service. You may not use any electronic address provided either in this notice of AGM or in any related documents (including the proxy form) to communicate with the Company for any purposes other than those expressly stated.

(vi) In the case of joint holders of shares, the vote of the first named in the register of members who tenders a vote, whether in person or by proxy, shall be accepted to the exclusion of the votes of other joint holders.

(vii) The following information is available at www.zotefoams.com: (1) the matters set out in this notice of AGM; (2) the total numbers of shares in the Company, and shares in each class, in respect of which members are entitled to exercise voting rights at the AGM; (3) the totals of the voting rights that members are entitled to exercise at the AGM, in respect of the shares of each class; and (4) members' statements, members' resolutions and members' matters of business received by the Company after the first date on which notice of the AGM was given.

(viii) If you are a person who has been nominated by a member to enjoy information rights in accordance with Section 146 of the Companies Act 2006, notes (iii) to (v) above do not apply to you (as the rights described in these notes can only be exercised by members of the Company) but you may have a right under an agreement between you and the member by whom you were nominated to be appointed or to have someone else appointed, as a proxy for the meeting. If you have no such right or do not wish to exercise it, you may have a right under such an agreement to give instructions to the member as to the exercise of voting rights.

(ix) A member that is a company or other organisation not having a physical presence cannot attend in person but can appoint someone to represent it. This can be done in one of two ways: either by the appointment of a proxy (described in notes (iii) to (v) above) or of a corporate representative. Members considering the appointment of a corporate representative should check their own legal position, the Company's Articles of Association and the relevant provision of the Companies Act 2006.

(x) Members attending the AGM have the right to ask, and, subject to the provisions of the Companies Act 2006, the Company must cause to be answered, any questions relating to the business being dealt with at the AGM.

(xi) As at the close of business on 1 April 2019, the Company's issued share capital comprised 48,301,234 ordinary shares of 5 pence each. Each ordinary share carries the right to one vote at a general meeting of the Company. No ordinary shares were held in treasury and accordingly the total number of voting rights in the Company as at the close of business on 1 April 2019 is 48,301,234.

(xii) Shareholders should note that it is possible that, pursuant to requests made by shareholders of the Company under Section 527 of the Companies Act 2006, the Company may be required to publish on a website a statement setting out any matter relating to: (i) the audit of the Company's accounts (including the auditors' report and the conduct of the audit) that are to be laid before the AGM; or (ii) any circumstance connected with the auditors of the Company ceasing to hold office since the previous meeting at which annual accounts and reports were laid in accordance with Section 437 of the Companies Act 2006. The Company may not require the shareholders requesting any such website publication to pay its expenses in complying with Sections 527 or 528 of the Companies Act 2006. Where the Company is required to place a statement on a website under Section 527 of the Companies Act 2006, it must forward the statement to the Company's Auditors not later than the time when it makes the statement available on the website. The business which may be dealt with at the AGM includes any statement that the Company has been required under Section 527 of the Companies Act 2006 to publish on a website.

(xiii) Copies of the Executive Directors' service contracts with the Company and any of its subsidiary undertakings, deeds of indemnity in favour of the Directors and letters of appointment of the Non-Executive Directors are available for inspection at the registered office of the Company during the usual business hours on any weekday (Saturday, Sunday or public holidays excluded) from the date of this notice until the conclusion of the AGM.

Explanatory notes to the resolutions

Ordinary resolutions

Resolution 1 – Receiving the Annual Report

Shareholders will be asked to receive the Company's Annual Report for the financial year ended 31 December 2018, as required by law.

Resolution 2 – Directors' Remuneration Report

Resolutions 2 seeks shareholder approval of the Directors' Remuneration Report for the year ended 31 December 2018 which can be found on pages 46 to 55 of the Annual Report.

The Company's Auditors, PricewaterhouseCoopers LLP, have audited those parts of the Directors' remuneration report that are required to be audited and their report may be found on pages 59 to 63 of the Annual Report.

The Shareholders approved the current Directors' Remuneration Policy at the AGM held on 17 May 2017 and it became effective immediately. As there have been no changes to the Directors' Remuneration Policy, there is no need to seek further approval of it at this year's AGM. The current intention is to submit the Directors' Remuneration Policy for Shareholder approval at the AGM scheduled for 2020, unless, in the interim, there are specific changes that require Shareholder approval. The Directors' Remuneration Policy may be found in the 2016 Annual Report on pages 41 to 52.

Resolution 3 – Declaration of dividend

This resolution concerns the Company's final dividend payment. The Directors are recommending a final dividend of 4.15 pence per ordinary share in respect of the year ended 31 December 2018 which, if approved, will be payable on 30 May 2019 to the shareholders on the register of members on 26 April 2019.

Resolutions 4 to 9 – Re-election of Directors

Resolutions 4 to 9 concern the re-election of the Directors, in accordance with the UK Corporate Governance Code.

Biographies for the Directors are set out on pages 38 and 39 of the Annual Report for the year ended 31 December 2018. The Chairman, having undertaken performance reviews of the Directors and the Non-Executive Directors of the Chairman, the Board is satisfied that each Director continues to be effective and demonstrates commitment to the role and recommends that each Director should be re-elected.

Resolutions 10 and 11 – Re-appointment of Auditor and their remuneration

Resolution 10 concerns the re-appointment of PricewaterhouseCoopers LLP as the Company's Auditor, to hold office until the conclusion of the Company's next general meeting where accounts are laid.

Resolution 11 authorises the Audit Committee to determine the Auditor's remuneration.

Notice of the 2019 Annual General Meeting
Continued

Special Business

Resolution 12 – Power to allot shares

This resolution grants the Directors authority to allot shares in the capital of the Company and other relevant securities up to an aggregate nominal value of £805,020, representing approximately one-third of the nominal value of the issued ordinary share capital of the Company as at 1 April 2019, being the latest practicable date before publication of this notice. In addition, in accordance with the latest institutional guidelines issued by the Investment Association, paragraph (b) of resolution 12 grants the Directors authority to allot further equity securities up to an aggregate nominal value of £1,610,040, representing approximately two-thirds of the nominal value of the issued ordinary share capital of the Company as at 1 April 2019, being the latest practicable date before publication of this notice. This additional authority may be only applied to fully pre-emptive rights issues.

The intention of the authority granted pursuant to paragraph (b) of resolution 12 is to preserve maximum flexibility and if the Directors do exercise this authority, they intend to follow best practice as regards its use.

The Company does not currently hold any shares as treasury shares within the meaning of Section 724 of the Companies Act 2006 (‘Treasury Shares’).

The Directors do not have any present intention of exercising the authorities conferred by resolution 12 but they consider it desirable that the specified amount of authorised but unissued share capital is available for issue so that they can more readily take advantage of possible opportunities.

Unless revoked, varied or extended, this authority will expire at the conclusion of the next AGM of the Company or 30 June 2020, whichever is the earlier.

Special resolutions

Resolutions 13 and 14 – Authority to allot shares disregarding pre-emption rights

These resolutions authorise the Directors in certain circumstances to allot equity securities for cash other than in accordance with the statutory pre-emption rights (which require a company to offer all allotments for cash first to existing shareholders in proportion to their holdings). Resolution 13 authorises the Directors to issue shares either where the allotment takes place in connection with a rights issue or the allotment is limited to a maximum nominal amount of £120,750, representing approximately 5% of the nominal value of the issued ordinary share capital of the Company as at 1 April 2019, being the latest practicable date before publication of this notice. Resolution 14 authorises the Directors to issue a further 5% of the issued ordinary share capital of the Company, but only to be used to raise finance for an acquisition or a specified capital investment (within the meaning given in the Pre–Emption Group’s Statement of Principles) which is announced contemporaneously with the allotment, or which has taken place in the preceding six-month period and is disclosed in the announcement of the allotment.

Unless revoked, varied or extended, these authorities will expire at the conclusion of the next AGM of the Company or 30 June 2020, whichever is the earlier.

The Directors consider that the powers proposed to be granted by these resolutions are necessary to retain flexibility, although they do not have any intention at the present time of exercising them.

Resolution 15 – Authority to purchase shares (market purchases)

This resolution authorises the Board to make market purchases of up to 4,830,123 ordinary shares (representing approximately 10% of the Company’s issued ordinary shares as at 1 April 2019, being the latest practicable date before publication of this notice). Shares so purchased may be cancelled or held as Treasury Shares. The authority will expire at the end of the next AGM of the Company or 30 June 2020, whichever is the earlier. The Directors intend to seek renewal of this authority at subsequent AGMs.

The minimum price that can be paid for an ordinary share is 5 pence being the nominal value of an ordinary share. The maximum price that can be paid is 5% over the average of the middle market prices for an ordinary share, derived from the Daily Official List of the London Stock Exchange, for the five business days immediately before the day on which the share is contracted to be purchased.

The Directors intend to exercise this right only when, in light of the market conditions prevailing at the time and taking into account all relevant factors (for example, the effect on earnings per share), they believe that such purchases are in the best interests of the Company and shareholders generally. The overall position of the Company will be taken into account before deciding upon this course of action. The decision as to whether any such shares bought back will be cancelled or held in treasury will be made by the Directors on the same basis at the time of the purchase.

As at 1 April 2019, being the latest practicable date before publication of this notice, there were outstanding awards under the Company’s long-term incentive schemes (excluding the Share Incentive Plan) in respect of 868,952 ordinary shares in the capital of the Company representing 1.8% of the Company’s issued ordinary share capital. If the authority to purchase the Company’s ordinary shares were exercised in full, such awards would represent 2% of the Company’s issued ordinary share capital.

Resolution 16 – Notice period for general meetings

Under the Companies Act 2006, a listed company must give at least 21 days’ notice of its general meetings. However, the Act enables general meetings (other than AGMs) to be held on shorter notice of not less than 14 days provided the shareholders have given their consent at the previous AGM or a general meeting held since the last AGM. Resolution 16 seeks such approval similar to the resolution that was passed last year. The approval will be effective until the Company’s next AGM, when it is intended that a similar resolution will be proposed. The Directors will always endeavour to give as much notice as possible of general meetings, but would like to have the flexibility to call a general meeting on the shorter permitted notice period for time sensitive matters that are clearly in the shareholders’ interests. If the authority is used, the Company will offer the ability, as required by the Companies Act 2006, to vote electronically.

Recommendation

The Directors consider that the proposals being put to the shareholders at the AGM are in the best interests of the Company and of the shareholders as a whole. Accordingly, the Directors recommend that you vote in favour of the resolutions set out in the Notice of the AGM, as they intend to do in respect of their own beneficial holdings of ordinary shares.

Company information

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London EC2N 1AR

Financial Public Relations
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Bankers
Handelsbanken plc
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London, E1W 1WY

National Westminster plc
Turnpike House, 123 High Street
Crawley RH10 1DD

Solicitors
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One London Wall
London EC2Y 5EB

Collyer Bristow LLP
4 Bedford Row
London WC1R 4TF

Registrars
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The Pavilions
Bridgwater Road
Bristol BS99 6ZZ
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Financial calendar

AGM	15 May 2019
Payment of final dividend	30 May 2019 to shareholders on the register at the close of business on 26 April 2019
Payment of interim dividend	October 2019
Announcement of 2019 results	March 2020

Website
The Company has a website (www.zotefoams.com) which provides information on the business and products.

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Registrars
Enquiries concerning the holding of ordinary shares in the Company should be addressed to the registrars who should also be notified of any changes in a holder's address.

The registrars are: Computershare Investor Services Plc, The Pavilions, Bridgwater Road, Bristol BS99 6ZZ.

Telephone: 0370 707 1424

www.investorcentre.co.uk/contactus

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