

ZOTEFOAMS

Setting the pace

Annual Report 2019

Setting the pace for growth

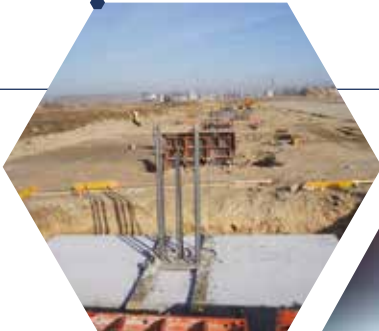
Following sustained growth in demand for our unique materials and completion of our first programme in the USA to install a high-pressure autoclave and infrastructure, Zotefoams embarked in 2018 on a second, broader programme of investment designed to make our organisation more agile and responsive to the many opportunities that exist for our products. With all projects due to be complete by H2 2020, see how we progressed over the course of 2019, along with other highlights from the year.

[Lift to find out more](#)

Timeline of the year

February

Construction of our plant in Poland begins. Scheduled for completion in H2 2020, this will increase our global annual foam manufacturing capacity by up to 50,000m³, or around 15%.



May

We open a sales office in Ahmedabad, India for our T-FIT[®] insulation range, enabling us to fully capitalise on the immense opportunity presented by the Indian pharmaceutical production market, which is forecast to be one of the world's top three markets by 2030.



July

On time and on budget: the new factory at our UK plant is officially opened, increasing capacity for production of our high-performance products (HPP) range.



March

Zotefoams wins the Innovation in Technology award at the prestigious PLC Awards, underlining how our unique materials are more relevant than ever in an increasingly safety- and energy-conscious world.



June

Our UK site gains Authorised Economic Operator status, recognising that our place in the international supply chain is secure, with customs controls and procedures that are efficient and meet EU standards.

September

We launch AZOTE® Adapt, a new range of crosslinked polyolefin block foams, which harnesses our knowledge of foam processing using autoclaves to redefine chemical foaming.



November

The construction phase of our Polish plant is completed on time and on budget and, following handover from the contractors, delivery, installation and commissioning of production equipment commences.



October

Zotefoams records an industry first as we launch ReZorce®, a range of recyclable high-density polyethylene (HDPE) mono-materials for barrier packaging of foodstuffs, beverages, household and personal care goods.



August

Work on supporting infrastructure for the second high-pressure autoclave at our USA plant nears completion. The project will add capacity and flexibility to produce more foams closer to our North American customer base.

Financial highlights

Group revenue

£80.86m

Change **0%**

2018 **£81.04m**

Operating profit before exceptional item

£9.10m

Change **-21%**

2018 **£11.57m**

Profit before tax and exceptional item

£8.76m

Change **-19%**

2018 **£10.81m**

Basic earnings per share before exceptional item

14.91p

Change **-20%**

2018 **18.66p**

Total dividend for the year

2.03p

Change **-67%**

2018 **6.12p**

Gross margin

35.4%

Change **-43 basis points**

2018 **35.8%**

Operating profit

£10.15m

Change **-4%**

2018 **£10.62m**

Profit before tax

£9.81m

Change **0%**

2018 **£9.86m**

Basic earnings per share

17.10p

Change **+1%**

2018 **16.96p**

Return on capital employed

10.5%

Change **600 basis points**

2018 **16.5%**

Impact of exceptional item

	Before exceptional item	After exceptional item
Operating profit	9.10	10.15
Exceptional item (£m)	-	1.05
Profit before tax (£m)	8.76	9.81
Tax (£m)	1.39	1.59
Profit after tax (£m)	7.17	8.22
Weighted average number of shares (number)	48,054,819	48,054,819
Basic earnings per share (p)	14.91p	17.10p

Impact of IFRS 16*

	As reported	Before IFRS 16 adjustment
Operating profit before exceptional item	9.10	9.10
Profit before tax and exceptional item (£m)	8.76	8.76
Basic earnings per share before exceptional item (p)	14.91	14.91
Gross margin (%)	35.4	35.4
Operating profit	10.15	10.15
Profit before tax (£m)	9.81	9.81
Basic earnings per share (p)	17.10	17.10
Return on capital employed (%)	10.5	10.5

* The financial year ended 2018 includes operating lease costs under IAS 17. The financial year ended 2019 includes lease costs under IFRS16, which classifies operating leases as right-of-use assets and lease liabilities on the statement of financial position. The net impact of IFRS 16 to profit before tax, being the increase in depreciation charge and interest charge offset by the decrease in operating lease charges, is nil for the year ended 31 December 2019.

Contents

Strategic Report

8	Group at a glance
10	A unique manufacturing process
12	An introduction from our Chair
14	Group CEO's review
18	Our business model
20	Our external context
22	Our strategic objectives
24	Our brands in action
28	Group CFO's review
33	Risk management and principal risks
39	Viability statement
40	Our people
43	Sustainability
47	s172(1) statement

Governance

48	Board of Directors
50	Corporate governance
51	The Board and its Committees
53	Audit Committee report
55	Nomination Committee report
56	Directors' Remuneration report
73	Directors' report
75	Statement of Directors' responsibilities

Financial Statements

76	Independent auditors' report
81	Consolidated income statement
82	Consolidated statement of comprehensive income
83	Consolidated statement of financial position
84	Company statement of financial position
85	Consolidated statement of cash flows
86	Company statement of cash flows
87	Consolidated statement of changes in equity
88	Company statement of changes in equity
89	Notes
128	Five-year trading summary
129	Notice of the 2020 Annual General Meeting
IBC	Company information
IBC	Financial calendar



Setting the pace with Nike

Unique processes deliver unique materials

The unique Zotefoams three-stage manufacturing process is recognised for the suite of product characteristics it delivers, including lighter weight and greater consistency, durability and purity than foams manufactured by any other method.

Equally important as a differentiator is the fact that our autoclave technology can be used to foam polymers that cannot be reliably expanded by any other method, which is the founding principle of our High-Performance Products (HPP) business.

Nowhere is this better illustrated than with ZOTEK® PEBA, based on a thermoplastic elastomer (TPE) resin, which we began to develop in 2012 as a material for demanding applications in sports.



High potential, high energy return

With an unrivalled combination of durability, outstanding energy return and ultra light weight, ZOTEK® PEBA is perfect for applications where cushioning and impact protection are paramount, such as saddles, protective clothing and, notably, high-tech footwear, where energy return ranks alongside cushioning as a critical performance factor.

In 2017, Nike and Zotefoams announced a strategic partnership, whereby Zotefoams supplies its foam materials exclusively to Nike within the footwear industry.

A recent result of the partnership is the Nike ZoomX Vaporfly NEXT%. Launched in 2019, the shoe combines a Nike ZoomX midsole produced from Zotefoams material with a full-length carbon plate. Together, these elements form a cushioning system that helps maximise energy return for the athlete.

“We are proud of this partnership, through which we continue to work exclusively with Nike to develop and manufacture foam innovations to bring to market high-performance athletic product.”

David Stirling, Group CEO



Setting the pace in polyolefin foams

Closer to our customers

Zotefoams materials have always stood apart from the competition thanks to our unique manufacturing process based on physical expansion using pure nitrogen.

This results in materials that are purer, lighter, more uniform and durable than chemically blown foams – all prized properties in the often-critical applications that utilise Zotefoams material. The capital-intensive nature of our business is one of the main barriers to entry for potential competitors. During periods of peak demand, however, it can limit flexibility. In 2019, we addressed this challenge with the launch of AZOTE® Adapt.

Redefining chemical foaming

Recognising the growing market our customers serve with chemically blown foams but also the concerns about residual volatile organic compounds (VOCs) and stricter emissions standards to limit workforce exposure levels, Zotefoams saw a clear opportunity to improve on that process.

AZOTE® Adapt is an entirely new category of polyolefin foam that combines our unique experience in physical expansion of foam using autoclaves with the latest chemical blowing agent technology in a proprietary process.

Closer to our customers

Well received by customers following its test launch in October, AZOTE® Adapt is currently being produced in limited quantities at Zotefoams' UK facility. It will be manufactured in volume in Poland on completion of the new plant, which offers additional competitive advantage thanks to its location close to major European manufacturing centres.



“AZOTE® Adapt has been developed specifically to deliver the service, block size and cell structure demanded by our customers along with consistency of density and low VOC with minimal chemical residues.”

David Stirling, Group CEO

The Polish plant will initially add

50,000m³

to our annual global foam production capacity – an increase of some 15%

On completion of this final phase of our two-year investment programme, we will have increased Group annual capacity by

60%

since 31 December 2017

Setting the pace in fully recyclable mono-material barrier packaging

Reduce, reuse, recycle

Plastic is a mainstay of consumer packaging thanks to its low cost, light weight and flexibility in processing. MuCell Extrusion LLC works with packaging materials suppliers delivering technology that foams the core of solid plastics, reducing material content, costs and weight.

Performance and sustainability

Although plastic is the focus of much negative publicity, when used and recycled appropriately it is a highly sustainable resource. One area of challenge remaining in this respect is barrier packaging, primarily used for foods and beverages where transmission of oxygen or moisture through the packaging will impair the product. Current barrier packaging typically consists of different types of materials – metallised foils, aluminium, paper and plastic – laminated together. Barrier performance can come at the expense of sustainability, however, as these combinations of materials face significant challenges in recycling.



In 2020, our team addressed this challenge with the introduction of ReZorce® packaging. Now available for licensing to brand owners and converters, ReZorce® offers excellent functional capability to replace current composite versions of:

- ▶ Tubes
- ▶ Laminated paper
- ▶ Pouches
- ▶ Cartons

100% recyclable

ReZorce® is a multi-layer high-density polyethylene (HDPE) film, with foamed layers critical in providing moisture vapour transmission (MVT) and oxygen barrier properties. It is also compatible with float-sink sorting and HDPE post-consumer recycling. The foamed layers also contribute to paper-like feel and fold characteristics, while the surface is compatible with all common printing methods.



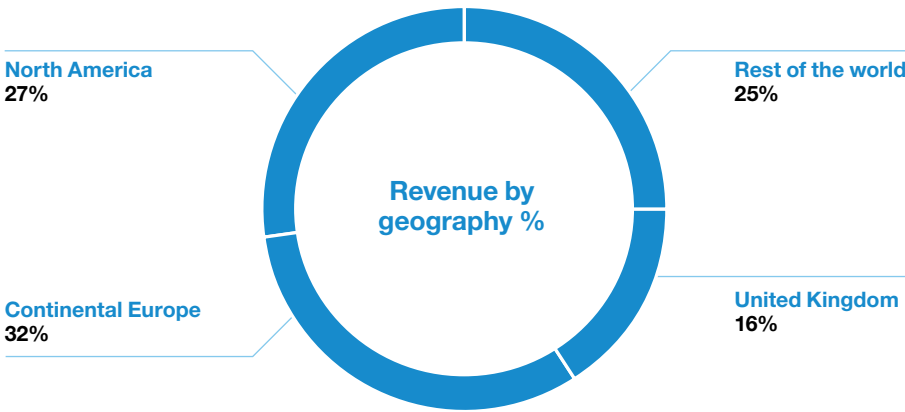
“Zotefoams’ products and technologies are frequently part of the sustainability agenda for our customers and their end users – and demand is increasing. The global trend of using less material creates opportunities to use foams and we intend to develop further products and solutions to satisfy global needs in a sustainable manner.”

David Stirling, Group CEO

Group at a glance

Four strong, distinctive brands

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



North America

Local manufacturing presence in Kentucky for the Polyolefin Foams business, cutting operation in Oklahoma to service the construction market, and headquarters of MuCell Extrusion LLC (MEL), based in Massachusetts, licensing technology globally. Local representation for our High-Performance Products (HPP) business.

Continental Europe

Largest market for polyolefin foams. Work is well advanced on a £23m manufacturing facility in south west Poland. Scheduled to begin operations in H2 2020, the plant will initially service the 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 for sale globally.

Rest of the world

T-FIT® technical insulation manufacturing in China for sales of insulation products globally. Local representation for High-Performance Products (HPP) business. Joint venture with INOAC Corporation for AZOTE® polyolefin foams sales in Asia. Commercial operation established during the year in India.

AUTOCLAVE TECHNOLOGY

AZOTE®

POLYOLEFIN FOAMS

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

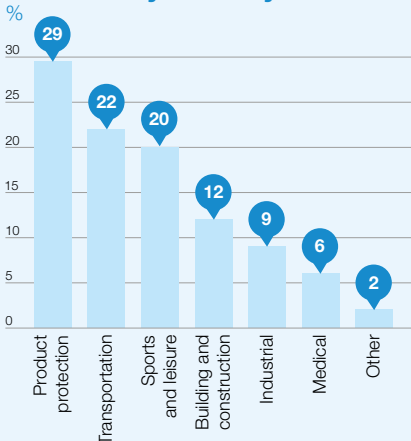
- Automotive
- Aviation
- Building and construction
- Industrial
- Marine
- Military
- Product protection
- Sports and leisure

Key market drivers

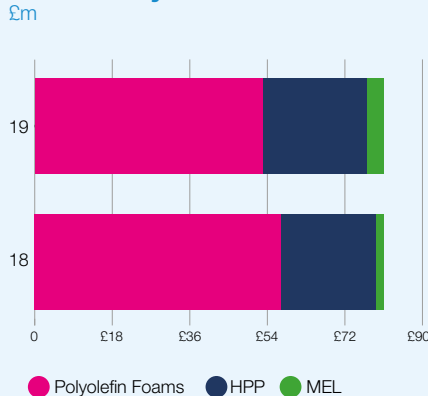
- Light weighting
- Durability
- Fire safety
- Reduced toxicity
- Energy saving

[+ Read more page 24.](#)

Revenue by industry 2019



Revenue by business unit



Lighter, purer, more durable components for the automotive industry

[+ Read more page 24.](#)

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 page 25.](#)



From lightweight to weightless: ZOTEK® F proves a winner in spacecraft interiors

[+ Read more page 25.](#)

T-FIT®



Technical insulation for industry

A range of bacteria-resistant insulation products manufactured from Zotefoams' own ZOTEK® block foam materials. T-FIT® insulation 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 page 26.](#)



T-FIT® Hygiene is first choice insulation for cool chain customer

[+ Read more page 26.](#)

EXTRUSION TECHNOLOGY

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. Recently developed ReZorce® recyclable mono-material barrier solutions use this technology.

Key markets served

- Automotive
- Consumer packaging

Key market drivers

- Environmental benefit
- Lower cost

[+ Read more page 27.](#)



An industry first in recyclable food packaging

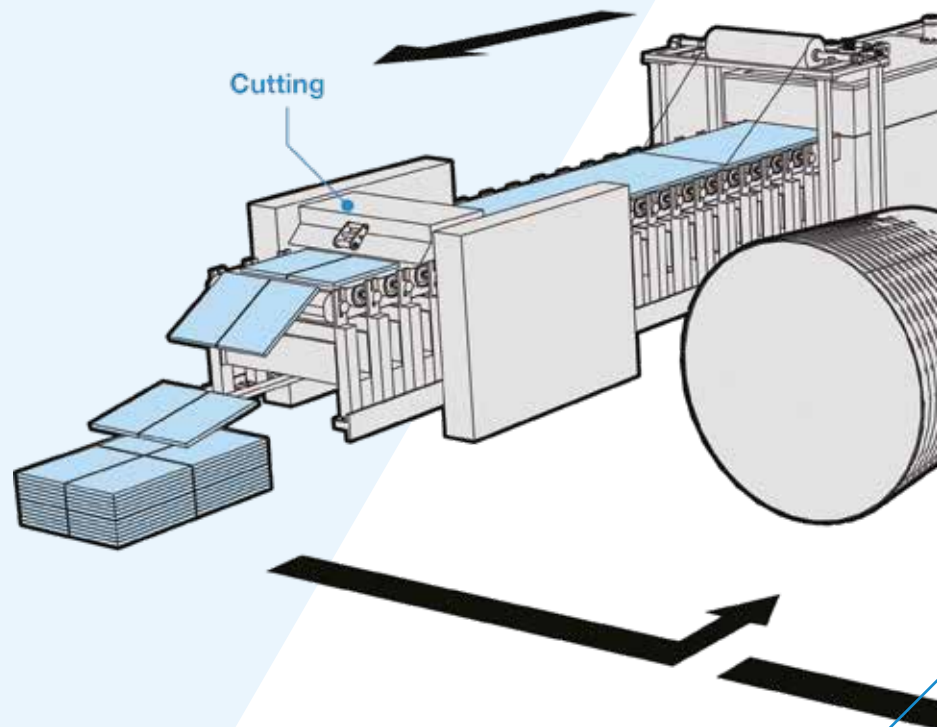
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A unique manufacturing process

The Zotefoams difference

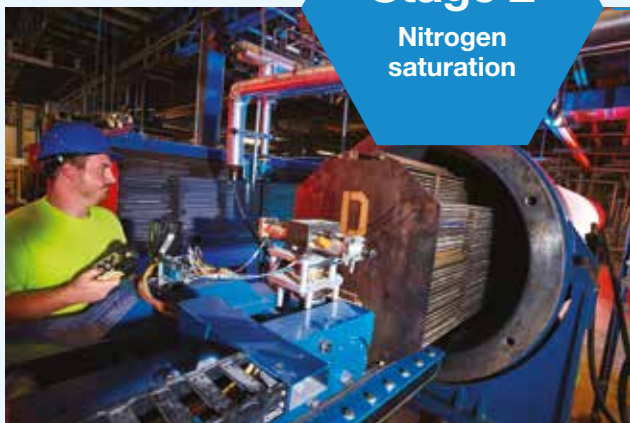
Zotefoams manufactures a wide range of crosslinked, lightweight block foams using variations of our unique nitrogen-expansion manufacturing process. This affords an exclusive combination of beneficial characteristics – uniformity, purity, low toxicity and durability – that differentiates Zotefoams' materials 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 performance delivers properties such as excellent fire resistance, high-temperature stability, toughness and insulation, which are prized in a wide range of demanding applications.



Stage 2

Nitrogen saturation



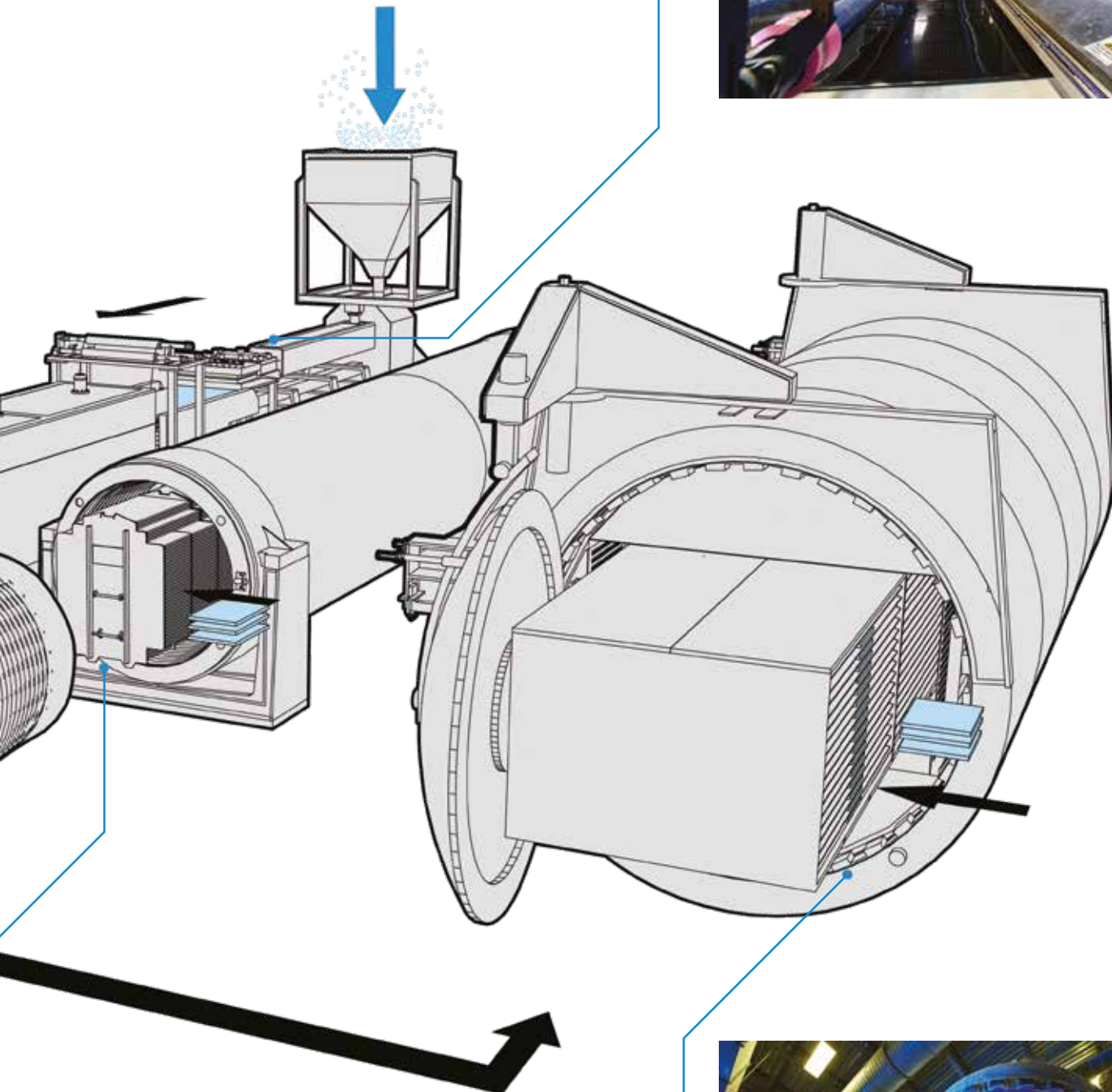
Slabs are loaded into a high-pressure autoclave. The material is heated above its melting point and pressurised with pure nitrogen gas. Over a long period of time the nitrogen gas diffuses into the slabs. A rapid depressurisation destabilises the absorbed nitrogen nucleating cells in the slab. The slabs are then cooled under pressure in the autoclave, locking the nitrogen in the unexpanded slabs, prior to them being unloaded.

Polymer and any additives (colours, fire retardants, conductive agents) are extruded into a continuous solid plate. The plate passes through an oven which activates the crosslinking process. It then cools and is cut into slabs.

Stage 1 Extrusion and crosslinking



Polymer granules feed



The nitrogen-charged slabs are loaded into a large lower-pressure autoclave and, under moderate pressure, are heated to above their melting point. When the pressure is reduced the nitrogen expands turning the slab into a larger foam sheet. This expansion process is unconstrained, so uniform in each dimension.

Stage 3 Expansion



An introduction from our Chair

Making good strategic progress



We remain committed to our strategy of building a global business despite a challenging environment.

Total dividend for the year

2.03p

Change **-67%**

2018 **6.12p**

Final dividend suspended in response to the COVID-19 virus outbreak and related uncertainty.

Basic earnings per share before exceptional item

14.91p

Change **-20%**

2018 **18.66p**

Earnings per share

17.10p

Change **+1%**

2018 **16.96p**

Overview

In a year which ended with a very challenging demand environment, we have made good strategic progress. We continued to deliver strong growth in our High-Performance Products (HPP) business, improved our revenue base and opportunities for future growth in MuCell Extrusion LLC (MEL) and all capacity expansion investments to support our medium-term growth ambitions completed as planned or are on track to do so. In our Polyolefin Foams business, following a good start to the year, market demand, particularly in continental Europe, deteriorated rapidly in the second half of the year. This situation was exacerbated by significant customer de-stocking and, while cost actions were taken, the Group's overall financial performance was weaker than the previous year as a result.

Performance

In 2019, Group revenue was £80.86m, broadly in line with 2018 (£81.04m). Operating profit before exceptional item was down 21% at £9.10m (2018: £11.57m) and operating profit was down 4% at £10.15m (2018: £10.62m). Basic earnings per share before exceptional item was down 20% at 14.91p (2018: 18.66p) and basic earnings per share was up 1% at 17.10p (2018: 16.96p).

HPP is our fastest-growing business unit and sales grew 20%, in line with our strategic targets. MEL, while still small, grew sales by 59%, driven by increased equipment revenue. The Polyolefin Foams business, which is the largest part of the business and whose volumes provide significant cost absorption to drive profitability, declined 10% amid macroeconomic and geo-political uncertainty.

Being a manufacturing exporter, the Group is subject to foreign currency volatility, which it seeks to mitigate through hedging of its net operating cash flows and using foreign currency denominated debt to offset the Company's exposure on its third party net assets as well as its intercompany loans and trading positions. While not affecting the cash profitability of the business, the impact of foreign exchange translation losses in 2019 of £0.47m (2018: gains of £0.99m) represented a significant adverse swing from the prior period.

The equity raise and refinancing of 2018 have provided Zotefoams with funds to complete our major capacity investment programme and finance the additional working capital required for growth. The timing of the cyclical downturn in Polyolefin Foams, exacerbated by the unprecedented economic uncertainty from COVID-19, at the same time as these capacity investments complete, has adversely impacted returns on capital and will result in peak debt levels and debt leverage (net debt to EBITDA) being higher than previously anticipated. We believe the Group has sufficient liquidity and expect to remain within revised covenant levels.

Delivering our strategy

The Board reviews strategic plans throughout the year and this forms the basis for our decision-making. We have a clear and consistent long-term strategy for organic growth, based around the three long-term megatrends of environment, regulation and demographics, all of which drive demand for our products. We use our unique technology to deliver stakeholder value by creating a portfolio of differentiated products which provide demonstrable benefits to our customers. Our strategic objective is to achieve annual growth in our Polyolefin Foams business of at least twice global GDP and develop HPP and MEL businesses that offer enhanced growth rates and margins, while growing operating margins and our return on capital over the investment cycle. During 2019, we have materially grown our HPP and MEL businesses in line with our strategy and have further developed our pipeline of opportunities to sustain high rates of growth. We have also maintained our focus on completing our capital expansion programme, expected to provide the capacity to support demand through our strategic plan period. We successfully completed our investments in the USA and the UK and expect to commission our Polish manufacturing facility in H2 2020.

The Board is very aware of the current plastics debate and the importance of sustainability with respect to driving desired outcomes for all stakeholders in the future. Zotefoams' products are used almost exclusively for permanent solutions and often form part of our customers' sustainability agenda. They are seldom used for single-use purposes which, understandably in certain applications, is causing most public concern. We believe that plastics, used appropriately, remain the optimal solution both functionally and environmentally for our customers' needs. We also recognise the importance of continuous improvement around product development and operating efficiency to reduce the Group's environmental impact.

➤ **More details are included under Sustainability on page 43.**

Governance and the Board

The Board sets out to deliver the highest standards of corporate governance and has remained abreast of developing governance standards. We have continued to prioritise a safe working environment for our staff across all global locations and have improved the visibility and quality of safety performance data across the business. We continue to support and empower our employees and are meeting our commitment to enhancing the employee voice in the boardroom through the appointment of J Carling as Board representative for workforce engagement. With the help of a diverse group of employee representatives and seeking to represent the interests of all stakeholder groups, we have articulated the purpose of Zotefoams to

be "Optimal material solutions for the benefit of society". We feel this perfectly encapsulates all three business units and reflects our alignment with the megatrends of environment, regulation and demographics. The Board considers that it has fully applied all the principles and provisions of the UK Corporate Governance Code during 2019.

➤ **More information is provided in the Corporate Governance report on page 50.**

During the year, there were no changes to the experienced and engaged Board, which has continued to provide challenge, support and guidance to the Executive Directors on the delivery of our strategy. Board succession planning is key to preserving this position and to that end we are pleased to be appointing C Wall and A Fielding to the Board with effect from 14 May 2020. Both will bring highly relevant skill sets and experience to the Board. A Fielding will replace A Bromfield as Chair of the Remuneration Committee, who will leave the Board on 13 May 2020. A Bromfield has served Zotefoams since 2014 and departs with our sincerest thanks for her wise counsel and leadership of the Remuneration Committee and her valuable strategic and cultural insights.

People

Our people are key to our success. During the year we have welcomed the first group of employees who will help ensure the success of our Poland manufacturing location, as well as the first group of employees to our new Indian organisation who will help achieve our ambitious growth targets in our T-FIT® technical insulation business. Having the right people at Zotefoams, who understand and promote our culture, act at all times with integrity, safety-consciousness and dedication and possess the right knowledge and skills, is critical to our future success. I would like to welcome the new employees who have joined us around the world during the past 12 months and extend my thanks, once again, to all our hard-working employees and their supportive families who have helped the Group continue to make good strategic progress while managing the challenges faced by our Polyolefin Foams Business Unit.

Dividend

The Board has a progressive dividend policy, recognising the importance to our shareholders of the dividend as part of their overall return. However, as described above, the extraordinary uncertainty posed by the COVID-19 outbreak means that we are focused on minimising cash outflows and strengthening our financial position in the short term. As such, the Board believes it prudent not to recommend a final dividend for the year ended 31 December 2019 (2018: 4.15p). The Board will keep this situation under review and will determine the timing for resumption of dividends as economic conditions stabilise.

Summary

In 2019, Zotefoams delivered good strategic progress in the face of very challenging macroeconomic conditions. Looking ahead, while the ongoing impact of the COVID-19 virus is generating significant uncertainty, we continue to benefit from an attractive product portfolio, strong competitive positions in our markets, and a broad range of growth opportunities which maintain our optimism in the future prospects of the business, our commitment to the Group's strategy, and the investments which underpin it.

S P Good

Chair

9 April 2020

Group CEO's review

Good strategic progress in a weaker demand environment



Zotefoams remains well positioned competitively and environmentally. Our core materials offer improved product performance using less material, and MEL licenses technology specifically to reduce polymer usage.

	United Kingdom	Continental Europe	North America	Rest of the world	Total
2019					
Change %	(2)%	(13)%	3%	19%	0%
Group revenue (£'000)	£12,875	£25,503	£22,010	£20,472	£80,860
% of Group revenue	16%	32%	27%	25%	100%
2018					
Group revenue (£'000)	£13,137	£29,342	£21,340	£17,218	£81,037
% of Group revenue	17%	36%	26%	21%	100%

Zotefoams takes a long-term approach to delivering organic growth through investment in our product portfolio, unique technology, people and processes. Our strategy is focused around key market trends in an increasingly global business. In 2019, we delivered good growth from our HPP and MEL business units, while Polyolefin Foams sales decreased by 10%, reflecting much lower levels of demand in key Western Europe and North American markets in the second half of the year. As a predominantly UK-based exporter, the impact of movements in foreign exchange rates can also be material, particularly the non-cash impact of translation differences, which negatively impacted profit before tax in the period by £0.47m (2018: benefit of £0.99m). Group revenue was at a similar level to 2018, £80.86m (2018: £81.04m), while profit for the year before income tax and exceptional item declined by 19% to £8.76m (2018: £10.81m). Adjusting for the aforementioned FX movement, profit for the year before income tax and exceptional item declined by 6% to £9.23m (2018: £9.82m).

Strategy update

Zotefoams' strategy is to invest in flexible assets with unique capability, to initially fill these assets with relatively lower margin business where required, then pursue longer-term mix enrichment strategies to generate higher returns and margins. This is more difficult to achieve during a short-term cyclical downturn, but we expect benefits from an initial improvement in utilisation once the macroeconomic environment improves, followed by further enhancement in return from increasing proportions of higher margin business.

As the world around us changes we regularly re-test our strategy. The significant decline in the demand for polyolefin foams during the second half of 2019, we believe, is largely cyclical and exacerbated by inventory reductions through the supply chain. Since 2017, we have made significant, long-term investments in further capacity for our unique manufacturing process. These have been recently commissioned, or are in the latter stages of commissioning, and the fall in demand for polyolefin foams means that some of these assets are currently under-utilised. We believe we have the product portfolio and underlying market potential to grow to planned levels of utilisation and that our existing strategy will deliver stakeholder value over the coming years. Investing in long-term assets at the appropriate time in the right places is one of the core challenges to implementing our strategy, alongside allocation of resource across a portfolio of products and markets, development of an organisation with flexible, talented people and a culture to support 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 content. The emergence of what we see as a strongly negative public perception of plastic is now becoming more nuanced beyond the environmental impact of ill-considered, single-use plastic, used predominantly in consumer packaging. Zotefoams' current markets are not immediately impacted by this, as products using our foams are primarily 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 aircraft, 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. In common with other businesses, we seek to minimise the use of natural resources 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 – environment, regulation and demographics – 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 37% (2018: 30%) of Group revenues. HPP and MEL increased combined sales by 23% to £29.57m (2018: £23.95m), which is a pleasing performance. The unique benefits offered by these products, combined with a focus on selling into structural growth niches, means that we expect strong further growth in these product lines in the future.
2. Sales of our highly differentiated AZOTE® polyolefin foam products declined by 10% (2018: growth of 8%), against our target rate of twice global GDP growth. Decreasing demand in the main markets of Western Europe and North America, specifically in the second half of the year, significantly impacted our sales in the Polyolefin Foams Business Unit. Reductions in inventory levels of customers, which contributed to the sharp decline in the second half of 2019, would normally be expected to reverse as underlying demand improves, although the uncertainty in the current economic environment is likely to contribute to lower levels of inventory at customers for the foreseeable future.
3. Group operating margins before exceptional item were 11.3% (2018: 14.3%). Despite the flat sales performance, gross margins remained robust, with the structural mix benefit of continued growth in HPP being offset slightly by increased depreciation from new assets. Continued investment in sales teams globally, to ensure we have the commercial platform to maximise the opportunity from a growing product range, led to a significant increase in distribution costs, and adverse foreign exchange translation movements increased administration costs. We expect future sales growth to improve

operating margins, although recent investments add to fixed depreciation and production overheads, which will now take longer to absorb in this weaker demand environment for polyolefin foams. We also expect licensing revenues at MEL to increase, which will have a positive impact on profit margins, and are optimistic about opportunities from our recently launched ReZorce® technology in the medium term.

- Group return on capital, which excludes large asset investments not yet commissioned, declined to 10.5% (2018: 16.5%). The Group has invested in a large capacity enhancement programme over recent years, including significant expenditure in the supporting infrastructure that will be sufficient to support further capacity at much lower incremental cost. The committed large-scale increases in capacity ends with the commissioning of our Poland facility, at which point the Group will be well invested to support future growth, and capital spending will return to more normal, lower levels, broadly in line with depreciation. The net assets of the business will have increased significantly and improvements in the return on capital over the coming years will largely arise from planned profitable sales growth, which will gradually deliver improved utilisation of this additional investment.

We believe Zotefoams' investments are consistent with our strong portfolio of business opportunities and will support strong organic growth in line with our stated strategic intent.

People and embedding our culture to deliver

The top priority for Zotefoams 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 specifically the behaviour of all employees, has a significant impact on safety risk and performance. Management therefore has a clear priority to ensure that safety behaviour and culture are 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. In 2019, the number of reportable lost time incidents across the Group reduced to 1 (2018: 4).

Following a few years of rapidly increasing headcount to support new business and initiatives, 2019 was a year of consolidation. Developing our organisational capability and culture globally is something which has, over the past few years, been essential for delivering our strategy. We have made significant investments over the past five years in increasing and developing our workforce which, by the end of 2019, numbered 445 people (2018: 443), an increase of 33% since 2015 (334 people). In 2019, 84% of our revenues came from outside the UK and our non-UK headcount comprises 33% of our global workforce. Continuing to manage non-UK-based employee growth, such as in our Poland facility, as we scale up our international operations, ensuring governance

and building a strong culture remain the primary focus for management. Zotefoams' culture is based around our four brand values: pioneering, reliable, responsible and trustworthy. It also strives for further development 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.

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.

Since 2014, we have invested £53.4m in growth capital, including two high-pressure autoclaves and matched extrusion capacity in Kentucky, USA, two high-temperature, low-pressure autoclaves in the UK, again with associated extrusion capacity, and our new facility in Poland. This Poland facility is planned to be available for production during the second half of 2020, albeit at lower utilisation rates than initially anticipated, in the early stages of operation given the current challenging polyolefin foams market. Since 2017, we will have increased Group capacity by approximately 60% and, with investment in latest generation technology, significantly improved the capability of our assets to produce the full range of Zotefoams' innovative products. This is particularly important to support the fast-growing HPP Business Unit, which is currently supplied from our UK site and, as this business grows, will utilise more of the available capacity on site. The Poland site is ideally placed to support and grow the Polyolefin Foams business in Europe.

Both the USA and Poland sites have been constructed with the option for further investment. For example, the Poland site could double its capacity for polyolefin foams with cost-effective investment on approximately an 18-month lead time. This gives Zotefoams the ability to react to increases in demand for all products, with an increase in HPP foams supplied via the UK and increasing supply to European customers from Poland.

COVID-19

While our China-based customers and our own relatively small processing facility for T-FIT® technical insulation in China returned to work at the beginning of March, following an extended closure post Chinese New Year, the global

outbreak of COVID-19 is a constantly developing situation. We are not in a position at this stage to speculate on the duration nor its future impact on the broader global customer base of the Group; however, we have put appropriate measures in place as we continue to monitor developments. The health and safety of our colleagues, their families and our business partners remain our primary concern and public health measures advised by governments are being followed in support of their efforts to contain the spread of the virus. The supply chain is being proactively managed as are operating costs and the timing of capital expenditure. We believe the Group has sufficient liquidity and expect to remain within revised covenant levels.

Forward-looking statements

Forward-looking statements have been made by the Directors in good faith using information available up until the date they approved these financial statements. These forward-looking statements should be considered with caution, given the unprecedented uncertainty surrounding the impacts of the COVID-19 virus on economic trends and business risks.

Current trading and outlook

On 24 March 2020 we made the statement below.

The challenging market conditions experienced in the latter part of 2019, particularly within our Polyolefin Foams business, have yet to improve noticeably. Adding to this, the outbreak of the COVID-19 virus is causing additional disruption.

Based largely on the expected demand profile for HPP products across a number of markets, the Board anticipates a stronger performance during the second half of the year. We are, however, mindful that the further spread of the virus, and responses to this, have created significant uncertainty in the near term with likely adverse trading impacts on operations and demand patterns.

In light of these exceptional circumstances, Zotefoams is currently focused on cash, including cost and capital management, and maintaining core operational capability across our business. We have a diverse customer base and strong competitive position, with our proprietary product portfolio focused on long term structural growth applications. This enables Zotefoams to continue to develop attractive new markets for its products and underpins the Board's confidence in the Group's future prospects.

As expected, since 24 March 2020 market conditions have remained challenging, with high levels of customer uncertainty, subdued market demand and rapid response times expected by customers. Using recently commissioned Group capacity, Zotefoams has aggressively targeted market share in discrete segments, the benefit of which is slowly being realised. We have also implemented strict cost and capital control throughout the business and are considering all elements of government support across our operating sites around the world. As a result of the measures the Group is taking, we believe we have sufficient liquidity to navigate through this uncertain period.

Group CEO's review
Continued

Segment revenue

£51.36mChange **-10%**2018 **£57.16m**

Segment profit margin

14%2018 **17%**

Segment profit

£7.30mChange **-23%**2018 **£9.45m**

Sales in Polyolefin Foams declined by 10% to £51.36m (2018: £57.16m). Sales volume fell by 14%, while improvements in product mix combined with the benefit of modestly better exchange rates to moderate this fall. Segment profit declined to £7.30m (2018: £9.45m), with improvement activities unable to overcome the lower absorption levels of fixed manufacturing costs, distribution and administration costs arising from the lower activity level. Included within manufacturing costs is additional depreciation, consistent with our investment in capacity, which increased allocated costs by £0.5m.

Zotefoams uses a commodity polymer, mostly low-density polyethylene (LDPE) and, utilising 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 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.

In the second half of the year, market conditions for polyolefin foams in the UK and continental Europe deteriorated rapidly, leading to a 15% decline in sales to these markets for the full year, while sales in North America and Asia were relatively flat. Supply chain destocking contributed to the fall in demand, particularly in continental Europe. Customers for AZOTE® foams are remarkably diverse, both geographically and in their use of our foams, and in the second half we saw a broad decline in demand across all major applications, such as product protection, industrial and transportation (which includes automotive, rail and aviation).

During the year, we delivered improvements in material and energy usage in the UK and USA facilities, as well as improved cycle times to increase efficiency and free up capacity, which will improve business flexibility in the future. These improvements, combined with an improved sales mix and active management of costs, including labour, in the second half, were critical in reducing the profit impact of the fall in sales in a highly operationally geared business.



Segment revenue

£26.48mChange **+20%**2018 **£22.01m**

Segment profit margin

24%2018 **26%**

Segment profit

£6.43mChange **+11%**2018 **£5.81m**

HPP comprises ZOTEK® technical foams and T-FIT® insulation products. Sales increased by 20% to £26.48m (2018: £22.01m) and segment profit increased by 11% to £6.43m (2018: £5.81m). 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 33% of Group sales in 2019 (2018: 27%), with the two largest applications being footwear and aviation. All major applications and products grew in the period with the strongest performance coming from fluoropolymer foams, which are largely used in aviation and in our T-FIT® technical insulation range. Around half of HPP sales revenue is derived from footwear products where, beginning in 2017, we have an exclusive relationship with Nike.

We continue to work under an exclusive agreement with Nike, where we believe we are able to optimise existing products and to develop new materials to prove Zotefoams' wider capability as a unique technology in this exciting market. With additional equipment now commissioned in the UK we have the capacity to meet the planned demand increases for our product range that we anticipate in the second half of 2020.

Sales of ZOTEK® F fluoropolymer foams increased by 28% compared with 2018. Pleasingly, this was achieved despite the backdrop of a more difficult aviation market due to the well-publicised slowdown in demand from Boeing. Growth came from a combination of new applications as well as increased penetration of existing applications for aviation customers.

We have invested significantly in the sales resource and manufacturing support for T-FIT® advanced insulation. In 2019, sales increased by 33%, including a very strong performance from India where we set up a sales office. These products are sold mainly into biotech and pharmaceutical markets, with further opportunity for strong growth in food, dairy and general process industries.

Segment margin has been impacted somewhat by the allocation of additional fixed manufacturing costs, primarily depreciation, from newer assets and a lower absorption of such costs by the Polyolefin Foams Business Unit as a result of that business unit's lower volumes during the year. Further investment has also been made in sales and administration costs, primarily for T-FIT® products, increasing the losses in this product line but with a view to accelerating growth, as well as in technical development costs primarily related to second generation footwear products.



Segment revenue

£3.10m

Change **+59%**

2018 **£1.95m**

Segment loss before amortisation

£1.27m

Change **+22%**

2018 **£1.63m**

Segment loss after amortisation

£1.55m

Change **+18%**

2018 **£1.89m**

MuCell Extrusion LLC (MEL) licenses microcellular foam technology and sells related machinery. Sales increased by 59% to £3.10m (2018: £1.95m) and segment loss, before amortisation, declined to £1.27m (2018: loss of £1.63m).

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. Using similar technology, the team at MEL recently developed mono-material barrier packaging technology, which we have branded ReZorce®. While MuCell® technology can be used with most common plastics, ReZorce® technology is specifically designed for high-density polyethylene (HDPE). In both cases, MEL will sell equipment to augment an existing extrusion line and, when the licensee is in production, MEL will collect a share of the value created as a licence fee and/or royalty payment. Occasionally, MEL will source an entire extrusion line at the request of the customer, who considers this a better way to leverage fully the MuCell® technology, in which case it also charges a small margin on the entire contract.

2019 was a year of good strategic progress for MEL. Revenue increased, driven by increased equipment sales, losses reduced and we developed and filed patents around the mono-material barrier technology. This improvement is on the back of 2018 where the business was restructured mid-year to improve clarity over the development of new accounts, delivery of machinery and financial management.

Late in 2019 we began the construction of a \$1m pilot production line for MEL to develop customer applications on a commercial scale. One of the major barriers to developing our technology in the past has been the inability to run large-scale commercial trials on customers' equipment, something outside the control of MEL and often linked to the high utilisation rates of the customers' production lines. The pilot line, which is expected to be commissioned in the second quarter of 2020, addresses these issues and will be available for customer trials prioritised for the development of ReZorce® mono-material barrier packaging.

D B Stirling
Group CEO

9 April 2020

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 variations of our unique nitrogen-expansion process, cuts and shapes 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 and 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. Recently, a variation of this technology has been

used to create ReZorce®, a recyclable, mono-material barrier packaging solution and an industry first. 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, and where the current environment is increasingly driving them towards more sustainable solutions. 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.

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 that 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.

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.

Sometimes, as happened in 2019, short-term factors distort longer-term trends. With clarity of purpose and an understanding of the fundamental drivers of our business environment, we will make adjustments to our short-term approach, such as limiting expenses and capital expenditure, while ensuring that our longer-term goals remain achievable.



Environment

Optimising the use of scarce resources has become a universal driver. Lightweighting is fundamental 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 and saves costs. Our ReZorce® mono-material technology can be used to create barrier packaging, for items such as juices, toothpaste, food and dried goods, which can be recycled using common kerbside collections. Much of our AZOTE® foam is used in permanent packaging or packaging that is designed to be reused, while foams used in transportation 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.

Zotefoams versus other materials: typical like-for-like performance using less polymer

Zotefoams

Crosslinked +10–15%

Non-crosslinked >15%

MuCell® technology produces plastics with a foamed core using 15–20% less material





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.

Regulatory requirements mainly cover the performance of end-use products, although there are specific tests for fire performance and toxicity limits in foams for certain industries and jurisdictions. Zotefoams provides specifically tested materials for semi-conductor, pharmaceutical and biotech manufacture, and automotive, aircraft and rail insulation and provides validated materials for medical transportation and devices, and military storage and personnel protection. Our technical team is closely involved in developing new materials to meet and anticipate standards and we are currently working on projects for automotive batteries, high-tech composites, foams from recycled materials and foams which can be more easily recycled. We sell AZOTE® grades for automotive, medical and packaging designed to minimise emissions and/or meet specific purity requirements. Around 45% of Zotefoams' revenue from foams in 2019 came from products with specific properties tested to customer requirements, although not all of this was demonstrably for regulation compliance.



Regulatory pressures are driving up standards in areas such as fire safety, while recycling to optimise resources is a global focus.



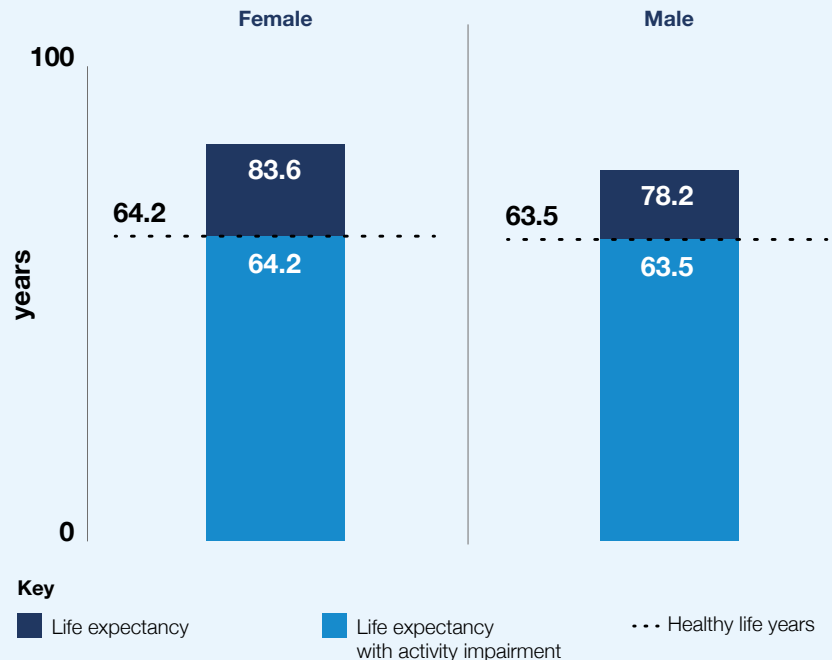
Demographics

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, sports equipment and transportation.

Transport, medical, and sports and leisure applications account for around 48% 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 4% of sales.

OECD life expectancy and years of activity impairment EU 2014–16

Source: Eurostat database



In one US study

14%

of adults aged 65 and over reported walking/jogging as their favourite way of remaining active.



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 underpins our growth potential in this profitable Business Unit. Investment decisions are made based on AZOTE® capacity requirements.

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' facilities 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.

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 business 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.

4

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

Why?

Zotefoams uses unique and capital-intensive assets. We understand the importance of generating a good return on these 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 invested in, 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 2019, sales of AZOTE® polyolefin foams declined by 10% with sales volume falling by 14%. The market for these products deteriorated very rapidly in the second half of 2019 and end user demand reduction was exacerbated by destocking in the intermediate supply chain. We see this decline as broadly cyclical in mainly industrial markets, although we are broadening our product range to gain market share in adjacent markets, developing relationships with new supply chain partners and increasing our geographical sales efforts.

Next year, and beyond

We are confident that growing AZOTE® sales at twice the rate of GDP growth is achievable and that the recent downturn is cyclical. The key drivers of this business – use of materials, lightweight, insulation etc – remain as relevant as ever and we are developing our product range and geographical reach accordingly.

This year

In 2019, sales in these segments increased by 23%, with all major product lines growing by double digits, and accounted for 37% (2018: 30%) of Group revenue, at £29.57m (2018: £23.95m). The profit margin of the HPP Business Unit was 24% (2018: 26%) compared with a 14% margin in AZOTE® foams (2018: 17%), both of which reflect allocated overhead from under-utilised capacity. Within the HPP Business Unit, T-FIT® insulation products and ZOTEK® N nylon foams are currently loss making as we invest to deliver higher growth in the future, as is MEL, which is developing a portfolio of licensees where value will be recognised over the life of the licence.

Next year, and beyond

We see opportunity to continue strong growth in HPP and MEL with the potential to enhance Group margins. The rate of margin enhancement will depend on both the capacity utilisation of the Group and the relative level of investment in early stage and high-growth opportunities within our HPP and MEL portfolio, such as ReZorce® mono-material barrier technology from MEL and T-FIT® advanced insulation.

This year

In 2019, in aggregate, segment margins decreased to 15.1% from 16.5%. After central costs, which include corporate, finance and IT, mainly relating to the corporate governance of an increasingly complex organisation, as well as net foreign exchange movements, which include the results of forward exchange contracts (to hedge foreign currency transaction risk) and non-cash balance sheet translation movements from the net exposure to foreign currency denominated assets, Group operating margin declined to 11.3% (2018: 14.3%). This decline in operating margin, despite an improved sales mix from HPP sales, results mainly from the year-on-year negative swing in non-cash foreign currency translation movements, increased manufacturing and depreciation overhead from the new US asset, investments in the T-FIT® business, primarily in Asia, in preparation for growth, and the lower than planned polyolefin sales expected to absorb these costs.

Next year, and beyond

In 2020, the additional depreciation and operating costs of the final capacity improvement projects will hold back operating margin potential given the time lag between making capacity available and achieving targeted utilisation rates. However, as we utilise these assets through the investment cycle, we expect margins to continue to grow, supported by the strong margin Polyolefin Foam business and the enhanced-margin, faster-growing HPP business.

This year

In 2019, the return on capital declined to 10.5% (2018: 16.5%). Profitability was impacted by the H2 downturn in Polyolefin Foams, while the capital base included recently commissioned assets in the UK as well as a full year from the first line, including infrastructure, of the US capacity expansion commissioned in 2018. The investment in the Group's ongoing expansion projects were excluded from the calculation, in line with the Group's definition of return on capital.

Next year, and beyond

The Group has committed to a large capital programme over recent years and this accelerated capital spend ends with the commissioning of our Poland facility later in 2020. The statement of financial position of the business, which includes new capacity as well as supporting infrastructure which will not directly generate returns, will have increased significantly. We approved these projects acknowledging and accepting the dilution of return in capital over the shorter term but recognising the importance of adequately investing in the capacity needed for anticipated future growth and the corresponding improvement in return on capital that should accompany it.

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.

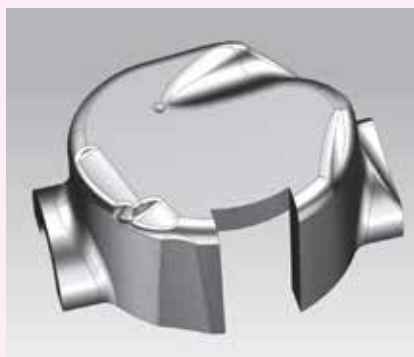
Case Study

Lighter, purer, more durable components for the automotive industry

Context

Founded in 1949, Odenwald-Chemie GmbH is a development partner and supplier of foam products and fleece systems to a wide range of markets. Headquartered in Neckarsteinach, Germany, Odenwald has a global network of partnerships and joint ventures. It strives to meet ever-changing requirements through innovative products and product optimisation, with environmental considerations always to the fore.

As a longstanding partner of the automotive industry, Odenwald supplies foam products for sealing against water, air and dust, as well as thermal insulation and acoustic absorption. In 2015, Mercedes-Benz requested a valve insulation component able to withstand high temperatures, ensure stable thermal and acoustic insulation and minimise heat loss.



What we did

By selecting Plastazote® HD30 from Zotefoams' AZOTE® foam range, Odenwald was able to successfully meet the rigorous requirements of Mercedes-Benz. With a density of 30kg/m³ and tolerance of temperatures up to 125°C, HD30 is ideal for addressing sealing and noise, vibration and harshness (NVH) concerns while reducing weight to improve fuel economy. Manufactured via Zotefoams' three-stage process, Plastazote® has a minimal VOC content compared with foams produced by other methods. Its closed cell, crosslinked structure delivers a unique combination of advantages, including ease of fabrication and purity and high chemical resistance; it neither absorbs nor transmits water or water vapour.

Results

Zotefoams' unique material combined with Odenwald's advanced processing technologies produces an energy-efficient product that satisfies the demanding criteria for automotive applications. The valve insulation component was successfully applied to Mercedes-Benz vehicles from 2015 and continues in production today.

Odenwald 
THE MOST EFFICIENT SOLUTION

ZOTEK®

ZOTEK® products use Zotefoams' unique autoclave technology applied to high-end polymers such as polyvinylidene fluoride (PVDF) fluoropolymer, 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 delivered the largest contribution to HPP growth 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.



From lightweight to weightless: ZOTEK® F proves a winner in spacecraft interiors



Context

Space tourism is about to become a reality, with inaugural commercial flights already booked out and demand for tickets surging, according to the companies vying for the lead in this new space race.

The design of the reusable spacecraft is a significant engineering achievement, with capabilities that enable repeatable use at unprecedented frequency. Internally, cabins will offer a level of comfort more akin to that of a luxury airliner than the cramped cockpits of previous space travel.

What we did

Zotefoams' ZOTEK® F closed cell PVDF foam is recognised as the ultimate lightweight and versatile material for aircraft interiors, boasting the highest levels of safety and comfort, so it was natural that spacecraft designers would look to ZOTEK® F as an optimal material.

With the cost per kilogram of weight in a spacecraft ranging from £10,000 to £50,000, every gram saved pays off in altitude.

"ZOTEK® F is a super lightweight, low-density material that can be formed in any number of ways, allowing us to develop prototypes easily in the studio along with flexibility in the subsequent manufacturing process," one designer tells us. "At 15–20% of the weight of solid equivalents and mechanical properties that allow us to reduce the volume of material significantly, it is a major contributor to weight-saving targets."

Results

ZOTEK® F features extensively throughout the interior of one of the first commercial spacecraft. Aside from weight and safety considerations, it is adding to the comfort of seats, while minimising the VOC content of the interior as a whole, thanks to Zotefoams' nitrogen-only expansion process.

Our brands in action

Continued

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, and 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

T-FIT® Hygiene is first choice insulation for cool chain customer



Context

Coca-Cola Bottlers Manufacturing (Suzhou) Co Ltd, a subsidiary of Coca-Cola Corporation, bottles non-carbonated beverages, such as fruit juice, for distribution in China.

In 2019, the company had a project for a new cool chain not-from-concentrate juice product. Cool chain means that the product risks being spoiled if temperatures during processing and through the supply chain vary outside set parameters, so the performance of insulation material used on process pipework and vessels is paramount.

What we did

The T-FIT® team in China worked with the customer to retro-fit T-FIT® Hygiene to an existing production line. The product temperature during processing is just 3°C in winter and up to 40°C in summer, with a humidity range of 60–75%, so the potential for condensation – considered a high risk in food and beverage production – was significant. However, the fine, closed cell structure of T-FIT® material, produced from Zotefoams' ZOTEK® F PVDF foam, does not transmit water or water vapour and is manufactured to the precise diameter of pipework, thus limiting the risk of condensation and traps.

T-FIT® materials are modular, supplied in ready-made tubes in straight runs, elbow and tee formats to minimise installation time and maximise efficiency in use. Their performance is such that a thin layer (6.25mm) achieves comparable performance with much thicker traditional open cell foam insulation.

Results

T-FIT® Hygiene was supplied to the customer for installation commencing in May 2019. The line was commissioned in mid-August, with T-FIT® insulation providing a professional appearance and compliance with GMP (Good Manufacturing Practice).

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.



An industry first in recyclable food packaging



Context

For more than 50 years, Ohio-based SugarCreek has been manufacturing and packing food for the USA's largest and best-known brands, offering a wide-ranging, value-added assortment of raw and fully cooked products for domestic and international customers from its six facilities.

SugarCreek packs bacon for much of the North American market, until recently using a coated paper incorporating food contact on one surface and high-quality print on the other, known as bacon board. However, this is non-recyclable, generating 14% waste at the printing/cutting station and 100% landfill or incineration after use. SugarCreek and others had therefore long sought an alternative material with no cost penalty.

What we did

In 2018, SugarCreek's Wingate division, which prints the bacon board on narrow web flexo presses, engaged with MuCell Extrusion, resulting in a blown plastic material with a foamed core that matches all the properties of the previous coated paper at a lower cost. This can be made of over 95% high-density polyethylene (HDPE) foam, making it fully recyclable via post-consumer waste streams. It can even be recycled back into the core of the same product.

A Life Cycle Assessment showed a reduction in carbon footprint of 28%, a reduction in freshwater consumption of 79%, and an improvement of 22% in ReCiPe score (total impact on human health, on the ecosystem and on consumption of available resources.)

Results

The MuCell Extrusion solution meets or exceeds all performance requirements, including stiffness, coefficient of friction, surface smoothness, high-definition print, ease of processing and conversion, and food safety regulations. This successful partnership was the genesis of ReZorce®, our range of fully recyclable barrier packaging materials launched in October 2019.

Group CFO's review

Macroeconomic challenges delay financial progress



The Group experienced a strong performance in High-Performance Products and advanced its capacity expansion projects in line with budget and expected timeframe. A second-half cyclical downturn in Polyolefin Foams impacted Group performance, with limited flexibility in discretionary fixed costs in the short term while maintaining appropriate investment linked to the Group's focus on future growth. Foreign currency translation movements generated a year-on-year negative profit impact of £1.46m.

Profit before tax and exceptional item

£8.76m

Change **-19%**
2018 **£10.81m**

Group revenue

£80.86m

Change **0%**
2018 **£81.04m**

Profit before tax

£9.81m

Change **0%**
2018 **£9.86m**

Overview

Following H1 growth in all business units and continued strong performance from both our HPP and MEL businesses through H2, Zotefoams experienced difficult H2 trading conditions within its Polyolefin Foams business.

Group revenue for the year was £80.86m (2018: £81.04m), in line with the previous year but 3% down in constant currency. HPP had another very strong year, growing 20% (constant currency: 15%) from £22.01m to £26.48m and MEL saw a pleasing growth rate of 59% (constant currency: 56%), up from £1.95m to £3.10m. The Polyolefin Foams business was impacted in H2 by a cyclical decline in demand, including inventory depletion across all geographies, resulting in a 10% decline in revenue (constant currency: 12%) from £57.2m to £51.4m. This was after the business unit reported H1 performance up 3% vs H1 2018 (constant currency: up 1%).

Operating profit before exceptional item was £9.10m (2018: £11.57m), down 21%, while operating profit was £10.15m (2018: £10.62m), down 4%. Excluding FX translation losses, operating profit before exceptional item was down 10% at £9.57m (2018: £10.58m), and operating profit was up 10% at £10.62m (2018: £9.63m). Underlying performance was impacted by the rapid decline in polyolefin foam sales in the latter part of the year and the resulting adverse operational gearing impact. Once the cyclical downturn became clear we managed certain costs lower in line with the lower scale of operations but refrained from taking measures which would have materially impacted our expected future growth prospects once the macroeconomic environment improves. Given the uniqueness of our business, a well-trained and experienced workforce is important and cannot be replaced easily.

Zotefoams is in the final stages of an extensive strategic capacity expansion programme. Our range of differentiated products requires a unique technology which is capital intensive, has long lead times and needs high levels of utilisation to leverage strong returns. Timely investment is essential to meet our anticipated organic growth opportunities. In 2019, the Group invested a total of £25.3m, after investing £16.1m in the previous year. The final major capacity expansion project, a new manufacturing facility in Poland, is on track for completion later in 2020 at a total cost of approximately £23m. A sizeable part of the Group's investments during this capacity expansion period has been directed towards generating the necessary infrastructure to run the equipment, infrastructure which will be leverageable to support future growth. This will moderate achievable returns on capital in the medium term but provides high return opportunities as incremental capacity is required to support further growth opportunities at the same locations.

At 31 December 2019, net debt was £31.90m, (2018: £12.96m) and leverage (net debt to EBITDA) was 2.0x (2018: 0.7x). Under the definition of the bank facility agreement net debt, which adjusts for the impact of IFRS 2 and IFRS 16, was £30.69m (2018: £12.96m) and leverage was 2.0x (2018: 0.7x). While net cash inflows from operating activities were £9.35m (2018: £4.49m), the aforementioned investment programme required the Group to draw down on its debt facilities, as expected.

Group revenue

Group revenue was at a similar level to the previous year, at £80.86m (2018: £81.04m).

Polyolefin Foams sales decreased 10% versus 2018, with a decline of 22% in H2 following an increase of 3% in H1, reflecting the significant adverse change in demand conditions across a range of our markets together with significant de-stocking by customers. Regionally, all geographies were impacted as well as most sectors within these geographies, with the UK down 12% and Europe, the largest market for the business unit, down 16% (constant currency: -16%). A North American slowdown in manufacturing demand was also evident late in the year, with full-year sales ending up in line with the previous year (constant currency: -5%). The single largest impact globally came from German automotive, which was also the earliest to show weakness.

HPP sales increased 20%. Footwear is the largest application currently within HPP and revenue in this market grew 13% (constant currency: +7%), benefiting from the full-year impact of sales programmes initiated late Q1 2018. ZOTEK® F fluoropolymer foams delivered strong growth of 28% (constant currency: +23%) and T-FIT® advanced insulation grew 33% (constant currency: +31%), albeit from a lower base. During the year, Zotefoams established a subsidiary in India, primarily to support T-FIT® sales, and sales from this country surpassed \$1m.

MEL sales increased 59% (constant currency: 52%), again from a relatively low base, with equipment sales driving growth.

Revenue by market (%)		
	2019	2018
Product protection	29	30
Transportation	22	22
Sports and leisure	20	19
Building and construction	12	12
Industrial	9	9
Medical	6	6
Other	2	2

Within the transportation segment, aviation represented 15% (2018: 13%) and automotive 7% (2018: 9%) of Group revenue.

Gross margin

Gross margin remained stable at 35.4% (2018: 35.8%). The increased proportion of sales from HPP had a positive benefit on gross margin, in line with strategy, but the lower plant utilisation rates following the Polyolefin Foams downturn, coupled with full-year depreciation charges from the Group's new US assets, amounting to an additional £0.5m, and additional operating cost from the Group's investment in its international operations, amounting to £0.8m, offset this benefit. Zotefoams' strategy is to fill these assets, with relatively lower margin business where required, then pursue longer-term mix enrichment strategies to generate higher returns and margins.

Distribution and administrative costs

The Group continues to pursue its expansion strategy, founded on proprietary cellular materials technology linked to longer-term demand growth in our chosen markets. 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 administrative resources to create, execute and manage this growth.

Included within distribution costs in the consolidated income statement are sales and marketing, and warehousing expenses. These costs increased by 11% to £8.00m (2018: £7.19m) during the year, mostly reflecting investment in sales capability in the China and India locations of the T-FIT® Business Unit, as well as the full-year impact of sales capability in other ZOTEK® business units. Included within administrative expenses before exceptional item are 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 12% to £11.50m in 2019 (2018: £10.24m); however, they include a combined net loss from foreign exchange hedging contracts and foreign exchange translation movements of £1.41m (2018: net gain £0.82m). See Currency review for further information and context. Without these foreign currency factors, administrative expenses before exceptional item were down £0.98m, reflecting reduced variable pay awards and H2 cost management.

⊕ The business unit results are shown on pages 16 to 17 in this Strategic Report.

They do not include central plc costs, which are not considered to be segment specific. In 2019, central plc costs were £1.68m (2018: £2.62m).

Finance costs

The total interest charge for the year was £0.46m (2018: £0.75m) and includes £0.20m (2018: £0.14m) of interest on the Company's Defined Benefit Scheme (the "DB Scheme") pension obligation. It also includes £0.03m (2018: nil) related to the impact of IFRS 16. The Group capitalised £0.93m (2018: £0.03m) of interest in relation to the financing of its capacity enhancement projects still under construction. Capitalised interest in 2018 was significantly lower as a result of a lower net debt level following the equity raise of £20.00m (after directly attributable costs) in May of that period.

Profit before tax

Profit before tax and exceptional item decreased by 19% to £8.76m (2018: £10.81m). Profit before tax was similar to the previous year at £9.81m (2018: £9.86m).

Exceptional item

During the year, the Company was successful in a claim against the previous advisers to the DB Scheme following legal advice that the linkage to future increases in salary had not been properly broken. The Company was awarded £1.05m, including £0.11m of expenses, following mediation and has recorded this as an operating exceptional item in the income statement.

In the previous year, the Company recognised an additional liability in respect of a legal ruling around guaranteed minimum pensions. This represented a charge of £0.95m, including £0.01m of expenses, and was considered an operating exceptional item in the income statement.

Currency review

Zotefoams is a predominantly UK-based exporter. In most cases, we invoice in local currency. In 2019, approximately 87% of sales were denominated in currencies other than sterling, mostly US dollars or euros. Most operating costs are incurred in sterling, other than the main raw materials for polyolefin foams used for production in the UK, which are euro-denominated, 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 and hedges its exposure to foreign currency denominated assets, where possible, by offsetting them with same-currency liabilities, primarily through borrowing in the relevant currency. These foreign currency denominated assets, which are translated on a mark to market basis every month and the movement taken to the income statement, include loans made by the Company to, and intercompany trading balances with, its overseas subsidiaries, the effect of which is cash neutral. They also include non-sterling accounts receivable, held on the Company's statement of financial position, the impact of which should reverse through forward currency contracts, but are subject to the timing difference between accounts receivable recording and cash received. The Group does not currently hedge for the translation of its foreign subsidiaries' assets or liabilities. This policy is kept under regular review and is formally approved by the Board on an annual basis.

During the year, the sterling average exchange rate against the US dollar weakened by 4.6%, while the sterling average exchange rate against the euro strengthened by 0.9%. The sterling spot rate against the US dollar from December 2018 to December 2019 strengthened by 3.2% and the sterling spot rate against the euro from December 2018 to December 2019 strengthened by 5.3%. Net revenues benefited from £2.06m of currency effect, which were offset by £0.93m of operating

Group CFO's review

Continued

costs to yield a net benefit before hedging of £1.13m. The Group generated a net loss on forward contracts of £0.94m (2018 loss: £0.18m), resulting in a positive net transactional foreign currency impact of £0.19m in the year (2018: negative impact of £1.12m), a year-on-year positive swing of £1.31m.

In addition, the Group recorded a translation loss of £0.47m (2018 gain: £0.99m), representing a year-on-year negative swing of £1.46m, and resulting in a total net FX impact on the income statement year-on-year of £0.1m. The Group's borrowings facility is held by Zotefoams plc, the parent company, which has provided intercompany funds to the USA and Poland to complete the Group's capacity expansion projects. Together with a growing footwear business, which is invoiced in US dollars, the net exposure to foreign currency denominated net assets has increased.

The combined income statement impact in the year of transactional and translational foreign currency movements was a charge of £1.41m (2018: gain of £0.82m).

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 transaction risk short term through hedging activities and longer term through investment in overseas operating locations. We recognise, however, that inherent risk will remain. Based on 2019, it is estimated that, with respect to transaction risk and for every one percentage point movement in the USD/£ rate, profit moves by £0.26m unhedged and £0.02m hedged. In the year, it is assumed that the transaction

exposure from euro/sterling movements continue to be substantially naturally hedged, with sales revenues offset by costs, primarily related to raw material purchases and certain further processing costs.

The translation movements of foreign currency denominated net assets in the Company's statement of financial position are, to the extent possible, hedged firstly through drawing down debt in the relevant currency. This debt has steadily grown through the year, helping to reduce exposure. With the Group's capacity investments close to completion, intercompany debt and intercompany trading accounts will peak and begin to fall as cash flows from those subsidiaries are used to pay back these positions.

Tax and earnings per share

The effective tax rate for the year, before exceptional item, is 18.20% (2018: 18.54%), which is in line with the Group's weighted average corporate tax rate for the year of 18.72% (2018: 17.99%). The effective tax rate for the year is 16.25% (2018: 20.32%), the decline being due to larger 2017 R&D expense reclaims than calculated in the estimated tax charge for that period. Net income tax paid during the year was £2.33m (2018: £2.14m).

Basic earnings per share before exceptional item was 14.91p (2018: 18.66p), a decrease of 20%. Basic earnings per share was 17.10p (2018: 16.96p), an increase of 1%. 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 1.32p on basic earnings per share before exceptional item (2018: 1.03p) and 0.71p on basic earnings per share (2018: 0.93p).

Dividend

The Board has a progressive dividend policy, recognising the importance to our shareholders of the dividend as part of their overall return. However, as described within this Strategic Report, the extraordinary uncertainty posed by the COVID-19 outbreak means that we are focused on minimising cash outflows and strengthening our financial position in the short term. As such, the Board believes it prudent not to recommend a final dividend for the year ended 31 December 2019 (2018: 4.15p). The Board will keep this situation under review and will determine the timing for resumption of dividends as economic conditions stabilise.

Cash flow and net debt

Net cash inflow from operations before investment in working capital decreased 12% to £15.39m (2018: £17.48m). Without the award of £1.05m following successful litigation specific to the DB Scheme, see Post-employment benefits below, net cash inflow from operations before investment in working capital decreased 18% to £14.34m, reflecting the downturn in the Polyolefin Foams business but still demonstrating the strong cash-generative nature of the business. £1.94m (2018: £9.75m) of this was re-invested in working capital. Trade and other receivables reduced £2.66m (2018: increased £6.36m), reflecting a more stabilised position for the HPP footwear business following the very strong final quarter of the previous year, and the lower level of Polyolefin Foams activity in Q4. Inventories increased £0.89m, with increased HPP raw material, in preparation for 2020 growth, being offset by the underlying lower level of Polyolefin Foams activity, with its shorter lead times. HPP raw materials are significantly more expensive than their polyolefin counterparts and their uniqueness requires a different approach to minimum holding quantities. Trade and other payables decreased £3.72m (2018: increased £0.37m), related to the timing of raw material purchases. Zotefoams recognises the importance of its supplier relationships and continues to honour agreed payment terms. As a result of the above, cash generated from operations was £11.77m (2018: £7.11m), up 66%.

Zotefoams continued to invest significantly in property, plant and equipment during the year, with a net cash outflow of £23.47m, following investments of £15.80m, £11.39m, £12.14m and £8.70m in 2018, 2017, 2016 and 2015 respectively. The 2019 expenditure was mostly on completing the second high-pressure autoclave project, with accompanying extruder, in the USA, completing the two high-temperature, low-pressure autoclaves and infrastructure in the UK, and making significant progress towards completion of the Group's final, major, capacity expansion project, a new manufacturing facility in Poland. In addition, interest of £0.93m was capitalised, specific to these assets under construction. The Group also invested £0.91m (2018: £0.29m) in intangible assets, mostly related to the upgrade of the Group's Microsoft AX ERP system to the latest version.

Currency impact on business segments in 2019

Segment revenue £m

	2019	2019	2018	Net change %	
	Reported	Adjusted*	Reported	Reported	Adjusted
Polyolefin Foams	51.36	50.48	57.16	(10)	(12)
HPP	26.48	25.37	22.01	20	15
MEL	3.10	3.03	1.95	59	56
Eliminations	(0.08)	(0.08)	(0.07)	-	-
Group	80.86	78.80	81.04	0	(3)

* Constant currency, adjusting 2019 values to 2018 rates.

Exchange rates

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

	2019	2018
GBP to euro – average	0.88	0.88
GBP to euro – year-end spot	0.85	0.90
GBP to USD – average	0.79	0.75
GBP to USD – year-end spot	0.76	0.78



Investing in growth

Zotefoams' strategy is focused primarily on organic growth. Over the past five years, Zotefoams has invested £72.4m in property, plant and equipment, including capitalised interest, 75% of which has been to increase capacity in its unique technology. In 2020, the new manufacturing facility in Poland will be completed, at which point the scale of growth capital will significantly reduce. With infrastructure in place in the USA and Poland for incremental capacity expansion at significantly lower cost, cash flow and return on capital employed will improve quickly as revenue grows.

Investments

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 major expansion or new location, such as installation of extrusion and high-pressure capability at our existing Kentucky, US site, or the current investment in foam manufacturing at the Poland 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 2019, the return on capital employed decreased to 10.5% (2018: 16.5%). The cause of this movement is reduced operating profit resulting from a reduction in polyolefin foam sales and consequent reduced rate of asset utilisation, at the same time as an increasing capital base from the full year impact of the first production line and infrastructure in the USA. If the capacity investments still under construction were also included, the return on capital employed reduced to 8.1% from 12.8% in 2018.

Zotefoams is reaching the end of this significant investment programme. Completing the Poland investment, with a 2020 estimated expenditure of £7.3m and an expected start-up date in late 2020, both subject to current COVID-19 uncertainty, is the final stage of this programme, after which we expect capital investment to return to lower levels more in line with the depreciation charge.

Investing in growth £m

	2015	2016	2017	2018	2019	Total
Growth capital	6.1	6.9	7.8	12.8	19.8	53.4
Capitalised interest	–	–	–	–	0.9	0.9
Maintenance capital	2.6	5.2	3.6	3.0	3.7	18.1
Total investment in property, plant and equipment	8.7	12.1	11.4	15.8	24.4	72.4

After dividends paid in the year amounting to £2.97m (2018: £2.71m) and the inclusion of £1.21m (2018: £nil) of lease liabilities in accordance with IFRS 16, closing net debt was £31.90m (2018: £12.96m). Under the definition of the bank facility agreement, which adjusts for the impact of IFRS 2 and IFRS 16, net debt was £30.69m (2018: £12.96m). At the year end, the Group remains comfortably within its bank facility covenants, with a ratio of EBITDA to net finance charges of 73 (2018: 29), versus a covenant minimum of 4 and net debt to EBITDA (leverage) of 2.0x (2018: 0.7x), against a covenant of 3.0x. While liquidity remains sufficient under the bank facility, the coincidence in timing of the performance downturn in Polyolefin Foams, the completion of the Group's capacity expansion projects and the unprecedented economic uncertainty from COVID-19 has placed a degree of risk around the Group's ability to remain within its leverage covenant. As a result, the Group's banks have amended the leverage covenant

from 3.0x to 4.0x for the 12 months to 30 June 2020. We expect to remain within revised covenant levels, subject to a severe but plausible scenario the Group has modelled, and which is described in the Going concern section below.

Post-employment benefits

As previously reported, the Company provided £1.27m in its 2017 income statement for potential additional liabilities in its DB Scheme following legal advice received by the pension trustees and a calculation by the actuaries. This was based on the legal opinion that the DB Scheme was properly closed to future accrual of service in 2005, but the linkage with future increases in salary had not been broken. The Company recorded this as an operating exceptional item in the income statement, together with a £0.03m accrual to take steps to break this link. The action to break the link was completed in 2018.

Group CFO's review

Continued

During the current year, the Company was successful in a claim against the advisers of both the Company and the Trustees, and was awarded £1.05m following mediation, which it has recorded as an exceptional item in the income statement. After deduction of costs incurred by the Company, the net award of £0.94m was transferred into the DB Scheme to help fund its deficit.

In the previous year, the Company sought advice from the Actuaries of the Trustees in relation to a High Court ruling in October 2018 relating to the equalisation of pensions for males and females and the impact on schemes with guaranteed minimum pensions rights. It was determined that the Company, as sponsoring employer of the DB Scheme, may have an additional liability of an estimated £0.95m and this liability was recorded as an exceptional item in the 2018 income statement.

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 decreased by £1.15m to £6.93m as at 31 December 2019 (2018: £8.08m). The main factors contributing to the decrease in the deficit are the additional contributions paid into the DB Scheme following the mediation settlement with its former advisers, and the actual investment return achieved on the assets being higher than required to match the expected increase in the defined benefit obligation over the year, partly offset by a change in assumptions, primarily a lower discount rate following falls in corporate bond yields over the year.

Zotefoams does not consider its pension scheme to be a key risk to its ability to achieve its strategic objectives. 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 8 to 27 and the section entitled 'Risk management and principal risks' on pages 33 to 38. These also describe the financial position of the Group, its cash flows

and liquidity position. In addition, note 22 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.

At 31 December 2019, the Group's financing arrangements amounted to £55.2m, comprising a multi-currency term loan of £25m, a multi-currency revolving credit facility of £25m, and a remaining balance of £5.2m of a further £7.5m sterling annually renewable term loan, repayable in equal quarterly instalments. The bank facility is for a five-year period and expires in May 2023. At the date of the statement of financial position, £17.7m was undrawn on the facility.

The facility is subject to two covenants, which are tested semi-annually: net debt to EBITDA (leverage) and EBITDA to net finance charges. In recognition of the current macroeconomic uncertainty, the Group's banks have amended the leverage covenant from 3.0x to 4.0x for the 12 months to 30 June 2020.

The Directors believe that the Group is well placed to manage its business risks and, after making enquiries including a review of forecasts and predictions, taking account of reasonably possible changes in trading performances and considering the existing banking facilities, including the available liquidity and increase in leverage covenant from 3.0x to 4.0x, 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.

The uncertainty as to the future impact on the Group of the current COVID-19 outbreak has been considered as part of the Group's adoption of the going concern basis. Our China-based customers and our own relatively small processing facility for T-FIT® technical insulation in China returned to work at the beginning of March 2020. Across the Group, public health measures advised by governments are being followed in support of their efforts to contain the spread of the virus, and the supply chain is being proactively managed as are operating costs and the timing of capital expenditure. The Board has also resolved not to recommend a final dividend for the year ended 2019 and will consider future dividends as and when conditions normalise.

The Board has considered a downside scenario that reflects the current unprecedented uncertainty in the global economy and which we consider to be severe but plausible. The results of this scenario show that there is sufficient liquidity in the business for a period of at least 12 months from the date of approval of these financial statements but show the potential for a covenant breach during the test period. The scenario considered Group revenue 20% below 2019 for the 12 months to 31 December 2020, and 25% below 2019 for the 12 months to 30

June 2021. It applied foreign exchange rates of \$1.30: £1 and €1.15: £1. Set against this were mitigating actions including tight management of headcount, significantly reduced capital expenditure, reduced SG&A expenditure and suspension of dividends. This severe but plausible scenario indicates a material uncertainty which may cast significant doubt over the Company's and Group's ability to continue as a going concern without further mitigating actions. The Company and Group consolidated financial statements do not include the adjustments that would result if the Company and Group were unable to continue as a going concern.

After due consideration of the range and likelihood of potential outcomes, the Directors continue to adopt the going concern basis of accounting in preparing the 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 22.

Events after the reporting period

In early 2020, the emergence and spread of a new coronavirus, now known as COVID-19, is affecting business and economic activity around the world. The Group considers this outbreak to be a non-adjusting post balance sheet event as at 31 December 2019. Given the spread of the virus, the range of potential negative outcomes for the global economy are difficult to predict at this point in time. Zotefoams is monitoring the COVID-19 outbreak developments closely and abiding by the advice and requirements of local governments. We have also been implementing a range of contingency plans to mitigate the potential adverse impacts.

G C McGrath

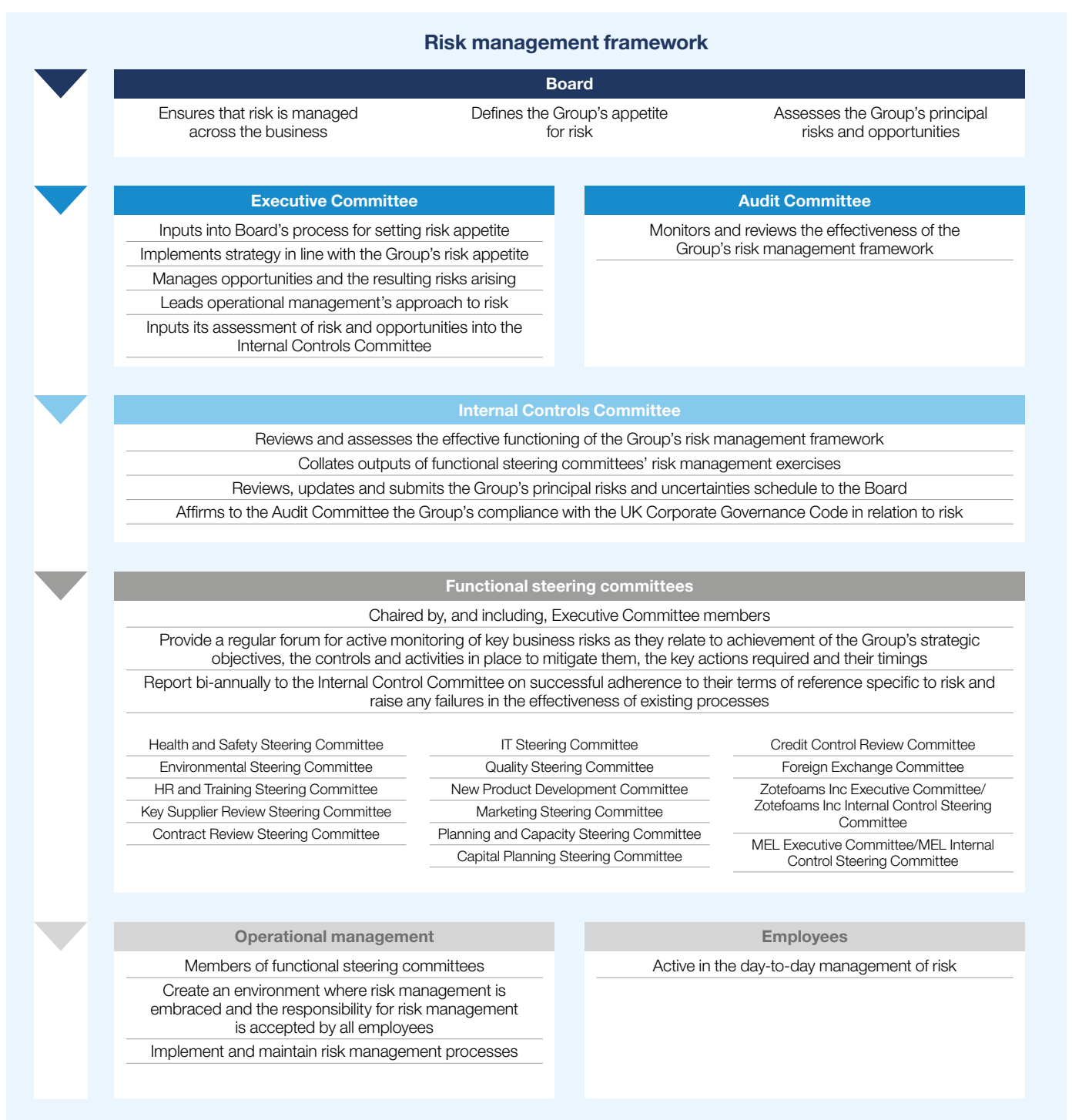
Group CFO

9 April 2020

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 and principal risks

Continued

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 plan for the future over five years and convert 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 continued to review and provide feedback on the roll-out of the Group's improved, more thorough and more inclusive risk management process. The Group's functional control committees updated their terms of reference, further improved and refined their 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. Having arrived at a status considered by the Group's Internal Control Committee to be of sufficient high quality, these risk maps were consolidated, applying agreed risk tolerance levels, to form a new Group risk register. Having at first excluded the US activities while the framework was being developed to a suitable standard prior to overseas roll-out, Zotefoams Inc and MuCell Extrusion LLC were successfully included into the full risk management process during the year.
- ▶ In November 2019, the risk management process was subject to an independent internal audit by Equas, a consultancy business supporting the implementation and maintenance of ISO-compliant management systems, to validate that the risk management process complied with the international standard for quality, ISO 9001:2015 and that it was also effective, with positive results.
- ▶ Zotefoams prepares an annual strategic plan over a five-year period. The Board and Executive team risk-assessed this plan during the two-day annual strategic review in October. The Board reassessed and agreed amendments to this plan as a consequence of the downturn in Group performance in Q4 2019.
- ▶ Risk discussions remained highly prominent at Board meetings during the year as the Board discussed the execution of existing plans and reviewed capacity expansion initiatives. A risk assessment checklist was also developed for when a new business entity is proposed. It was used for the first time when the Audit Committee's approval was sought for the creation of the Group's new Indian subsidiary.

- ▶ The Executive team, also members of the functional steering committees, met twice during the year specifically to review and update the Group's principal risks and uncertainties.
- ▶ 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. It also relaunched online training activities, for risk-assessed employees, to ensure continued adherence to corporate governance compliance and educate on IT cyber risks and pitfalls.
- ▶ Zotefoams successfully gained the Cyber Essentials Plus certification in 2018 following a full independent assessment of our IT systems. During the year we have ensured maintenance of standards in line with the accreditation and await an annual re-audit by the accredited bodies early 2020. 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. In addition to meeting the requirements of the Cyber Essentials Plus certification, we also implemented a formal cyber security training programme for all staff globally.
- ▶ In December 2019, the Company successfully completed recertification to OHSAS 18001:2007. Throughout the year, it has also been reviewing and updating its health and safety management system in order to transition to the new Occupational

- ▶ Health and Safety Management System ISO 45001:2018. As with previous years, accreditation and product audits were conducted during 2019 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 MuCell Extrusion LLC, 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 35 to 38. 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 33. 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 and uncertainties to remain broadly consistent. Following a detailed reassessment of our thinking and approach to risk management in the previous year, and having assessed the inputs from our risk framework mechanism during the current year, we have concluded that there are no changes to our assessment.

Key to links to the strategy



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.

Having formally exited the European Union on 31 January 2020, uncertainty remains around the nature of a trade agreement between the UK and its key trading partners. While not imminent, there remain 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.

At the time of writing this Annual Report, COVID-19 is raising considerable global concern. Its direct impact on Zotefoams in China seems to have dissipated, with the start-up of the Kunshan China T-FIT[®] processing plant operational after a two-week delay post Chinese New Year. However, while all foam manufacturing sites continue to operate at present, there remains uncertainty over the extent to which the virus will disrupt supply chains, close down customer locations or even shut down the UK plant.

Mitigating actions

Safety, Health and Environment policies

We have extensive Safety, Health and Environment (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.

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 became available in February 2020. 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 continued the construction of a third foam manufacturing location in Poland, the first line of which is expected to commission in H2 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, and testing and approval of, alternative suppliers of critical materials. We also ensure we have sufficient levels of safety stock to mitigate short-term supply issues.

Investing in IT

We continue to invest in our IT systems and department. In November 2019, we upgraded our Microsoft Dynamics AX ERP system to the latest "365" environment. 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. We are accredited to the Cyber Essentials Plus certification, part of the UK Government's National Cyber Security Strategy, which requires an annual, full independent assessment of our IT systems' ability to deal with common cyber-attacks. We also train our employees on a regular basis to spot potential cyber-attacks through communication and online training.

Mitigating Brexit risks

We continue to monitor Brexit developments, including planning our production and shipping schedules around any key dates. We applied for Authorised Economic Operator status, underwent a thorough audit and were granted it. This status provides a fast track for shipments in and out of mainland Europe, 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 high-performance products, which are less sensitive to the macroeconomic trading environment.

COVID-19

The global outbreak of COVID-19 is a constantly developing situation. We are not in a position at this stage to speculate on the duration nor its future impact on the broader global customer base of the Group; however, we have put appropriate measures in place as we continue to monitor developments. The health and safety of our colleagues, their families and our business partners remain our primary concern and public health measures advised by governments are being followed in support of their efforts to contain the spread of the virus. We have provided our staff with the technology and training support to work from home, where appropriate, and have limited travel in line with World Health Organization advice. All foam production facilities are operating. The supply chain is being proactively managed and we hold several months of inventory of ZOTEK[®] raw material and work in progress due to the uniqueness of the core materials. We have alternative supply sources for LDPE in different countries and have built additional inventory of key grades for the purpose of contingency. While we have sufficient liquidity headroom in our bank facility, we are managing our leverage covenants through tight control of operating costs and the timing of discretionary capital expenditure. The Board has also considered it prudent to suspend the dividend until economic conditions stabilise. We continue to monitor the development of the virus and its implications given the evolving nature of the situation.

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

Risk management and principal risks

Continued

Global capacity management

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. 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 environment, regulation and demographics, listed on pages 20 and 21, 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 aforementioned megatrends. HPP sales are more project-driven and have stronger links directly with the end user, who also has a more direct involvement in the 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 foam 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.

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 have continued to refine our monthly sales and operations planning process, which generates high levels of cross-functional engagement to ensure collaboration and consistency in planning sales and production over the upcoming 24 months.

We run an annual strategic planning process with a five-year view to reflect the longer time horizons related to capacity planning. Our five-year strategic plan was rigorously tested by the Board and reassessed and retested following the downturn in Polyolefin Foams performance in Q4.

Close to the end of current investment programme

We have been engaged in a significant programme of capital investment since 2014 and are nearing its successful completion. The first stage of this programme completed in the USA in 2018, comprising a high-pressure autoclave, ancillary equipment and infrastructure for two further lines. A second high-pressure autoclave was commissioned in February 2020, a UK investment in two high-temperature, low-pressure autoclaves was completed in December 2019 and the final major programme, the Poland manufacturing facility, is on time and on budget,

Strategy 1 2 3 4 Risk trend <>

and expected to be commissioned in H2 2020, subject to the current uncertainty related to COVID-19.

Building on our experience in the USA

The experiences gained through the recent investment in the Kentucky, USA site and the work performed around high-temperature low-pressure vessels in the UK 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.

Sufficient funding to support investment

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 and more favourable covenants. We also completed a successful equity placing, raising a further £20.6m (before expenses). This has provided us with sufficient headroom and flexibility to complete our investments as well as place us well for further opportunities as they arise.

Control Committees

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

Technology displacement

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 to entry for 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 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 a Graduate Scheme 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 across our business, making it difficult to poach. We protect our know-how using confidentiality and contractual agreements with employees, suppliers, customers and by 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

Strategy 1 2 3 4 Risk trend <>

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 Poland 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 and Executive 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 MuCell Extrusion 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 that behaviours are aligned with those at the corporate centre.

Hiring and developing overseas leaders

The Group's USA operations, comprising Zotefoams Inc and MuCell Extrusion LLC, have been part of the Group since 2001 and 2008 respectively, have experienced management teams with significant tenure at Zotefoams, 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 President is a member of the Executive Committee.

The Group's China subsidiary was formed in 2016, while the India subsidiary was formed during the year. With the exception of Finance, local management reports directly into the HPP Business President, who has created strong communication and reporting structures. The local finance teams report directly into the Group Financial Controller for independence, clearer leadership and greater assurance around governance.

Building up our global functions

We have invested significantly in human resource over the past few years as we build global functions and hire leaders with international and cross-cultural experience. In January 2020, an HR Executive was recruited as an addition to the Executive team, elevating the importance and representation of the function and charged with managing the challenge of a growing, international workforce. Now reporting into this HR Executive, Zotefoams also has a Global Talent Manager, who presents regularly at Executive Committee

meetings and whose remit is to ensure that senior and emerging talent is appropriate for the Group's current and future needs.

Preparing the Poland manufacturing site for start-up

We recognise the importance and risks surrounding the construction and start-up of a new manufacturing site in a country we are less familiar with. Following the decision to proceed with the investment, we hired an experienced project leader to manage all aspects of the project, including the construction phase, which was completed on time and within budget. In July 2019, we hired the Poland Plant Manager in order to take over from the project leader at the right time, gain experience with Zotefoams' unique technology, become familiar with the key functional support staff in the UK required to support the plant going forward, as well as understand and adopt the Zotefoams culture as staff are hired in Poland. Currently, the Polish team comprises the Plant Manager and a further five key staff, all of whom are training in the UK facility at least four months prior to planned start-up.

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 are set up. We have introduced a global training tool which provides training, plus tracking mechanisms, across all our locations on a risk-assessed basis and in the local language.

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

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® 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 and a stable macroeconomic environment, 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

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 remain 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 2019 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. Being at the beginning of the value chain, the Group often sees the impacts of downturns early, accentuated as customers deplete their inventories, but it then benefits from seeing the recovery sooner too. The profit impact on such risk is accentuated by the Group's operational gearing and its demand for skilled employees, given the business's uniqueness, which makes short-term cost cutting often inadvisable. The timing of a downturn in the Group's performance coupled with reaching the final stages of the Group's global capacity enhancement programme could place pressure on debt facilities and banking covenants.

At the date of this Annual Report there is unprecedented uncertainty from the outbreak of the COVID-19 virus, with impacts on the health and safety of our staff, customer demand, continuity of plant operations and financial liquidity. See also the COVID-19 paragraph above under Operational disruption.

The consequences of the UK's decision to leave the European Union continue to risk impact to our business in a variety of ways and affect other key risks listed in this report, although this impact is still not yet fully understood or fully quantifiable given the negotiations expected during 2020. 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 and euro

We reduce our net foreign exposure for transactional items by making purchases either in US dollars or euros. 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 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 Poland 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's financial statements. 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 by 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, certain 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 and slowing capital expenditure projects to help offset the effects of a downturn. Decisions in this regard are, however, taken with respect to our assessment of the underpinning reasons for a downturn, our belief in the likely recovery and an assessment of the impact of short-term cost control on medium-term growth potential.

Managing our debt facilities/COVID-19

We maintain close relationships with our supporting banks, meeting with them regularly and updating them on performance and outlook. Our 2018 refinancing and capital raise have given us sufficient liquidity to manage through a downturn. We expect H1 2020 to be our highest leverage (net debt to EBITDA) position, given the challenging trading environment in Polyolefin Foams, the rapidly evolving situation regarding the COVID-19 pandemic and the final stages of completion of the Group's significant capital investment programme. Our budgets and forecasts include investments in growth opportunities, some of which can be slowed if necessary. We stress-test our possible outcomes and engage with our banks to ensure their continued support under all circumstances.

The coincidence in timing of the performance downturn in Polyolefin Foams, the current uncertainty around COVID-19 and the completion of the Group's capacity expansion projects has placed a degree of risk around the Group's ability to remain within its leverage covenant without actions that would negatively impact our strategy. In support of this strategy and in recognition of the current macroeconomic uncertainty, the Group's banks have amended the leverage covenant from 3.0x to 4.0x based on the 12 months to 30 June 2020. In light of the exceptional circumstances, Zotefoams is focused on cash, including cost and capital management, in order to maintain sufficient liquidity and remain within revised covenant levels. The Board has also considered it prudent not to recommend a final dividend for the year ended 31 December 2019, and will keep this situation under review and determine the timing for resumption of dividends as economic conditions stabilise.

Monitoring Brexit developments

As documented under the operational disruption risk, we continue to monitor Brexit developments, including planning our production and shipping schedules around any key dates as they arise. Our Authorised Economic Operator status provides a fast track for shipments in and out of mainland Europe. 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

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 33 to 38.

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 page 35; Global capacity management page 36.

Scenario 2:

Business performance risks. These include both Polyolefin Foams and High-Performance Products 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 page 36; External page 38.

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 page 35; Global capacity management page 36; Loss of a key customer page 37.

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 page 38.

Scenario 5:

COVID-19 disruption. We considered the impact of a severe but plausible scenario that reflects the current unprecedented uncertainty in the global economy, with Group revenue 20% below 2019 for the 12 months to 31 December 2020 and 25% below 2019 for the 12 months to 30 June 2021, together with mitigating cost and cash actions.

Read more Principal risk: Operational disruption page 35; External page 38.

The Group continues not to consider Brexit a material risk to its long-term viability. While operational disruption is possible in the period immediately after an adverse outcome to negotiations, albeit mitigated by appropriate 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 people

Our people are key to our success and we are committed to their development

Our continued expansion in markets, products and geography brings ongoing challenges in talent and capability. Our strategy to address this is centred on connecting people through a consistent focus on our culture and values and by developing our workforce for current and future roles.

The Board and Executive team discuss talent and culture on a regular basis, with a deeper review as an integral part of the annual Board strategy day. We aim to set clear expectations for culture and values which apply to, and engage employees, at all levels. Again this year we have placed significant emphasis on increasing the level of engagement across our diverse group of employees. Here are some examples of how we are progressing:

Delivering culture and engagement with a consistent theme

In 2017, we formulated a set of culture pillars to complement our brand values; in 2019, we ran workshops across our UK management team to translate our culture pillars into tangible actions and behaviours. From these, our management team agreed to make a collective effort to drive a learning culture through our organisation. Below are examples of initiatives in 2019. We also ran

leadership development sessions to pinpoint and improve our focus areas in parallel with a leadership culture development programme which has been under way at executive level since 2017.

We are a learning organisation

Employee group	Action	Outcome
Senior management	To enhance our learning culture (and our talent development programmes) we trained our senior management team on coaching, mentoring and sponsoring.	Managers are reporting successful use of coaching techniques in our discussion sessions. Selected managers are mentoring our graduates as they move from their development programme into dedicated roles within the business.
Senior management	We identified the components of a learning culture, discussed challenges and successes in small groups and scored our current performance, establishing personal focus areas and a team overview on how to improve.	Through our group workshops we identified our weakest area as being in retrospection – identifying mistakes and embedding the changes for the organisation to learn. Moving the dial on this is a management focus for 2020.
UK employees	We initiated a 14-month Lean Education and Development (LEAD) programme to train and engage 45 employees, cross-functionally, in a broad range of analysis and improvement techniques – a toolbox – specific to an operational business.	We have completed the classroom phase and employees have identified improvement projects to execute in cross-functional teams in 2020. The business improvement techniques have been incorporated into our operational practices to produce a consistent Zotefoams approach to improvement across all business functions.
US employees	A \$101,000 government training grant was awarded for an upskilling training and development programme across operations, building consistent cross-functionality, flexibility and bench strength in leadership and engineering know-how.	Through investment of this grant, we achieved significant workforce development and role progression, including leadership and technical training with mentoring support for stretch assignments, yielding a 25% rise in engagement levels in this group.

Our culture pillars



Our AZOTE® global commercial team pictured at its annual strategy meeting

Spotlight on
Learning and
Development

LEAD operational business toolbox

In May 2019, we used our apprenticeship levy to embark on a large development programme. Our primary objective was to give a broad range of employees the skills to identify and address inefficiencies: this training programme covers lean techniques along with project management and commercial tools. Our secondary objective was to enhance cross-functional teamwork through integrated training and projects, using common language and methodologies. We will be extending the training, as part of continuous improvement, across the UK plant's shop floor during 2020.

“Empowerment and engagement are at the foundation of our strategy for the future; the LEAD programme is making significant progress in this direction, developing capability within operations and reinforcing cross-functional alignment throughout the business. I am looking forward to the operational improvements and alignment the projects will deliver in 2020.”

Benito Sala
Managing Director, Europe



Our talent strategy addresses resourcing challenges while promoting organic progression

Our brand values are an ongoing focus and we continue to promote and hire in line with these values. Talking about culture and values has become an integral part of our business strategy and operations at senior level and, for the first time in 2019, values-based behaviour was made integral to management reward schemes, alongside the usual hard objectives. In 2020, we will roll out a culture change programme to enhance business-wide commitment to these values.

We repeated our global employee engagement survey in the spring of 2019, and again ran focus groups to add insight to the results. The results showed a significant increase in engagement in all our overseas operations, and in our skilled and shift employees in the UK. The demands of our combined growth and future investment have been felt most keenly by our specialist employees and will continue through much of next year. We have responded to this challenge with a business-wide skills development programme (operational business toolbox, featured to the left) and a framework to become more people focused. Additionally, as we develop as a learning organisation, a closer cross-functional alignment of project work is emerging, which will streamline efforts and increase productivity.

Building accountability

In line with our culture pillar “We hold ourselves accountable”, we have built foundations to increase accountability in 2020. These include our work on being a learning organisation, where we identified key components around managing failure and capturing learning to get lessons embedded through training, knowledge sharing and process changes. We overhauled our meetings culture to an objective and action-focused approach. But our main work in this area was a job evaluation project, through which all job descriptions in the UK were revised with clear accountabilities for delivery and behaviours.

Growing flexible resource through talent development

Our talent strategy allows us to address resourcing challenges while continuing to promote organic progression. Cross-functional development is paramount and we have two major programmes in place to deliver this:

1. Our Agile Talent Group, which consists of employees with core business expertise, commitment to our culture and values and the desire to develop a broad skill set for cross-functional progression. 62% of our Agile Talent Group have successfully completed development projects outside their areas of expertise and 54% have progressed to new roles during the last two years. We are growing our internal agile talent pool and adding a mentor scheme to complement the project-based development we operate currently. The development of this group is intended to provide the business with employees who are equipped for a variety of progression opportunities and who possess the breadth of knowledge and insight required for a senior role.

2. The Zotefoams Graduate Scheme (featured on page 42) is designed to equip some of the brightest graduates in material science and engineering with the knowledge, skills and experience they require to excel in their careers at Zotefoams. Our talent pipelines (which include placement students) have a shadowing programme to help them learn about the roles they might progress to and, exactly as in the previous year, 38% of employee role changes in the UK during the year were cross-functional. This talent structure has largely addressed previous hiring challenges where we were, to a sizeable extent, reliant on mainland Europe to source candidates with the right skills and experience.

Ongoing progression of expertise and diversity through talent acquisition

We indicated in our 2018 Annual Report that our growth in employee numbers globally would slow in 2019 and we are reporting no net increase for this year, in contrast to growth rates as high as 17% in recent years. 2019 investment has been primarily in capital projects. Nevertheless, we have complemented our programmes for growing talent by increasing our expertise in key areas and in our international presence through external appointment. Benito Sala joined us as MD Europe, responsible for our European operations, which will include our Poland manufacturing site. We hired four key roles in operations management and engineering for Poland, investing in training and induction to Zotefoams in preparation for a smooth start-up of the new factory in 2020. We also invested in our global commercial resource, appointing 10 new people, primarily in sales, to a new subsidiary in India.

Diversity

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 (the under-35 cohort has grown from 25% to 30% of our workforce since 2015) and our years of service metric reflects our recent growth. Attracting women into our business, especially into senior and technical roles, remains a challenge but globally we achieved 33% females hired into senior roles across the Group in 2019. We are particularly proud that one of our female employees was appointed Chair of the Women in Materials group of the Institute of Materials, Minerals and Mining.

Our UK business is a knowledge and resource hub, providing support to the Zotefoams Group and directly servicing customers throughout Europe and key accounts worldwide. In addition to the broader benefits of diversity, our rich culture helps us align with our colleagues, suppliers and customers. We leverage this to support our European business and currently employ 17% non-British European staff and 20% other non-British staff at our UK facility by maintaining strong levels of retention and remaining an attractive employer to these groups. Our factory in Poland, due to open in the second half of 2020, will further strengthen our European employee base.

Our people
ContinuedSpotlight
on talent
development

Graduate Scheme

Our Graduate Scheme is designed to ensure the future needs of Zotefoams are supported by the right skill sets and versatility to respond to a variety of growth opportunities in a highly diverse business. It is a two-year scheme, comprising two or three development roles chosen to complement each graduate's expected career path. Alongside their day jobs, graduates undertake a programme of learning and hands-on exposure to all major functions in the business to help build a broad business insight, something that is already enhancing their effectiveness and versatility. The demographic of the group is 64% male and 36% female. Our first cohort completed the programme and transitioned into the business in 2019, all taking roles we would traditionally find difficult to fill.

"Since becoming Director of Technology & Development in 2010 I have created a structure within the Technical Department to grow talent for the wider business. The Graduate Scheme adds a fast track for talented engineers, allowing them to gain experience in multiple roles, an understanding of functions in the business and giving them an appreciation of the whole business. Our aim is to develop people with an engineering foundation and the flexibility to adapt to new roles as we grow."

Dr Karl Hewson

Director of Technology & Development

We overhauled our talent acquisition strategy in 2015 and continue to monitor our quality of hiring. Our 2019 statistics in the UK show more than a third of our hires from 2015 onwards are retained and ranked as either high potential or high performance two years following their start of employment. In 2019, we have continued to strengthen our relationships with four key universities, offering industrial visits and industry insight lectures as well as supporting careers fairs and hiring opportunities. We continue to sponsor Imperial College London's Materials Engineering Society as we have found it worthwhile, not only for recruitment but for increasing awareness of our unique foams within a group of talented materials engineers, many of whom will work for current and potential customers when they graduate.

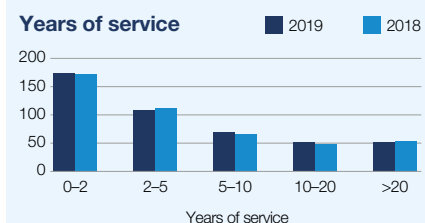
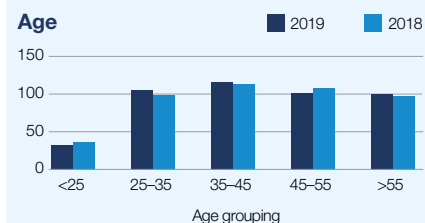
Talent pool sustainability

We strive to maintain and improve a talent pool with the skills and flexibility to deliver our ambitious growth targets. Zotefoams Group operates unique technology and sells into a wide diversity of applications globally. We expect our business to grow primarily through new applications for existing materials and from the introduction of new technology. We therefore expect our people to be demonstrably reliable and pioneering, supporting existing and new customers with materials for the benefit of customers and society. These skills, combined with process and materials knowledge, need to be nurtured internally and, alongside role succession, we conducted an audit in 2018 to identify key skills and knowledge across the business with a view to ensuring sustainability. The outcome was a plan and budget to address 30 areas where the knowledge or skills should be grown or captured internally. In 2019, we closed out 22 of these and made significant progress on the remaining eight, all of which we expect to close out during 2020.

Looking forward

Throughout 2020 and beyond, we will face the continuing challenge of making significant investments in the future of our business while seeking to deliver ambitious growth. We will support our employees with clear communication on purpose and objectives, with the aim of increasing engagement and productivity.

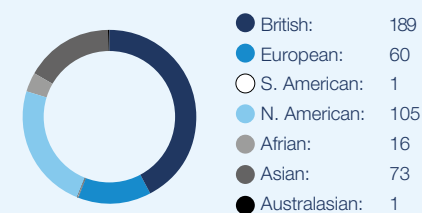
We have made many steps this year to increase our focus on culture, engagement and developing people. This is a challenge for a technical organisation where a natural task focus is inherent. We need to remain people-centric and our focus for next year is "we live the brand values", with a programme of work to bring these values to life throughout the organisation. We will continue our work on "learning organisation", building the right platform for us to move on to "developing accountability" and "constructive challenge" without losing the agility we value and which has delivered so much success.



Role by gender

	Male	Female
Non-Executive Director	3	1
Executive Director	2	–
Senior management	5	1
Other staff	336	97

Cultural diversity



We have been on a journey of change since we commercialised our first unique foam in the ZOTEK® range in 2004. However, culture change is especially challenging and, in recognition of the pivotal role line managers play in any change process, we will be rolling out a step-by-step programme of training and support to help our line managers execute this in 2020.

Our talent structures have equipped us well to replace the European talent pipeline we expect to lose through Brexit, but talent acquisition is an area where no business can be complacent. We are only as good as our ability to attract and retain the right people, so we continue to develop our employer brand, our resourcing methods and the sustainability of our talent pipelines.

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.

Health and safety

Over the past few years we have heightened our focus on health and safety and delivered a marked improvement in performance across the Group. Our chosen metrics allow benchmarking against similar industries and our performance is now better than average in these comparator industries. The next stage of development involves better awareness of the behavioural aspects of health and safety and this will form the core of our priorities for 2020 across the Group.

Environmental

Zotefoams operates in the plastics and polymer industry where environmental performance is increasingly under societal and regulatory scrutiny. When developing our business we consider both the internal and external environment. Internally, the focus is mainly around improving efficiency in energy and polymer use. Externally, we consider the benefit of the products and technology we offer and seek to develop products which we can justify as being more beneficial to society than either our existing products or those offered by competitors.

The debate on plastic prompted by inappropriate applications and irresponsible disposal has become polarised, with many beneficial uses of plastic now tainted by association. We at Zotefoams believe that responsible usage of plastics, minimising usage (reduce), maximising service life (reuse) and considering end of life issues (recycle) is vital to ensuring the sustainability of the plastics industry and our business.

Internal metrics are complicated by the changing product mix of our business, as our HPP business in particular grows more quickly than Polyolefin Foams. The additional capacity investments in the UK and USA are latest generation technology that are more flexible and energy-efficient than existing equipment, although the benefits of this will not be fully realised until utilisation levels increase.

Internal 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. Our USA high-pressure autoclaves heat and cool more quickly and are around 10% more efficient than those in the UK. Improvement activities in the UK and USA are estimated to have improved yields and reduced material usage by at least £400,000 per annum, which also benefited energy consumption and other processing costs.

Through optimised machine loading and cycle time reduction in our main high-pressure and low-pressure gas processes, we have reduced annual energy usage by around 700,000kWh.

UK investment

The development of Factory 4 on our UK site, which was completed during 2019, has been assessed using the BREEAM environmental assessment methodology and has achieved an Excellent rating. The design team has incorporated a wide range of environmental features into the design of the building, including:

- ▶ monitoring the processes during the construction period;
- ▶ LED lighting and controls;
- ▶ efficient space conditioning systems;
- ▶ low water usage fittings with solenoid shut-off valves;
- ▶ energy-efficient equipment throughout; and
- ▶ environmentally responsible materials.

External impact

▶ Zotefoams products make airplanes, trains and cars demonstrably lighter than traditional materials, translating to better fuel efficiency and a lower carbon footprint. This is a far more tangible and immediate measure than e.g. carbon offsetting.

- ▶ Our foams are typically 15–20% less dense than any competing foam for comparable applications. This means less material content and the maximum possible lightweighting benefits for our customers.
- ▶ Zotefoams' main three-stage process uses only pure nitrogen to expand foams and is inherently environmentally friendly. The process affords exceptional product characteristics that contribute to a long service life.

We have set out to improve post-consumer recycling rates of single use packaging by designing ReZorce® mono-material barrier packaging – now available for licensing globally – for full compatibility with HDPE recycling (Stream 2).

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

Climate change

At Zotefoams, we understand that combating climate change is a significant global challenge. Regulatory and behavioural changes are already shaping the markets we serve and the environment in which we operate. We believe the business is well positioned and prepared to deal with these changes, with foam products delivering high performance, insulation and reduced weight which offer the potential for CO₂ reduction in excess of the CO₂ required to manufacture the product. We are improving our energy intensity and material consumption and adapting our product range to enter new markets where these benefits are clearly understood and valued. Measurement of energy consumption and polymer usage, which generate CO₂ emissions, are monitored monthly and we have clear targets to improve these as described further in this report.



15%–20%

less dense than competing foam for comparable applications

£400,000

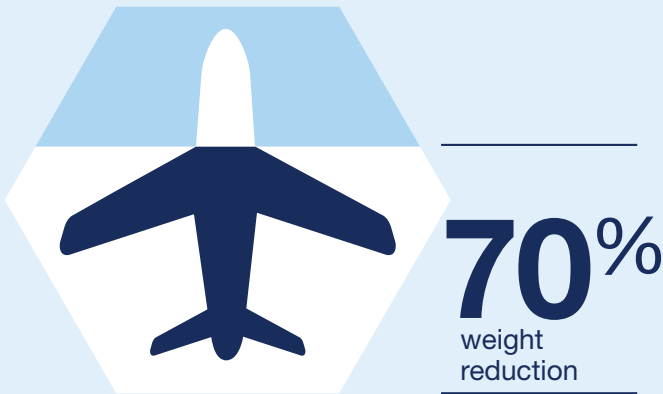
reduced material usage

700,000kWh

reduced annual energy usage

Sustainability
Continued

Weight savings vs traditional materials



Lightweighting

70% lighter and flying high

Zotefoams' latest PVDF foam, ZOTEK® F XR, is an extra-rigid closed cell crosslinked foam that significantly extends Zotefoams' scope of application in aircraft interiors. With sufficient rigidity to replace solid thermoplastics in applications such as the interior of seat pods, stowage lockers, rigid armrests and tray tables, ZOTEK® F XR reduces weight by up to 70% on a like-for-like basis. The material meets all relevant aviation standards, offering outstanding fire, smoke and toxicity (FST) ratings.



Safety

Introducing our passport to safety

The Board has ultimate responsibility for Safety, Health and Environment (SHE) policy and performance, setting annual performance objectives and receiving quarterly reports on SHE issues. In 2019, we launched a Safety Passport initiative for all our Croydon-based employees, emphasising the priority the Board places on SHE. Employees receive the passport as part of their induction process and it serves as a record of ongoing SHE training that all staff receive throughout their career with Zotefoams.



Achieving accreditations

Zotefoams achieved accreditation to ISO 14001 Environmental Management standard in 2018 and maintained this throughout 2019.

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 certification bodies to ensure that the Company complies with those standards. The Company achieved compliance against ISO 14001/2015 in 2018 and has now made considerable progress towards migration to ISO 45001:2018 by successfully completing recertification to OHSAS 18001:2007 in December 2019. Migration to ISO 45001:2018 will be conducted beginning in March 2020 as part of a continual improvement plan.

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 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 induction training on SHE matters, including the Group's OHSE 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, acts or 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 takes the reporting of all SHE incidents very seriously and requires 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, in 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

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

SHE: Key metrics

Year	2019	2018	2017	2016	2015
Group: Reportable lost time injuries	1	4	6	13	7
Company: Environmental metrics					
Internally recorded environmental incidents					
Level 1	0	0	0	0	0
Level 2	0	0	0	0	0
Level 3	10	24	7	11	6
Energy usage – (Mwh)	44,570	52,225	49,085	46,912	50,006
Energy consumption (kWh/kg)	11.60*	11.03*	11.05	11.76	11.75

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

16% reduction in carbon emissions

in our UK facility, mainly due to lower usage of natural gas and electricity within the plant, together with lower output volumes in the second half of 2019

Sustainability
Continued

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.

Health and safety performance

The primary metric used to monitor the number of reportable lost time injuries is RIDDOR. In 2019, the number of RIDDOR incidents across the Group decreased to 1 (2018: 4).

The Zotefoams Group also uses metrics devised by the United States Department of Labor to measure staff absences resulting from workplace incidents and accidents. This allows comparison with a large, relevant peer group as well as provides an established methodology with which we can benchmark our performance annually. In 2019, there was a marked improvement in Days Away From Work (DAFW) and Days Away Restricted Or Transferred (DART). In both cases, the metrics are compared with the latest benchmark data for Rubber and Plastics Processors and represent approximately the rate of accidents and incidents per 190 full-time Zotefoams employees.

Year	2019	2018	Industry
RIDDOR	1	4	n/a
DAFW	1.1	2.3	1.1
DART	1.3	3.1	2.4

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 2019, there were no prosecutions, fines or enforcement actions taken as a result of non-compliance with Safety, Health or Environment legislation (2018: none).

Behaviour is now the focus for Group health and safety training and intervention. Analysis of incidents and near misses clearly shows that behaviour is the main root cause of these incidents and this focus is needed to maintain and better the recently improved safety outcomes.

Environmental performance

There were no significant environmental incidents during the year (2018: none). Minor incident reports at our UK facility decreased significantly. In 2019, 10 internally reported environmental incidents were reported (2018: 24). Previous years have been analysed against a new internal categorisation, guided by the Environmental reporting guidelines at <https://www.gov.uk/report-an-environmental-incident>

Level 1 – Reported to Environmental Agency (e.g. Polluting incident)

Level 2 – Reported to local authority (e.g. Waste concerns)

Level 3 – Internal report only (e.g. small granule spills)

In 2019, no incidents were reported at Level 1 or 2, meaning no significant impact to the environment. The Group ensures that all reports are taken seriously, investigated, and the responses given are appropriate to their level of impact or potential impact. Figures on page 45 are reported for the Company. There were no Level 1 or Level 2 equivalent incidents elsewhere in the Group in 2019.

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.

The Company measures 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 production of our HPP foams, which requires more energy than for polyolefin foams, prompted us to update these metrics to be product-mix neutral in 2018. In 2019, our adjusted energy efficiency measure Specified Energy Consumption (SEC) has increased to 11.60kWh/kg (2018: 11.03kWh/kg). The increase seen this year is adversely influenced by the lower plant utilisation in the second half of the year, due to the high energy base load of the manufacturing process.

In 2019, the Company completed its second assessment under the Energy Saving Opportunity Scheme (ESOS) and remains compliant.

Carbon emissions

The Group's total carbon emissions for 2019 for all its operations were 12,425 metric tonnes (2018: 14,825 tonnes, adjusted to include 94 tonnes for our China facility). A reduction of 19% has been recorded in the UK facility (2,268 metric tonnes), mainly due to lower usage of natural gas and electricity within the plant, together with lower output volumes in the second half of 2019. An update to the conversion factors for greenhouse gasses also supports the above, while increased output in the USA was achieved with an 8% reduction in carbon emissions. Contribution from other Group locations is included in the total above but was minimal.

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.

Group: carbon emissions (CO₂ tonnes)	2019	2018	2017	2016	2015
Emissions arising directly from our operations (including fuel used in our vehicles)	190	288	134	136	382
Indirect emissions – use of energy (electricity and gas)	12,235	14,443	16,291	16,006	18,194
Total	12,425	14,731	16,425	16,142	18,576
Carbon emissions (kg)					
per material gassed (kg)	1.6	1.7	2.1	2.3	2.4

s172(1) statement

Our shareholders and stakeholders

Since 1 October 2007, the Board has been required to carry out its statutory duty to act in a way which it considers, in good faith, would be most likely to promote the success of the Company for the benefit of its members as a whole, and in doing so have regard to:

- ▶ the likely consequences of any decision in the long term;
- ▶ its environmental impact;
- ▶ key stakeholders (including employees, customers, suppliers and communities); and
- ▶ maintaining a reputation for high standards of business conduct.

The Board has striven to embed these considerations in its decision-making process since the imposition of the duty and now reports on compliance.

With the help of a diverse group of employee representatives and seeking to represent the interests of all stakeholder groups, we have articulated the purpose of Zotefoams to be “Optimal material solutions for the benefit of society”. We feel this perfectly encapsulates all three business units and reflects our alignment with the megatrends of environment, regulation and demographics.

Our purpose

Optimal material solutions for the benefit of society

Decision-making

The Board delegates day-to-day management and decision-making to its senior management team, but it maintains oversight of the Group's performance, and reserves to itself specific matters for approval, including significant new business initiatives. Then, by receiving regular updates on business programmes and objectives, the Board monitors that management is acting in accordance with agreed strategy. Processes are in place to ensure that the Board receives all relevant information to enable it to make well-judged decisions in support of the Group's long-term success.

Achieving long-term value for our shareholders

The Board places considerable emphasis on engaging with shareholders to understand their interests and any concerns they may have. The Executive Directors and their advisers manage and develop the Group's external relationships with institutional investors and prospective investors. They follow a comprehensive programme of investor meetings and calls, particularly following the release of annual and half-year results.

In 2019:

- ▶ The Board closely monitored the previously approved ongoing investments in the UK, USA and Poland, which significantly enhance capacity and support the business' continued growth in line with its strategic objectives.

➤ Further details are provided in the CEO review on page 15 and in the CFO review on page 31.

- ▶ The Remuneration Committee, on behalf of the Board, solicited feedback from the Company's major shareholders in advance of making decisions relating to the three-yearly review of the Directors' Remuneration Policy which will be proposed for approval at the 2020 AGM. A similar process was followed for the approval of the Directors' Remuneration Policy in 2017, with 99.96% of the votes cast in favour of the Policy at the 2017 AGM.

➤ Further details may be found in the Directors' Remuneration report on pages 58 to 72.

- ▶ The Board met with the members of the Executive team and reviewed, discussed and approved the five-year strategic plan.

Investing in people

Our people strategy is centred on connecting employees through a consistent focus on our culture and values and by developing our workforce for current and future roles. The Board placed significant emphasis in 2019 on increasing the level of engagement with our diverse group of employees and enhanced the employee voice in the boardroom through the appointment of J Carling as Board representative for workforce engagement.

The Board reviewed the results of the employee engagement survey at its meeting in June. Good progress was noted with the leadership culture development programme, which has been under way at executive level since 2017.

Health and safety is the Group's top priority. The Board has reviewed and amended the format and focus of global health and safety data provided to it on a quarterly basis, to maintain relevance and provide leading and lagging data points, and engaged directly with the Group's Head of Health, Safety and Environment.

➤ The Sustainability report on pages 43 to 46 provides further details.

Our customers

The Board has a keen interest in customers' feedback and encourages the business to maintain multiple channels and methods of communication to engender a useful dialogue, including customer services contact, social media, and in the future customer satisfaction surveys. Representatives from all business units attended Board meetings in 2019 to provide insight on customer relationships and market expectations.

Our supply chain

A strong supply chain is key to Zotefoams' success, and the Group aims to build strong, collaborative relationships with its suppliers, informed by the external context. The Board receives monthly management information relating to inventory and sales, and regularly discusses with management logistical issues which may affect sales. In 2019, the Board satisfied itself that suppliers' due diligence procedures, including financial checks and modern slavery compliance, were sufficiently robust.



Since 2003, Zotefoams has worked with a social enterprise set up by the Royal British Legion Industries. The company, called “Britain's Bravest Manufacturing Company”, supplies 50,000 wooden pallets a year to Zotefoams to ensure the safe distribution worldwide of its products, helping to provide crucial employment for over 100 military veterans and supporting a valued supplier. Zotefoams' support was recognised by a special award it received from the company in November 2019.

The Board will keep engagement methods under review to ensure it remains effective and will continue to foster business relationships with suppliers, customers and others in its decision-making process in order to achieve good quality outcomes.

The environment and our communities

The debate on plastic prompted by inappropriate applications and irresponsible disposal has become polarised, with many beneficial uses of plastic now tainted by association. Considering the responsible usage of plastic, minimising relevant usage (reduce), maximising service life (reuse) and considering end of life issues (recycle) has formed an inherent part of the Board's discussions on the future of the business and the plastics industry in 2019.

Following the launch of ReZorce® recyclable mono-material barrier packaging, the Board approved the construction of a \$1m pilot line for MEL to develop customer applications on a commercial scale.

With a UK business operating in close proximity to a residential community in South London, Zotefoams is conscious of its impact as a neighbour. The development of Factory 4 on our Croydon site, completed during 2019, has been assessed using the BREEAM environmental assessment methodology and has achieved an Excellent rating. The design and build has included monitoring the processes used during construction as well as incorporating a wide range of environmental features into the design of the building. These include LED lighting and controls, efficient space conditioning systems, low water usage fittings with solenoid shut-off valves, and in all cases we installed energy-efficient equipment throughout the development and sourced environmentally responsible materials.

Board of Directors

The right skills to take us forward



Steve Good
Non-Executive Chair



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

Skills
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, Chair of the Remuneration Committee and member of the Nomination Committee, Elementis plc
Chair, Chair of the Nomination Committee and member of the Remuneration Committee Devro plc

David Stirling
Group CEO

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

Skills
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

Gary McGrath
Group CFO

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

Skills
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

Douglas Robertson
Senior Independent Director







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

-  Chair of Committee
-  Member of the Audit Committee
-  Member of the Remuneration Committee
-  Member of the Nomination Committee



Angela Bromfield
Non-Executive Director



Appointed
October 2014

Skills
Business leader and strategist with a 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, also serving as 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, Chair of the Remuneration Committee and Member of the Audit Committee, Churchill China plc
Non-Executive Director and member of the Audit and Remuneration Committees, Harworth Group plc
Non-Executive Director and member of the Nomination, Remuneration and Audit Committees of Marshall plc

Jonathan Carling
Non-Executive Director



Appointed
January 2018

Skills
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 on 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. He 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

Alison Fielding
Non-Executive Director



Appointed
14 May 2020

Skills
Experienced entrepreneur and Non-Executive Director, with significant expertise in strategy development and implementation for start-ups, AIM / main market listed and not-for-profit organisations.

Experience
Alison is a Non-Executive Director and Chair of the Remuneration Committee at Nanoco plc and Maven Income and Growth VCT plc and a Non-Executive Director and Chair of the Audit Committee at Getech plc. Alison spent 13 years with IP Group plc as Chief Technology Officer, Chief Operating Officer and latterly as Director of Strategy and IP Impact, and brings extensive investment, strategy development and execution experience in fast-growing, science-based businesses. Alison has a PhD in Organic Chemistry from Glasgow University.

External appointments
Non-Executive Director and Chair of the Remuneration Committee of Nanoco plc
Non-Executive Director and Chair of the Remuneration Committee of Maven Income and Growth VCT plc
Non-Executive Director and Chair of the Audit Committee of Getech plc

Catherine Wall
Non-Executive Director



Appointed
14 May 2020

Skills
Skilled independent Chair and Non-Executive Director for private equity owned, quoted and family companies. Sectors: industrials, business services, consumer.

Experience
Catherine is a Non-Executive Director and Chair of Audit at Mobeus Income and Growth VCT plc. Catherine has 30 years' experience in the private equity industry, primarily with Equistone Partners Europe, where she led numerous management buy-outs and later became UK Portfolio Partner supervising the management of all the business' UK investments. Catherine also has extensive industrial markets and Non-Executive Director experience, working with and helping develop many management teams to deliver ambitious growth plans.

External appointments
Non-Executive Director and Chair of Mobeus Income and Growth VCT plc

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. At Zotefoams, we recognise the importance of being a well-managed business, not only in the interests of our shareholders, but for other stakeholders as well. The Board and I are committed to the highest standards of corporate governance.

Statement of compliance with the 2018 UK Corporate Governance Code

Corporate governance plays an essential part in the long-term success of the Group, and the Board and I are committed to upholding the highest standards of governance in our worldwide operations. The Board welcomed the introduction of the new Corporate Governance Code (the "Code") in 2018 and introduced new practices, or adapted existing practices where appropriate, to ensure compliance with the Code's obligations.

➤ [The Code can be downloaded here](https://bit.ly/2AKGqTm)
<https://bit.ly/2AKGqTm>.

Throughout the financial year ended 31 December 2019, the Board has considered the contents and requirements of the Code and confirms that the Group has been compliant with the provisions of the Code.

➤ [Explained further in this report and in the Board Committee reports that follow on pages 53 to 72.](#)

The disclosures required by Disclosure and Transparency Rules DTR 7.2.6R have been provided in the Directors' Report.

Purpose

The Board considered the Code's requirements during the year and a number of discussions took place on the development of the Company's purpose before concluding on 'Optimal material solutions for the benefit of society'.

Board leadership and effectiveness

Together with the support of the Company Secretary, we conducted an internal review of Board effectiveness. The review confirmed that the Board represents a strong mix of skills, experience and knowledge and that each Board member continues to demonstrate this, effectively contributing to Board matters.

➤ [Further information relating to the evaluation process can be found on pages 51 to 52.](#)

Board and Committee composition

The Board membership has remained unchanged throughout 2019. As part of its succession planning process, the Board has carried out a thorough review of the balance of skills, experience and knowledge present in the Board's membership. This process led to the decision to seek two new Non-Executive Directors with additional strategy, marketing and leadership experience to support the continued growth of the Group. The recruitment process began in 2019 and was finalised in 2020 with the appointment, with effect from 14 May 2020, of two experienced Non-Executive Directors, A Fielding and C Wall. A Fielding will replace A Bromfield as Chair of the Remuneration Committee following her retirement from the Board on 13 May 2020.

The Board will continue 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.

Accountability

The Board acknowledges its responsibility to give a fair, balanced and understandable view of the business' financial position and future prospects. On behalf of the Board, at the recommendation of the Audit Committee, I confirm that we believe that the 2019 Annual Report presents a fair, balanced and understandable assessment of the Group's position, its performance and its prospects, as well as its business model and strategy.

AGM

The AGM provides our shareholders with the opportunity to engage with our Directors. We look forward to receiving shareholders' feedback at the AGM on 8 June 2020.

S P Good

Chair

9 April 2020

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 enables risk to be assessed and managed. 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.

Three principal Committees report into the Board, functioning 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 November 2019.

Chair and Group CEO

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

The Board considers that S Good has sufficient time to devote to his role as Chair of the Group. S Good is currently a Non-Executive Director of Elementis plc and Chair of Devro plc. He has recently stepped down from his role as Non-Executive Director of 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 Chair. D Robertson was appointed Senior Independent Director at the AGM held on 16 May 2018. The Board considers D Robertson to be independent.

S 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 Chair met with the Non-Executive Directors regularly without the Executive Directors present and the Non-Executive Directors met without the Chair present to carry out a review of the Chair'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 55.](#)

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 in Our people on pages 40 to 42.](#)

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 Chair'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 Chair 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).

The Board considered the merits of retaining the services of an external facilitator and concluded that, given the Group's size and the Board's needs, this was not appropriate. The matter will be kept under review in 2020. The 2019 Board evaluation process was undertaken by means of a qualitative questionnaire which was prepared by the Chair and the Company Secretary, circulated confidentially through an online portal. 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

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

Attendance at meeting	Board Meetings		Audit Committee Meetings		Remuneration Committee Meetings		Nomination Committee Meetings	
	Eligible	Attended	Eligible	Attended	Eligible	Attended	Eligible	Attended
A C Bromfield	7	6*	4	4	9	9	3	2
J D Carling	7	7	4	4	9	9	3	3
S P Good	7	6*	–	–	9	9	3	3
G C McGrath	7	7	–	–	–	–	–	–
D G Robertson	7	7	4	4	9	9	3	3
D B Stirling	7	7	–	–	–	–	–	–

* Failure to attend Board meetings by S P Good and A C Bromfield was due to ill health and an accident, respectively.

The Board and its Committees

Continued

their effectiveness. After the Directors had each completed a qualitative questionnaire, the Chair held individual meetings with each Director and then prepared a discussion document, which reviewed progress against the actions identified from the 2018 Board evaluation and set out recommended actions for the following year. These included enhancing engagement opportunities with the business and its people, and an increased focus on sustainability.

The outcome of the review highlighted that the Board and its committees are effective and well run, and that all Directors contribute effectively and provide appropriate commitment to their role.

The Board considers that it is functioning well and that its current 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.

⊕ [The report can be found on pages 56 to 72.](#)

Financial reporting

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

⊕ [The report can be found on page 75.](#)

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 53 to 55.](#)

Relations with shareholders

Meetings with institutional shareholders are held twice a year following the announcement of the Group's interim and preliminary results, usually in August and March respectively. Other meetings are held at institutional shareholders' request. To ensure that the Board, particularly the Non-Executive Directors, understands 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 Chair 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 2018 Code by establishing procedures to manage risk, overseeing the internal control framework, and determining the nature and extent of the principal risks the Group is willing to accept in order to achieve its long-term strategic objectives. 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 2018 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 33.](#)

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

The risk profile of the business continues to become more international



Dear Shareholder

I am pleased to present my report on the activities of the Audit Committee in 2019.

As the Group pursues its growth strategy, Zotefoams has continued to move into new markets, backed by planned capital investment in its manufacturing facilities and significant product innovation. With a new plant under construction in Poland, increased activity out of China, and the establishment of a commercial operation in India, the risk profile of the business continues to become more international. This brings increased challenges in terms of oversight and management processes. In 2019, the Committee focused its attention on global controls, the importance of culture and the processes for setting the Board's risk appetite. These are discussed in further detail below.

Global control

Global controls were a focus of the Committee in 2019. As headcount and assets grow globally, the Group recognises the importance of ensuring an effective control environment across the world, paying particular attention to its smaller or more remote subsidiaries, some of which are relatively new and still in the process of embedding process and control environments. In November 2019, an upgrade of the Microsoft Dynamics AX ERP system, in place since 2014, took the Group onto the latest "365" environment, a single, global platform with significantly improved capability to support business growth, facilitate global expansion and provide global oversight and effective control. The Group's online governance training platform was relaunched in 2019, providing a centralised management system to match governance training requirements with those individuals deemed to be exposed to a higher inherent risk. Additionally, the Group adopted a rigorous compliance checklist, encompassing risk, finance, regulatory and commercial considerations to support the Committee's decision-making around the creation of new group entities. This was most recently applied to the incorporation of the Group's Indian subsidiary, which will support the HPP Business Unit, primarily in the sale, installation and support of T-FIT® technical insulation products. The Committee's assessment is that the global controls of the Group remain appropriate and effective.

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 monitored the effective implementation of the actions arising from the 2018 internal audit of the Group's operations in China. In November 2019, it engaged Grant Thornton LLP to perform a review of the control environment of MuCell Extrusion LLC. Their report was presented to the Audit Committee in December 2019 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 and timetable. This will continue to be an area of focus in 2020 until the final capital project, the investment in Poland, is complete, which is expected to be in H2 2020.

Risk appetite

Following the introduction of a new, robust, risk management framework in 2018, the governance structure has allowed the Board to provide effective oversight through clear discussions of the organisation's objectives and risk appetite. The Committee reviewed how the Board's risk appetite was communicated to the organisation to ensure consistent understanding and application of risk principles.

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

9 April 2020

Summary of the role of the Audit Committee

The main responsibilities of the Audit Committee are:

- ▶ to review on behalf of the Board the integrity of the Group's internal financial controls and assess the scope and effectiveness of the systems established by management to identify, assess, manage and monitor financial and non-financial risks and make recommendations to the Board;
- ▶ to keep under review the adequacy and effectiveness of the Group's internal financial controls and internal control and risk management systems;
- ▶ to review the Group's systems and controls for the prevention of bribery and receive reports on non-compliance;
- ▶ to monitor and review the effectiveness of the Group's internal audit function in the context of the Group's overall risk management system;
- ▶ to review and approve the terms of engagement, including any engagement letter issued at the start of each external audit and the scope of any audit before it begins;
- ▶ to assess annually the qualification, skills and resources, effectiveness, objectivity and independence of the External Auditor;
- ▶ to develop and implement a policy in relation to the provision of non-audit services by the External Auditor and the approval by the Committee of such services, in order to avoid any threat to the External Auditor's objectivity and independence and the impact that such services could have on the audited financial statements, which takes into account any relevant ethical guidance on the matter; and
- ▶ to report 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 annually by the Audit Committee to ensure that they remain appropriate and reflect best practice. The Terms of Reference were last reviewed in November 2019.

Composition of the Audit Committee

In line with the Code, the Committee comprises three independent Non-Executive Directors, including the Chair.

The members of the Audit Committee during 2019 were D Robertson (Chair), A Bromfield and J Carling.

⊕ Their biographies can be found on pages 48 to 49.

Audit Committee report

Continued

D 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, D 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 2019.

The Company Secretary acts as secretary to the Audit Committee. The Company Chair, 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. During the year, on an informal basis, the Audit Committee Chair liaises with senior representatives of both the External and Internal Auditors 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 2019 the Audit Committee has:

- ▶ reviewed the financial statements in the 2018 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 2018 Annual Report;
- ▶ reviewed the Interim Report issued in August 2019 and received the report from the External Auditor on their review of the Interim Report;
- ▶ considered the risks impacting the Group, its customers and the economic environment, relating to Brexit and the Group's preparations to mitigate those risks;
- ▶ considered the inventory management and working capital position of the Group;
- ▶ satisfied itself that the requirements of the Regulations made under section 3 of the Small Business, Enterprise and Employment Act 2015 relating to payment practices reporting had been met;
- ▶ considered the provisions of the 2018 UK Corporate Governance Code;
- ▶ considered how the Board's risk appetite was communicated throughout the Group;

- ▶ reviewed the Group's policies on ethics, anti-bribery, corruption and fraud;
- ▶ considered the output from the Group-wide process used to identify, evaluate and mitigate high-level business risks;
- ▶ received reports from J Carling in relation to his engagement with the Joint Consultative Committee (JCC), which comprises an employee representative from each department and meets regularly to consider a wide range of matters affecting the employees' current and future interests;
- ▶ agreed a programme of work for 2019 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 the structure and skill base of the Finance team;
- ▶ 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 by conducting a confidential evaluation through an online portal, the outcome of which was discussed by the Committee. It was agreed the Committee remained effective.

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.

An area of significant focus in Q1 2019 was the £0.95m exceptional item declared in the 2018 full-year results in relation to Guaranteed Minimum Pension, the result of guidance post year end relating to a court ruling late in the year, and the treatment was considered appropriate.

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 1 to 47, including the section entitled 'Risk management and principal risks' on pages 33 to 38. The Strategic Report also describes the financial position of the Group, its cash flows and liquidity position. In addition, note 22 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.

At 31 December 2019, the Group's financing arrangements amounted to £55.2m, comprising a multi-currency term loan of £25m, a multi-currency revolving credit facility of £25m, and a remaining balance of £5.2m of a further £7.5m sterling annually renewable term loan, repayable in equal quarterly instalments. The bank facility is for a five-year period and expires in May 2023. At the date of the statement of financial position, £17.7m was undrawn on the facility.

The Committee has reviewed the Group's cash flow forecasts, taking into account strategic initiatives and sensitivity analysis based on reasonably possible changes in trading performance. The COVID-19 outbreak has created a further material uncertainty in these forecasts. While it is difficult to accurately quantify the effects on financial performance of COVID-19, the Committee has reviewed the severe but plausible downside scenario produced by management and the mitigating actions identified.

Under this severe but plausible downside scenario, while there is sufficient liquidity in the business for at least 12 months from the date of approval of these financial statements, there is the potential for a breach of the leverage covenant during the test period. This indicates a material uncertainty which may cast significant doubt over the Company's and Group's ability to continue as a going concern without further mitigating actions.

The Committee is aware that lenders to the Group have expressed a strong commitment to support the business through this difficult period. Moreover, Government measures are also being implemented to support businesses economically through the downturn and this reinforces the Committee's view that the going concern principle remains appropriate in preparing the financial statements.

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.

The Group is by virtue of the FRC Ethical Standard subject to the requirement to put

Nomination Committee report

Focus on succession planning and talent development

the audit to tender every ten 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, and the Audit Committee expects to carry out a tender process in 2022. The 2019 Audit was PwC's eighth annual audit for the Group. A new Audit Partner, Simon Bailey, was appointed by PwC in November 2019.

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 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. Other than the review of the Group's Interim Report, the External Auditor did not provide any non-audit services in 2019.

The Audit Committee, having conducted its 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 2020 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 2019. 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. The External Auditor is aware of the Internal Audit outsourcing arrangements and fully supports them.



Dear Shareholder

I am pleased to present my report on the activities of the Nomination Committee in 2019.

In 2019, the Committee has focused its attention on Zotefoams' resourcing for future growth and mitigating risk. Critical skill gaps identified by executive management have been addressed through a talent management programme, aimed at developing a diverse and sustainable talent pipeline linked to the Company's strategy. The gender balance in senior management levels has improved in 2019, with the appointment of a female Company Secretary raising the percentage of female senior managers to 26% (2018: 21%).

Following the nominations of D Robertson and J Carling in 2018, good progress has been made with succession planning at Board and Executive team levels. The Board, having recognised the benefits of greater diversity of gender, social and ethnic backgrounds, cognitive and personal strengths, commenced a recruitment exercise in 2019 to engage two new Non-Executive Directors with the support of Warren Partners, a leading executive search firm. The process concluded in 2020 with the appointment, with effect from 14 May 2020, of two experienced Non-Executive Directors, A Fielding and C Wall. A Fielding will replace A Bromfield as Chair of the Remuneration Committee following her retirement from the Board on 13 May 2020.

The Board's annual evaluation process was completed in Q4 2019 and demonstrated further progress in the effectiveness of the Board with some areas highlighted for ongoing development in 2020.

➤ Further details are provided in the Board and its Committees section on pages 51 to 52.

The Committee will continue to focus on talent development and succession planning in 2020.

S P Good

Chair of the Nomination Committee

9 April 2020

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 three times in 2019. 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 Chair of the Board and its Committees, against a specification of the role and capabilities required for the position;
- ▶ lead on the annual performance evaluation of the Board and its Committees;
- ▶ identify and manage any potential conflicts of Directors' interests;
- ▶ review the external interests and time commitments of the Directors to ensure that each has sufficient time to effectively discharge his/her duties; and
- ▶ manage succession planning for the Executive Leadership team and Non-Executive Directors.

During 2019, the Committee:

- ▶ reviewed the performance and ability of the Chair to continue to contribute to the Board in the light of the knowledge, skills and experience required, and recommended to the Board that the Chair be re-appointed for a three-year term subject to annual re-election by shareholders at the Company's 2019 AGM;
- ▶ continued to review succession and development plans for the Executive Leadership team 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;
- ▶ 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;
- ▶ planned, considered and recommended to the Board that a search for two new Non-Executive Directors should be initiated and subsequently engaged with Warren Partners to conduct the search;
- ▶ 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 2019 AGM;
- ▶ ensured that at least annually the Non-Executive Directors met without the Executive Directors present; and
- ▶ reviewed and updated the Ethics policy, including diversity requirements.

Directors' Remuneration Report

Remuneration practices and policies aimed at entrenching a high-performance culture



Dear Shareholder

I am pleased to present the Remuneration report for the year ended 31 December 2019.

Introduction

This is my final report as chair of the Remuneration Committee. A Fielding will be taking over as chair from 14 May 2020.

Zotefoams has a growth strategy focused on generating sustainable long-term value. Despite the difficult trading conditions in the Polyolefin Foams business in the latter part of 2019, the Group has remained focused on delivery of this strategy and continued to demonstrate progress in the High Performance Products (HPP) and MuCell (MEL) business units. The strategic capacity investments to support our long-term growth expectations are on track. These assets will provide a platform for significantly enhanced returns over the medium term.

The HPP business has continued to achieve strong levels of growth in sales (£26.48m – 20% growth) and profits (£6.43m – 11% growth) in 2019. Given continued strong performance by the HPP business unit, the Board remains of the view that motivating and retaining our Executive Directors is key to driving progress against our long-term goals.

Remuneration Policy review

In line with the three-year cycle, the Committee undertook a detailed review of the Group's approach to executive remuneration to ensure that it continues to support the delivery of the Group's long-term strategic ambitions and operational performance, and is aligned

with the wider interests of the Company's shareholders and other stakeholders.

Overall, the Committee is satisfied that the current Remuneration Policy has been successful in incentivising the Executive Directors to focus on delivering growth in the size of the business, demonstrated by a 41% increase in the Group's turnover, a 21% increase in the Group's underlying PBT and the market capitalisation having grown by over 94% in the three-year period ending 31 December 2019.

Taking the above into account, the Committee felt that it would be appropriate to continue with the same overall remuneration structure, which consists of fixed pay, an annual bonus and a separate long-term incentive plan and adheres to latest best practice in areas such as time horizons. Minor changes are proposed from a structural perspective to align with the updated corporate governance code, which include: (i) making it clear that the pension arrangements for new executive directors will be aligned with the wider workforce (in line with the approach taken for the CFO); (ii) updating our post-cessation shareholding policy such that 50% of shares up to the value of the shareholding requirement must be held for two years post-cessation of employment (shares to the value of 100% of the shareholding requirement must already be held for one year post-cessation); and (iii) minor updates to the malus and clawback triggers.

The key area of change going forward is the approach to performance measurement for the long-term incentive plan, which reflects the current stage of maturity of the business and feedback from shareholders. To that end, the Committee intends to change the metrics used for the purpose of the LTIP as follows:

- ▶ Earnings per share (EPS) metric will be maintained as the key metric for the plan; however, the weighting will be reduced from 70% to 50% of the award. The Committee continues to believe that EPS remains a key measure to incentivise delivery of the Group's business strategy going forward and focus management on the delivery of operational performance.
- ▶ Relative Total Shareholder Return (relative to the FTSE SmallCap Index excluding investment trusts) is maintained at 30% of the award, to ensure that management is appropriately aligned to the creation of long-term value for our shareholders.

- ▶ A new metric of return on capital employed (ROCE) will be introduced. The weighting will be 20%, to ensure that there is an appropriate level of focus on efficient capital allocation. For the purpose of the LTIP, the ROCE measure used will be adjusted to exclude large asset investments not yet commissioned.

During the course of late 2019 and early 2020, the Committee consulted in detail with investors on the proposed changes, who were supportive of the proposed approach and, in particular, the inclusion of a return-based metric in the LTIP. I want to thank shareholders and the proxy advisers for their time during the consultation process.

Implementation of the Policy in 2020

As many investors will recall, the 2018 Remuneration Report set out a phased approach to increasing the Executive Directors' base salaries over a two-year period which was supported by shareholders at the 2019 AGM.

Phase one of the salary increase was implemented on 1 April 2019. In light of the trading announcement of 3 October 2019, the Committee has decided that it would not be appropriate to go ahead with the second phase of the proposed increase in 2020. It has been decided instead that no increase should be awarded in 2020 and that the second phase of the proposed increase should be postponed to 2021, subject to continued good performance of the Executive Directors and the Group.

The Committee believes that it is important to postpone rather than cancel the second phase of the increase. This will enable the Committee to continue with the strategy, previously agreed with shareholders, to remove the significant discount to the market on base salaries for the Executive Directors and avoid unnecessary risk to the execution of our strategy and the delivery of the major investment programmes which underpin it. This is because, notwithstanding the near-term headwinds in the Polyolefin Foams business and the unprecedented uncertainty caused by the COVID-19 pandemic, the Board remains confident in the growth strategy and in the long-term prospects of the business. We continue to deliver strong growth in our HPP business, we have improved our revenue base and opportunities for future growth in MEL and all capacity expansion investments to support our medium-term growth ambitions have been completed as planned or are on track to do so. Any increase in 2021 will be subject to good performance.

With regards to the annual incentive, the structure will continue to operate in line with previous years. To ensure that the bonus framework continues to reward the key annual strategic priorities for the Group, the Committee has introduced a new cash metric into the incentive plan (weighted at 15% and 20% for the CEO and CFO respectively) and metrics linked to Health, Safety and Environment and Sustainability for the 2020 performance year.

➤ **Details on the wider metrics to be used for the purpose of the annual bonus are set out on page 64.**

With regards to 2020 LTIP awards, in line with our normal practice, the Committee's intention had been to publish details of the targets for the 2020 LTIP award within the Directors' Remuneration report. The Committee is, however, mindful of the more challenging business environment and recent share price performance, both as a result of Group performance and the impact of COVID-19. The Committee has decided therefore to defer a decision on granting of the 2020 LTIP until around the time of the interim results expected to be in August of this year. It is hoped that, by then, the Committee will be able to better understand the impact of COVID-19 on the business and allow the Committee appropriate time to make an informed decision on quantum and the targets for awards. Prior to grant of the 2020 LTIP award, the Committee will consult with shareholders as appropriate.

Group performance for 2019 and incentive outcomes

In light of the performance delivered in 2019, the Committee determined that 37.1% and 35.2% 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 pages 66 to 67.**

With regard to longer-term performance, the Company achieved EPS before exceptional item of 14.9p in 2019, which represented a compound growth rate of over 6% and relative TSR performance above the upper quartile of the FTSE SmallCap Index (excluding investment trusts) over the three-year performance period. In line with performance delivered, 46.99% of the 2017 LTIP award will vest, in equal tranches on the third, fourth and fifth anniversaries of grant.

The Committee took into account the underlying financial performance of the Group when

considering the out-turns against the annual bonus and the LTIP and determined that the formulaic outcome was an appropriate reflection of the performance delivered.

Reflecting on the impact of COVID-19 in recent weeks, and given the decision of the Board not to recommend a final dividend for the year ended 31 December 2019, the Committee has decided the following:

At the request of the Executive Directors, the proportion of the bonus that would normally have been paid in cash (75% of the award), will be deferred into shares for a period of up to one year. The proportion of the bonus that would normally be deferred into shares (25%) will continue as normal, and will be released after three years.

The decision on the timing of the vesting of the 2017 LTIP award has been deferred for a period of up to one year by the Committee.

➤ **Further information on performance against the targets is provided on page 67.**

Conclusion

The Committee and I believe that the proposed approach to the Remuneration Policy going forward and the proposed changes to the LTIP metrics are consistent with our ethos of rewarding strong long-term performance and are in the best interests of our shareholders and other key stakeholders.

The Committee and I hope you will be able to support the resolutions in respect of the Remuneration Policy and the annual Remuneration report at the 2020 AGM.

A C Bromfield

Chair of the Remuneration Committee

9 April 2020

Directors' Remuneration report

Directors' Remuneration Policy Report

Introduction

In developing the Remuneration Policy as set out below, the Committee was guided by three key principles:

Remuneration principles

Strategic and operational delivery

- ▶ The Remuneration Policy should support the delivery of the Group's long-term strategic ambitions and operational performance.

Competitive salaries

- ▶ 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.

Focus on long-term performance

- ▶ 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; and
 - Long-term incentives should focus management on both the delivery of operational performance and the growth potential of the Group.

Directors' Remuneration Policy

The following sections sets out the Remuneration Policy for our Executive and Non-Executive Directors.

This Policy will be put to shareholders for approval at the Annual General Meeting to be held on 8 June 2020. The Policy is intended to apply, subject to shareholder approval, from the date of the Annual General Meeting.

As set out in the Committee Chair's statement, the previous Remuneration Policy was considered to be fit for purpose and therefore no material changes are proposed. In determining the new Remuneration Policy, the Committee followed a robust process which included discussions on the content of the Policy at six Remuneration Committee meetings. The Committee considered input from management (although Committee meetings where decisions were made were not attended by management to avoid conflicts of interest) and from our independent advisers, as well as best practice and shareholder guidance from major shareholders and proxy advisory bodies.

Remuneration Policy for Executive Directors

Base salary

Purpose and link to strategy

To provide a core reward for undertaking the role, positioned at a level needed to recruit and retain Executive Directors of the calibre required to develop and deliver the business strategy.

Maximum opportunity

Base salaries for Executive Directors are set at an appropriate level to be market competitive, reflecting the size and complexity of the business, and to attract and incentivise the calibre of individuals required of each role.

While there is no maximum opportunity for base salary, any increases for Executive Directors will be considered in the context of the typical level of increases awarded to other employees in the Company.

In specific circumstances, the Committee may award increases above this level, including but not limited to:

- ▶ where the Committee has set the base salary for a newly appointed Executive Director at lower than the market level for such a role to allow for the individual to progress into the role; or
- ▶ where, in the Committee's opinion, there has been a significant increase in the size or scope of an Executive Director's role or responsibilities.

Operation

The Committee sets base salary taking into consideration a range of factors, including:

- ▶ the individual's experience, performance and skills;
- ▶ the scope of the role;
- ▶ pay and conditions elsewhere in the Group; and
- ▶ remuneration levels at companies of a comparable size and complexity.

Base salary is normally reviewed annually, with increases effective from 1 April, however the Committee may review base salary more frequently where it considers this appropriate.

Paid in cash.

Performance measures

N/A

Benefits

Purpose and link to strategy

To provide market-competitive benefits for the Executive Directors, to assist in carrying out their duties effectively.

Maximum opportunity

There is no maximum or minimum level of benefits as they are dependent on the individual's circumstances and the cost to the Company.

Participation in all-employee share plans that the Company establishes from time to time will be on the same basis as all other UK employees.

Relocation/international assignment benefits. The level of such benefits would be set at an appropriate level taking into account the circumstances of the individual and typical market practice.

Operation

The Committee's policy is to provide Executive Directors with a market-competitive level of benefits, taking into consideration benefits offered to other senior managers within the Group, the individual's circumstances and prevailing market practice.

- ▶ Core benefits currently provided to Executive Directors include, but are not limited to, a car allowance, private medical insurance and death in service cover.
- ▶ Participation in all-employee share plans that the Company establishes from time to time is on the same terms as all other UK employees.
- ▶ Relocation/international assignment benefits where an Executive Director is required to relocate to take up their position, may be provided, including, but not limited to: assistance for housing, school fees, travel assistance, relocation costs, insurance cover and assistance with tax advice.

Performance measures

N/A

Pension

Purpose and link to strategy

To provide Executive Directors with competitive post-retirement benefits and reward sustained contribution.

Maximum opportunity

The maximum level of contribution in respect of any financial year is as follows:

D B Stirling – 15.75% pensionable salary

G C McGrath – 5% pensionable salary

Following the closure of the Defined Benefit Pension Scheme (“the DB Scheme”), there was a commitment to increase the level of contribution to the replacement Defined Contribution Pension Scheme (“the DC Scheme”) for the members of that scheme (which includes D B Stirling) by 3% of pensionable salary every five years. The most recent increase was applicable from 1 January 2016.

The DB Scheme is closed to future accruals, but legacy arrangements will continue to be honoured.

Contributions for new Executive Directors will be set in line with the rate received by the majority of the workforce in the relevant jurisdiction.

Operation

Executive Directors are eligible to participate in the DC Scheme or receive a cash allowance in lieu of pension.

D B Stirling is also a deferred member of the closed DB Scheme.

The policy for a new Executive Director is either to participate in a DC Scheme or receive a cash allowance in lieu of pension. There will be no contractual commitment to increase the level of contribution every five years.

The Committee would continue to honour any legacy arrangements agreed with an individual prior to them being promoted to an Executive Director role.

Performance measures

N/A

Annual Bonus

Purpose and link to strategy

Incentivise Executive Directors to achieve specific financial and predetermined strategic goals aligned with the Group’s annual business plan.

Deferred proportion of annual variable pay provides a retention element and alignment with shareholders.

Maximum opportunity

Maximum opportunity in respect of any financial year is 75% of base salary.

Operation

Awards are based on a balanced scorecard combining Group financial and non-financial performance targets.

Performance is normally assessed over one financial year.

Performance targets are normally set annually by the Remuneration Committee to ensure they are appropriately stretching.

Bonus out-turns are determined by the Committee, taking into consideration actual performance against targets and the underlying performance of the business.

The Committee has the discretion to adjust bonus out-turns should the formulaic output not produce a result, which in the view of the Committee, fairly reflects overall performance.

25% of the earned bonus is normally deferred under the Deferred Bonus Share Plan (DBSP). Awards under the DBSP will vest after a period set by the Committee, which will normally be three years from the date of award.

Deferred awards are normally granted in the form of conditional awards of shares, although awards may take other forms if it is considered appropriate.

Deferred awards will accrue dividend equivalents during the deferral period. These will normally be paid in shares on a reinvested basis.

Deferred awards are subject to Malus and Clawback provisions (see page 60).

The Committee may adjust and amend awards in accordance with the DBSP Rules.

Performance measures

Performance is measured based on an appropriate mix of financial, strategic and personal performance measures.

At least 75% of the bonus opportunity will be based on financial performance targets. The split between financial, strategic and personal performance measures will be kept under review and set annually by the Committee.

Normally no more than 20% of the bonus is payable at the trigger point, dependent on the stretch in the targets, with a graduated scale operating thereafter through to the maximum bonus being payable for outperforming the Group’s targets for the year.

2017 Long-Term Incentive Plan (LTIP)

Purpose and link to strategy

To incentivise the delivery of long-term sustainable operational performance and the growth potential of the Group.

To align interests of Executive Directors and shareholders.

To attract and retain executives of the calibre required to drive the Group’s long-term strategic ambitions.

Maximum opportunity

The normal maximum award permitted in respect of any financial year is 150% of base salary.

Operation

Awards are subject to a performance period of normally no less than three years with a subsequent holding period of up to two years.

Performance targets are normally set annually by the Remuneration Committee to ensure they are appropriately stretching.

The Committee has the discretion to adjust the final level of vesting of awards if it does not consider that it reflects the underlying performance of the Group.

LTIP awards are normally in the form of conditional awards of shares, although the Remuneration Committee may decide to make awards in other forms, such as nil-cost options, if considered appropriate.

Dividend equivalent payments accrue during the performance period and holding period. These will normally be paid in shares on a reinvested basis.

LTIP awards are subject to Malus and Clawback provisions (see page 60).

The Committee may adjust and amend awards in accordance with the 2017 LTIP Rules.

Performance measures

Awards vest based on an appropriate balance of earnings, capital efficiency and shareholder return measures.

The current intention is that LTIP awards for 2020 will be based on:

- ▶ Earnings per share (50%);
- ▶ Relative Total Shareholder Return measured against the FTSE SmallCap Index (excluding investment trusts) (30%); and
- ▶ Adjusted Return on Capital Employed (20%).

20% of the award vests for performance at the trigger point, increasing to 100% of the maximum for maximum performance.

The performance measures selected by the Committee may change from time to time in certain circumstances, for example, to reflect any change in the Group’s strategy. If the Committee were to introduce a new performance measure, it would consult with the Company’s largest shareholders in advance, as appropriate.

The performance measures will be disclosed in the Directors’ Remuneration report for the relevant year.

Directors' Remuneration report

Continued

Shareholding guidelines

To align the interests of the Executive Directors with shareholders, the Company operates a shareholding guideline for Executive Directors of 200% of salary. A newly appointed Executive Director will have five years from the date of his or her appointment to the Board to build up such a holding.

Upon cessation of employment, Executive Directors are expected to remain aligned with the interests of shareholders for an extended period after leaving the Company. Details of the application of this policy will be disclosed in the Directors' Remuneration report for the relevant year.

Notes to the policy table

The deferred share element of the Annual Bonus Plan and the 2017 Long-Term Incentive Plan shall be operated in accordance with the rules of the respective plan.

The Committee reserves the right to make any remuneration payments and/or payments for loss of office (including exercising any discretion available to it in connection with such payments), notwithstanding that they are not in line with the policy set out above, where the terms of the payment were agreed: (i) before the policy set out above and any previous policy came into effect; or (ii) at a time when a previous policy, approved by shareholders, was in place, provided the payment is in line with the terms of that policy; or (iii) at a time when the relevant individual was not a director of the Company and, in the opinion of the Committee, the payment was not in consideration for the individual becoming a director of the Company. For these purposes, "payments" includes (but is not limited to) the Committee satisfying awards of variable remuneration and, in relation to an award over shares (including legacy awards under the 2008 Approved Share Option Plan ("CSOP")) the terms of the payment being "agreed" at the time the award is granted.

Changes to the Policy

The key changes that have been made to this Policy compared with the last Policy approved by shareholders are:

- ▶ the ability to include a measure related to capital efficiency in the long-term incentive plan (return on capital employed will determine vesting of 20% of the 2020 award under the 2017 Long Term Incentive Plan);
- ▶ updates to reflect the new UK Corporate Governance Code as well as best practice; and
- ▶ minor amendments to clarify the Committee's intended approach and ensure that the Committee has an appropriate level of flexibility to implement the Policy in the most appropriate manner each year.

Committee discretion in relation to future operation of the Remuneration Policy

For share awards, in the event of a variation of the Company's share capital or a demerger, delisting, special dividend, rights issue or any

other event that may affect the Company's share price, the number of shares subject to an award and/or any exercise price applicable to the award and/or any performance condition attached to the award may be adjusted.

The Committee may amend any performance conditions applicable to CSOP or LTIP awards if any event occurs which causes the Committee to consider an amended performance condition would be more appropriate and not materially less difficult to satisfy.

The Committee may make minor amendments to the Policy set out above for, for example, regulatory, exchange control, tax or administrative purposes or to take account of a change in legislation, without obtaining shareholder approval for that particular amendment.

Performance measures and approach to target setting

Annual bonus

Performance measures for the short-term incentive arrangements are selected annually by the Committee to align with Zotefoams' annual business strategy.

Performance targets for the financial element are set to be appropriately stretching, by reference to the Group's internal business plan, and to align with delivery of returns to shareholders. Performance targets for the strategic element are determined annually by the Committee and set to incentivise the delivery of key strategic priorities over the course of the year.

Long-Term Incentive Plan

Performance measures for the long-term incentive arrangements are selected annually by the Committee to align with Zotefoams' long-term business strategy and to reflect the Group's growth ambitions, desire to efficiently manage capital employed and returns to the shareholders.

The performance targets for the Long-Term Incentive Plan are reviewed annually and set taking into account market conditions, external market forecasts, internal business forecasts and market practice.

Malus/Clawback arrangements for the DBSP and LTIP

The Remuneration Committee may, in its absolute discretion, determine at any time prior to the fifth anniversary of the date of grant of an award under the DBSP or LTIP to:

- a) reduce the number of shares to which an award relates;
- b) cancel an award;
- c) impose further conditions on an award;
- d) require a cash repayment; or
- e) require a transfer of shares delivered under incentive plans in circumstances where the Remuneration Committee considers such action is appropriate.

Such circumstances include, but are not limited to:

- a) a material misstatement of the Group's (or any subsidiaries) audited financial results
- b) corporate failure (2020 awards onwards);
- c) deliberately misleading management, the market and/or shareholders regarding financial performance;
- d) overpayments due to material abnormal write-offs;
- e) payments based on erroneous or misleading data (2020 awards onwards);
- f) reputational damage resulting from misconduct; and
- g) serious misconduct or conduct which causes significant financial loss.

Remuneration structure for employees below the Board

The remuneration for the senior management immediately below the Board is a similar structure to the structure used for the Executive Directors. Middle management participates, at the discretion of the Remuneration Committee, in the 2018 Approved Share Option Plan and the CSOP, both subject to the Plans' rules. There is a general staff discretionary bonus scheme which is based on the performance of the Group and other factors. Other arrangements are also in place for specific areas of the Group.

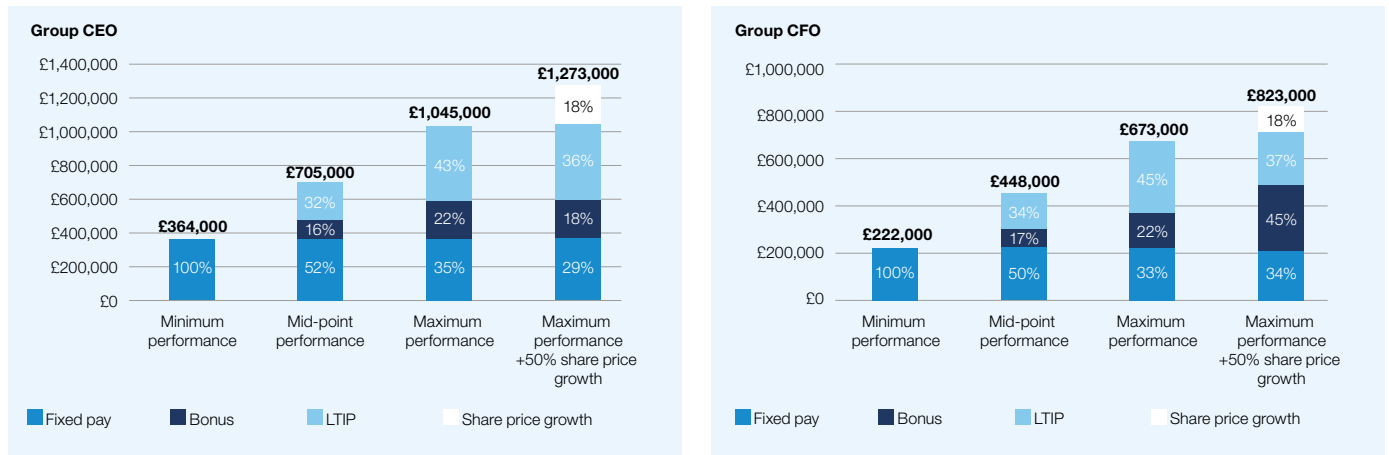
Illustration of application of remuneration policy

The following charts below show how the composition of each of the Executive Directors' remuneration packages varies at different levels of performance achievement. The assumptions used in the charts above are as follows:

	Minimum performance	Mid-point performance	Maximum performance	Maximum performance + 50% share price growth
Fixed pay ¹	✓	✓	✓	✓
Annual bonus	✗	✓	✓	✓
		(50% of maximum)	(75% of salary)	(75% of salary)
Long-Term Incentive	✗	✓	✓	✓
		(50% of maximum)	(150% of salary)	(150% of salary x 1.5)

¹ Comprises base salary for 2020, benefits (as per the 2019 single figure) and pension contribution/cash in lieu of pension for 2020.

The charts below do not take into account share price appreciation, unless otherwise stated, or dividends.



Remuneration Policy on recruitment

Area	Policy and operation
Principles	<p>The Remuneration Committee takes into consideration all relevant factors, including local market practice in the individual's home country, appropriate market data, internal relativities, the current remuneration arrangements applicable for other Executive Directors on the Board and the Committee's desire to recruit an Executive Director of the required calibre to develop and deliver the business strategy while at the same time ensuring that remuneration arrangements offered are in the best interests of both Zotefoams and its shareholders.</p> <p>The Committee endeavours to align the remuneration arrangements of new recruits with the Policy outlined on the previous pages.</p> <p>In the event that an internal candidate was promoted to the Board, legacy terms and conditions would normally be honoured.</p> <p>The Committee will make every effort to explain the rationale for the remuneration arrangements for a new recruit in the Remuneration report following the recruitment of a new Director.</p>
Base salary	Set at a level to recruit the candidate with the required calibre, skills and experience to deliver the Group's strategy.
Benefits and pension	<p>To be provided in line with normal policy.</p> <p>In the event that an Executive Director is required to re-locate to undertake the role, the Committee may provide additional benefits to reflect the relevant circumstances (on a one-off or ongoing basis).</p>
Incentive awards	<p>When appointing a new Executive Director, existing incentive arrangements will be used where possible.</p> <p>The Committee has the discretion to include any other remuneration component or award which it feels is appropriate, taking into account the specific commercial circumstances, and subject to the limit on variable remuneration set out below. The key terms and rationale for any such component would be appropriately disclosed.</p> <p>The maximum level of annual variable pay and long-term incentive awards which may be awarded to a new Executive Director in respect of their recruitment, excluding any buy-out awards, is 225% of salary. Such variable remuneration may be made in the form of cash or shares, subject to performance conditions as selected by the Committee, and may vest immediately or at a future point in time.</p>
Buy-outs	<p>To facilitate recruitment, the Remuneration Committee may 'buy out' any remuneration arrangements forfeited by the new Executive Director on leaving his or her former employment. In doing so, the Committee will consider all relevant factors including the form of the awards (i.e. cash or equity), performance conditions attached to the awards, the likelihood of such conditions being met and the timeframe of the awards.</p> <p>Typically, any buy-outs will be made on a like-for-like basis.</p> <p>On recruitment, the Committee retains discretion to grant awards under Listing Rule 9.4.2 which allows for the grant of awards specifically to facilitate, in unusual circumstances, the recruitment of an Executive Director.</p>
Non-Executive Directors	The Remuneration Committee will normally align the remuneration arrangements for new Non-Executive Directors with those outlined in the Policy table on page 63.

Directors' Remuneration report

Continued

Service contracts and termination policy

When determining leaving arrangements for an Executive Director the Committee takes into account any pre-established contractual agreements including the provisions of any incentive plans, pension entitlements, typical market practice, the performance and conduct of the individual and the commercial justification for any payments.

The following summarises our policy in relation to Executive Director service contracts and payments in the event of loss of office:

Area	Policy and operation
Notice period	<ul style="list-style-type: none"> ▶ D B Stirling, Group CEO – 12 months' notice by either party. ▶ G C McGrath, Group CFO – 12 months' notice by either party. ▶ For new recruits, the Committee's policy is that Executive Director contracts will normally provide up to 12 months' notice by the Company and up to 12 months' notice by the Executive Director.
Contract commencement date	<ul style="list-style-type: none"> ▶ D B Stirling, Group CEO – 1 September 1997 (contract last updated 13 May 2019). ▶ G C McGrath, Group CFO – 1 December 2015 (contract updated 15 April 2019).
Expiry date	<ul style="list-style-type: none"> ▶ The contracts for the Executive Directors are rolling service contracts with no expiry date.
Termination payments	<ul style="list-style-type: none"> ▶ If the Company terminates an Executive Director's contract without full notice then the Executive Director has the right to a termination payment to reflect the unexpired term of the notice. ▶ A payment in lieu of notice can be made of no more than one year's base salary. ▶ Our policy for new appointments is that termination payments in lieu of notice will be based on base salary. ▶ Termination payments may be subject to mitigation and may be paid in instalments. ▶ Rights to annual bonus, DBSP awards, LTIP awards and CSOP awards are governed by the respective plan rules. ▶ The Committee reserves the right to make any other payments in connection with a Director's cessation of office/employment where the payments are made in good faith in the discharge of an existing legal obligation (or by way of damages for breach of such an obligation) or by way of settlement of any claim arising in connection with the cessation of the Director's office/employment. Any such payments may include, but are not limited to, any fees for outplacement assistance and/or the Director's legal and/or professional advice fees in connection with his cessation of office/employment.
Other information	<p>Annual bonus</p> <ul style="list-style-type: none"> ▶ Under the Annual Bonus Plan a "good leaver" is someone that leaves employment because of death, disability, ill health, injury, sale or transfer out of the Group of the participant's employing company or business, redundancy or any other circumstance at the discretion of the Remuneration Committee. ▶ A "bad leaver" is someone that leaves employment for any other reason. ▶ For "good leavers", rights to any outstanding annual bonus in the year of cessation will be determined at the discretion of the Remuneration Committee, normally after the end of the financial year, and taking into account the level of performance achieved during the performance period. Any payments will be made in such proportions of cash and shares as the Committee considers appropriate. Outstanding DBSP awards will normally vest at the end of the normal vesting period, although the Remuneration Committee may, in its discretion, allow the award to vest earlier. ▶ For "bad leavers" rights to annual bonus and unvested DBSP awards will normally be forfeited. <p>2017 Long-Term Incentive Plan</p> <p><u>Leavers during the performance period</u></p> <ul style="list-style-type: none"> ▶ Under the 2017 Long-Term Incentive Plan, a "good leaver" is someone that leaves employment because of death, disability, injury, ill health, redundancy, retirement, their employing company or business being sold/transferred out of the Group, or any other circumstances at the discretion of the Remuneration Committee. ▶ A "bad leaver" is someone that leaves employment for any other reason. ▶ For "good leavers", rights to any awards under this plan will normally, unless the Remuneration Committee determines otherwise, be pro-rated by reference to the proportion of the performance period that has elapsed on cessation and will vest, subject to performance, at the normal time. ▶ The Remuneration Committee retains the discretion to accelerate vesting in certain circumstances, e.g. death. ▶ For "bad leavers", rights to unvested awards under this plan will normally be forfeited. <p><u>Leavers during the holding period</u></p> <ul style="list-style-type: none"> ▶ Where a participant who is subject to a further holding period in relation to his / her award ceases to be employed by the Group, the award will normally be delivered at the end of the holding period or the expiry of such shorter period as the Committee may determine. In cases where the individual leaves employment and where the Company is entitled to dismiss the individual without notice, the award will lapse on cessation of employment. <p>2008 Approved Share Option Plan (CSOP)</p> <ul style="list-style-type: none"> ▶ Under the 2008 Approved Share Option Plan a "good leaver" is someone that leaves employment because of death, disability, injury, redundancy, retirement, their employing company or business being sold or transferred out of the Group or any other circumstance at the discretion of the Committee. ▶ A "bad leaver" is someone that leaves employment for any other reason. ▶ For "good leavers", rights to any awards under this plan will normally be pro-rated from the start of the performance period to cessation and will vest based on performance to the date of cessation. The Remuneration Committee has the discretion to adjust the final level of vesting of these awards. ▶ For "bad leavers", rights to unvested awards under this plan will normally be forfeited. ▶ Mr McGrath currently has 10,344 awards exercisable from 5 April 2019 subject to the above provisions.

Area	Policy and operation
Change of control	<ul style="list-style-type: none"> ▶ The Committee would determine the treatment of any annual bonus award at the time taking into account such circumstances as it considers appropriate. ▶ In the event the Company is taken over, CSOP, DBSP and LTIP awards vest early. The extent to which LTIP awards granted after the date of the 2017 AGM vest will be determined by the Committee, taking into account the performance conditions and, unless the Committee determines otherwise, the proportion of the performance period that has elapsed. The extent to which any LTIP awards granted prior to the 2017 AGM vest will be determined by the Committee. ▶ If there is a demerger, special dividend, delisting or any other event that may materially affect the Company's share price, the Committee may allow awards to vest on the same basis as for a takeover. ▶ Awards may be exchanged for new awards if the Committee considers this appropriate.

Copies of the Executive Directors' service contracts and deeds of indemnity in favour of the Directors are available for inspection at the Company's registered office.

External appointments

Executive Directors may be invited to become Non-Executive Directors of other companies. These appointments provide an opportunity to gain broader experience outside Zotefoams and therefore benefit the Group. Providing that appointments are not likely to lead to a conflict of interest and the Board agrees, Executive Directors may accept non-executive appointments and retain the fees received.

Remuneration Policy for Non-Executive Directors

Approach to fees	Operation	Other items
<p>Fees for the Company Chair and Non-Executive Directors (NEDs) are set at an appropriate level to reflect:</p> <ul style="list-style-type: none"> ▶ the time commitment required to fulfil the role; ▶ the responsibilities and duties of the positions; and ▶ typical practice in other companies. <p>Fees are reviewed at appropriate intervals by the Board.</p> <p>Base fees are subject to the aggregate limit in the Company's Articles of Association for fees paid to NEDs.</p>	<p>Our NED fee policy is to pay:</p> <ul style="list-style-type: none"> ▶ a base fee for membership of the Board; and ▶ an additional fee for being Chair of a Committee and/or Senior Independent Director to reflect the additional responsibilities and time commitments of the role. <p>The Company Chair receives an inclusive fee for the role.</p> <p>Additional fees for membership of a committee, chairing or membership of subsidiary boards for a time commitment significantly more than anticipated at the start of the year, or other fixed fees, may be introduced if considered appropriate.</p> <p>Fees can be paid in cash and/or shares as appropriate.</p>	<p>The Company Chair and NEDs are not eligible to participate in the bonus or any long-term incentive arrangements.</p> <p>NEDs do not currently receive any taxable benefits.</p> <p>Benefits (such as travel and accommodation allowances to allow the NEDs to fulfil their duties along with any tax liability arising on such allowances) may be provided in the future if the Board considers this appropriate.</p>

Non-Executive Directors and the Company Chair have appointment letters setting out their duties and the time commitment expected. Appointment letters are currently for terms of three years. Appointments may be terminated by either party with six months' written notice.

Considering employment considerations elsewhere in the Group

Budgeted salary increases for the wider employee group are taken into consideration when determining increases for the Executive Directors. The Remuneration Committee does not consult with employees when formulating the Remuneration Policy for Executive Directors.

Considering shareholder views

The Remuneration Committee is committed to engaging in an open dialogue with the Company's shareholders and will seek views and opinions on significant matters relating to the remuneration of the Executive Directors as appropriate. As part of formulating the Remuneration Policy, a consultation was undertaken with the Company's main shareholders regarding the proposed changes to the Policy. The feedback from shareholders was taken into account by the Committee and is reflected in the final proposal. The Committee would like to thank shareholders for the time they provided and their input in to the consultation.

The Company Chair and the Chair of the Remuneration Committee are available (requests should be made to the Company Secretary), should a shareholder wish to raise a matter on remuneration.

Directors' Remuneration report

Continued

Directors' Remuneration report

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

Implementation of the Directors' Remuneration Policy in 2020

Element and purpose / link to strategy	Implementation for 2020														
<p>Salary Positioned at a level needed to recruit and retain Executive Directors of the calibre required to develop and deliver the business strategy.</p>	<p>Base salaries will remain unchanged for 2020: D B Stirling – £303,000 G C McGrath – £200,500</p>														
<p>Benefits Provide market-competitive benefits for the Executive Directors, to assist in carrying out their duties effectively.</p>	<p>Benefits to be provided in line with approved policy.</p>														
<p>Retirement benefits Provide competitive post-retirement benefits and reward sustained contribution.</p>	<p>In line with policy: D B Stirling – 15.75% of salary G C McGrath – 5% of salary</p>														
<p>Annual bonus Incentivise Executive Directors to achieve specific financial and predetermined strategic goals aligned with the Group's annual business plan. Deferred proportion of annual variable pay provides a retention element and alignment with shareholders.</p>	<p>Maximum opportunity – 75% of salary. 25% of the bonus is deferred into shares in the Company for three years under the deferred bonus share plan. For 2020, the bonus will be assessed against the following measures for both Executive Directors:</p> <table border="1"> <thead> <tr> <th>Measure</th> <th>Weighting</th> </tr> </thead> <tbody> <tr> <td>Profit before tax</td> <td>60%</td> </tr> <tr> <td>Free cashflow delivery¹</td> <td>15%-20%</td> </tr> <tr> <td>Strategic financial²</td> <td>0%-10%</td> </tr> <tr> <td>Safety</td> <td>5%</td> </tr> <tr> <td>Sustainability</td> <td>5%</td> </tr> <tr> <td>Individual objectives³</td> <td>5%-10%</td> </tr> </tbody> </table> <p>¹ CEO: 15%. CFO: 20% ² CEO: 10%. CFO: 0% ³ CEO: 5%. CFO: 10%</p> <p>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.</p>	Measure	Weighting	Profit before tax	60%	Free cashflow delivery ¹	15%-20%	Strategic financial ²	0%-10%	Safety	5%	Sustainability	5%	Individual objectives ³	5%-10%
Measure	Weighting														
Profit before tax	60%														
Free cashflow delivery ¹	15%-20%														
Strategic financial ²	0%-10%														
Safety	5%														
Sustainability	5%														
Individual objectives ³	5%-10%														
<p>Long-Term Incentive Plan To incentivise the delivery of long-term sustainable operational performance and the growth potential of the Group. To align interests of Executive Directors and shareholders. To attract and retain executives of the calibre required to drive the Group's long-term strategic ambitions.</p>	<p>Maximum opportunity – up to 150% of salary. Awards granted subject to a three year performance period and a subsequent two-year holding period such that no shares will normally be released until the end of year five. Awards will be subject to three performance conditions: <ul style="list-style-type: none"> ▶ EPS growth (50%); ▶ Relative TSR measured against the FTSE SmallCap Index (excluding investment trusts) (30%); and ▶ Return on Capital Employed (20%). As set out in the Committee Chair's cover letter, the Committee is mindful of the more challenging business environment and recent share price performance both as a result of Group performance and the impact of COVID-19. The Committee has decided therefore to defer a decision on granting of the 2020 LTIP until around the time of the interim results, expected to be in August of this year. It is hoped that, by then, the Committee will be able to better understand the impact of COVID-19 on the business and allow the Committee appropriate time to make an informed decision on quantum and the targets for awards. Prior to grant of the 2020 LTIP award, the Committee will consult with shareholders as appropriate.</p>														
<p>Non-Executive Director fees</p>	<p>The Non-Executive Directors (including the Company Chair) would normally receive a fee increase of 2.3%, effective 1 April 2020, which is line with the general salary increase that was given to the Company's staff in the UK in 2019. In light of the impact of COVID-19, fee increases for the Non-Executive Directors (including the Company Chair) have been suspended.</p>														
<p>Shareholding requirement and post-cessation shareholding policy Aligns the interests of Executive Directors and shareholders.</p>	<p>Executive Directors are required to hold shares in the Company equivalent to 200% of base salary. Executive Directors are expected to retain their full shareholding requirement for one year post cessation of employment and 50% in the second year after leaving.</p>														

The Committee considers that the remuneration framework in place at the Group appropriately addresses the following principles set out in the 2018 UK Corporate Governance Code:

Clarity	Incentive arrangements are based on clearly defined financial, non-financial and personal performance objectives which are aligned with the Group's long-term strategy. Incentive payments operate throughout the Group (with participation in the LTIP based on seniority) to ensure that there is alignment on key priorities throughout the Group.
Simplicity	Remuneration arrangements are simple, comprising the following key elements: <ul style="list-style-type: none"> ▶ Fixed pay: comprises base salary, benefits and pension. ▶ Annual bonus: bonus which incentivises the delivery of financial, non-financial and personal performance objectives. ▶ LTIP: which incentivises financial performance over a three-year period, promoting long-term sustainable value creation for shareholders. Awards are subject to a two-year holding period post vesting.
Risk	Performance targets for incentive plans are designed to reward out-performance, while at the same time being calibrated to ensure that they do not encourage excessive risk taking by the Executive Directors. The Remuneration Committee retains the flexibility to review formulaic outcomes under incentive plans to ensure that they are appropriate in the context of the overall performance of the Group.
Predictability	The Remuneration scenario charts, set out on page 61, provide estimates on the potential future remuneration opportunity for Executive Directors in a range of scenarios, including below threshold, target and maximum performance (including share price appreciation).
Proportionality	Incentives are directly aligned to the Group's strategic objectives, with performance targets calibrated to reward out-performance both over the short and long term.
Alignment with culture	The Remuneration Policy has been set in the context of the nature, size and complexity of the Group. It has been designed to support the delivery of the Group's key strategic priorities and is in the best interests of the Group and its stakeholders.

Single total figure of remuneration (audited)

The following tables set out the single figure for total remuneration for Directors for the 2019 and 2018 financial years.

Executive Directors

	Salary (£)	Benefits (£)	Bonus ¹ (£)	LTIP ² (£)	CSOP (£)	Pension (£)	Total fixed pay (£)	Total variable pay (£)	Total (£)
D B Stirling									
2019	290,500	13,057	84,272	204,128	nil	45,516	349,073	288,400	637,473
2018	249,375	12,926	66,602	427,670	nil	38,332	300,633	494,272	794,905
G C McGrath									
2019	193,000	11,574	53,007	133,946	nil	20,632	225,206	186,953	412,159
2018	167,064	11,441	62,147	277,965	29,015	17,859	196,364	369,127	565,491

1 As set out in the letter from the Committee Chair, reflecting on the impact of COVID-19 in recent weeks, none of the 2019 bonus will be paid in cash. At the request of the Executive Directors, the proportion of the bonus that would normally have been paid in cash (75% of the award) will be deferred into shares for a period of up to one year. The proportion of the bonus that would normally be deferred into shares (25%) will continue as normal, and will be released after three years.

2 The performance period for the 2017 LTIP award (granted in June 2017) ended on 31 December 2019. Details on out-turns against the performance targets are set out on page 67. As set out in the letter from the Committee Chair, reflecting on the impact of COVID-19 in recent weeks, while no change is proposed to the formulaic outcome at this time, the final decision on the timing of vesting of the 2017 award has been deferred for a period of up to one year. As the awards would not normally have been due to vest until June 2020, and are subject to a holding period, for the purposes of this table, in line with the applicable regulations, the award has been valued using the average share price over the three months to 31 December 2019 of £3.75. This compares with a share price of £3.04 at the date of grant, with share price appreciation representing 23% of the overall value set out in the table above. Vested awards will be subject to holding periods, in line with the intention when the awards were granted.

The LTIP award made in April 2016 vested on 5 April 2019 and the 2016 LTIP value for the Executive Directors has been recalculated using the actual market price achieved for the shares when they were delivered (£5.74) on 16 April 2019 (previous value used £5.705 which was the three-month average to 31 December 2018).

Non-Executive Directors¹

	Fees paid in respect of 2019 (£)	Fees paid in respect of 2018 (£)
A C Bromfield	41,707	40,750
J D Carling	36,494	35,693
S P Good	83,415	81,500
D G Robertson	41,707	40,750
R J Clowes²	Nil	15,175

1 Non-Executive Directors who also chair a Board Committee receive an additional fee.

2 R J Clowes retired from the Board on 16 May 2018.

Directors' Remuneration report
Continued**Notes to the table (audited)****Base salary and pension contributions**

The Company operates a Defined Contribution Pension Scheme ("the DC Scheme") or a cash contribution equivalent. Where participating in the DC Scheme, individuals may elect to enter a salary sacrifice arrangement, whereby their salary is reduced, and the Company makes a corresponding contribution into their DC Scheme. G C McGrath opted for the salary sacrifice arrangement 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 2019, the base salary (before salary sacrifice) for G C McGrath was £200,500 p.a. (£170,500 p.a. as at 31 December 2018).

D B Stirling receives a cash contribution in lieu of pension contributions. At 31 December 2019, the base salary for D B Stirling was £303,000 p.a. (£253,000 p.a. as at 31 December 2018).

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 2019

The targets for the annual bonus for 2019 for D B Stirling and G C McGrath are as set out in the below table:

Measure	Weighting (% max)			Targets			Pay-out	
	D B Stirling	G C McGrath	Trigger point	Maximum	Performance achieved	D B Stirling	G C McGrath	
Profit before tax and exceptional items ¹	60%	60%	£12.2m	£13.0m	£9.1m	Nil	Nil	
Working capital	15%	15%	See below	See below	See below	15%	15%	
Development of MEL business	5%	5%	See below	See below	See below	5%	5%	
Individual objectives	20%	20%	See below	See below	See below	17.1%	15.25%	
Total	100%	100%	n/a	n/a	n/a	37.1%	35.25%	

¹ The Group uses forward exchange contracts to hedge its foreign currency transaction risk. In 2019, the Group did 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 £9.1m.

The below table sets out the targets and performance for the Executive Directors for the following measures: Working capital; development of the MuCell Extrusion, LLC (MEL) business; Group refinancing; and personal objectives.

● Achieved in full or predominantly achieved ● Partially achieved ● Not achieved

Strategic financial metrics – D B Stirling & G C McGrath

Measure	Objective	Performance	Scoring
Working capital¹	Reduce required inventory levels at the Croydon facility by £1m using a dynamic metric based on anticipated future global sales	Inventory at Croydon facility on 31 December was £12.65m, which was £2.5m below target inventory based on our risk optimised inventory levels by business stream vs expected sales activity in 2020	●
Development of MEL	Achieve annual revenues of at least £3m	Revenue of £3.03m	●

Personal objectives – D B Stirling

Measure	Objective	Performance	Scoring
Individual objectives	Health and safety (5%) Achieve 20% reduction in Group reportable incidents (Riddor UK and equivalents for non-UK locations)	75% reduction achieved	●
	Strategic development of T-FIT [®] insulation products (5%) Deliver 25% growth in sales of T-FIT and successfully launch T-FIT Process and T-FIT Hygiene grades	31% growth in T-FIT [®] sales but sub-brands did not meet specific targets	●
	Capital projects (5%) Ensure all major capital programmes delivered on time and on budget	All programmes in UK, USA and Poland delivered on time and on budget	●
	Cultural engagement (5%) Deliver detailed programme to engage staff and grow capability	Detailed programme implemented in recruitment, induction and staff development but not completely embedded into performance management	●

Personal objectives – G C McGrath

Measure	Objective	Performance	Scoring
Individual objectives	Health and safety (5%) Achieve 20% reduction in Group reportable incidents (Riddor UK and equivalents for non-UK locations)	75% reduction achieved	●
	Internal controls (5%) Ensure all subsidiaries are confirmed compliant with effective internal systems and self-audit process (5%)	Compliance achieved; self-audit process outstanding	●
	IT implementation (5%) Successfully launch Microsoft AX 365 upgrade by the end of Q3 2019	Successfully completed but outside timeframe	●
	Fixed costs (5%) Ensure effective control mechanisms for fixed costs are in place and drive performance improvement	Control mechanisms partly implemented	●

¹ Inventory at our Croydon site is considered a critical and controllable element of Group working capital. Croydon accounts for 77% of total inventory in the Group. As many HPP materials, and some polyolefin foam additives, are single sourced from suppliers across the globe, we have a low tolerance for this risk and correspondingly higher levels of inventory for some product lines. The objective was therefore set as a dynamic target based on anticipated future sales linked to a global Sales and Operations Planning system.

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). As set out in the letter from the Committee Chair, reflecting on the impact of COVID-19 in recent weeks, none of the 2019 bonus will be paid in cash. At the request of the Executive Directors, the proportion of the bonus that would normally have been paid in cash (75% of the award) will be deferred into shares for a period of up to one year. The proportion of the bonus that would normally be deferred into shares (25%) will continue as normal, and will be released after three years.

2019	Voluntary deferred bonus (£)	Compulsory deferred bonus (£)	Total bonus (£)
D B Stirling	63,204	21,068	84,272
G C McGrath	39,755	13,252	53,007

The Committee considered the bonus levels in view of the performance achieved. The objectives were a balance of financial and non-financial metrics with 90% of the CEO's bonus based on formulaic targets. The Committee noted the fact that the PBT element had not been met (largely because of the cyclical downturn in the polyolefin foams market) but believes that the Executive Directors continue to deliver against the strategy, delivering strong growth in the HPP business and improved revenue growth opportunities in the MEL business. It therefore determined no discretion should be exercised in relation to the level of pay-out, noting that the Executive Directors voluntarily agreed to the cash proportion of the award being deferred.

LTIP

The 2017 LTIP award was subject to two performance conditions. 30% of the award was subject to relative total shareholder return against the FTSE SmallCap Index (excluding investment trusts). 70% of the award was subject to an EPS growth target. 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.

The table below summarises the performance criteria for the 2017 award, which in normal circumstances would have been due to vest on 1 June 2020.

	Trigger point		Maximum		Achievement	Level of vesting (% maximum)
	Performance target	% of award vesting	Performance target	% of award vesting		
Relative TSR performance	Median performance against peer group	6	Upper quartile performance against peer group	30	Upper quartile performance against peer group	30%
Annualised EPS growth	5%	14	22%	70	14.9p	16.99%

Based on the above level of performance, 46.99% of the total awarded vested. The Committee considered the overall performance of the Group when assessing the LTIP outturn, including performance against the targets. The Committee noted that the TSR performance for the Company over the period was upper quartile when compared with the FTSE SmallCap Index (excluding investment trusts) and determined that the pay-outs were reflective of the performance delivered. As a result of the impact of COVID-19, however, as set out in the cover letter from the Committee Chair, while no change is proposed to the formulaic outcome, the final decision on the timing of vesting of the 2017 LTIP award has been deferred for a period of up to one year. Vested awards will be subject to holding periods, in line with the intention when the awards were granted.

Directors' Remuneration report
Continued**Scheme interests granted during 2019 (audited)**

The table below sets out details of scheme interest granted to the Executive Directors during 2019:

	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)	20.05.2019	2,677	16,651	n/a	n/a	n/a	n/a
G C McGrath			2,497	15,531	n/a	n/a	n/a	n/a
D B Stirling	LTIP ⁵ (Conditional shares)	20.05.2019	73,070	454,495	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	31.12.2021
G C McGrath			48,352	300,750	150			

1 Face value calculated using the average of the Company's mid-market price for the five trading days preceding the date of grant (£6.22). The share price was £6.34 on 20 May 2019.

2 Relative TSR growth is measured against the FTSE SmallCap Index (excluding investment trusts). The trigger point for relative TSR performance is median performance against the peer group, where 6% of the award will vest, to upper quartile performance against the peer group, where the maximum of 30% of the award will vest.

3 Annualised EPS growth is from the EPS for 2018. The trigger point is 8% annualised growth, where 14% of the award will vest, to the maximum of 22% annualised growth, where 70% of the award will vest.

4 Awards vest on the third anniversary of grant.

5 Award is subject to a three-year performance period and, subject to performance, is released after a two-year holding period.

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 2019 (£ p.a.)	Gross increase in pension (£)	Increase in accrued pension net of CPI inflation (£)	Change in value over the year (£)
D B Stirling	21,933	514	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 2019; 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 Defined Contribution Pension Scheme 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 Scheme 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 2019.

Payments for loss of office (audited)

No payments were made during 2019.

Statement of Directors' shareholding and share interests (audited)

Executive Directors are required to hold shares in the Company equivalent to 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 Remuneration Policy to be proposed at the 2020 AGM will also require 100% of the shareholding requirement to be held for one year following cessation of employment with the Group and 50% of the shareholding requirement to be held for two years following cessation of employment with the Group. Throughout 2019, D B Stirling complied with the Policy (holding 717% of salary in shares in the Company as at 31 December 2019). G C McGrath, who joined the Group on 1 December 2015 is making progress towards meeting the requirement and has until 17 May 2022 to build up a shareholding to comply with the Policy (G C McGrath currently holds 78% of salary in shares in the Company as at 31 December 2019).

The tables below set out the Directors' interests (including those of their connected persons) in Zotefoams shares as at 31 December 2019. There were no changes in the Directors' interests between the year end and the date of this report.

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	493,037	74,039	139,978
G C McGrath	35,646	59,823	93,442

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 2017 LTIP award that is due to vest on 1 June 2020.

3 Comprises: unvested LTIP shares.

Non-Executive Directors

	Shares owned outright
A C Bromfield	5,145
J D Carling	3,323
S P Good	30,047
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 2018	Date of exercise or release	Granted during the year	Exercised or released	Lapsed or cancelled	As at 31 Dec 2019	Market price on exercise date	Exercise price	Date from which exercisable	Expiry date
D B Stirling	LTIP (2016)	74,507	26.04.2019	–	74,507	–	–	£5.740	–	05.04.2019	n/a
	LTIP (2017) ¹	115,842	–	–	–	–	115,842	–	–	TBC ²	n/a
	LTIP (2018)	66,908	–	–	–	–	66,908	–	–	24.05.2021	n/a
	LTIP (2019)	–	–	73,070	–	–	73,070	–	–	20.05.2022	n/a
	DBSP (2015)	8,278	26.04.2019	–	8,278	–	–	£5.740	–	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
	DBSP (2018)	–	–	2,677	–	–	2,677	–	–	20.05.2022	n/a
	SIP ³	399	–	85	–	–	484	–	–	–	n/a
G C McGrath	CSOP	10,344	–	–	–	–	10,344	–	£2.900	05.04.2019	05.04.2026
	LTIP (2016)	48,426	26.04.2019	–	48,426	–	–	£5.740	–	05.04.2019	n/a
	LTIP (2017) ¹	76,014	–	–	–	–	76,014	–	–	TBC ²	n/a
	LTIP (2018)	45,090	–	–	–	–	45,090	–	–	24.05.2021	n/a
	LTIP (2019)	–	–	48,352	–	–	48,352	–	–	20.05.2022	n/a
	DBSP (2016)	6,533	–	–	–	–	6,533	–	–	27.03.2020	n/a
	DBSP (2017)	4,419	–	–	–	–	4,419	–	–	24.05.2021	n/a
	DBSP (2018)	–	–	2,497	–	–	2,497	–	–	20.05.2022	n/a
	SIP ³	351	–	85	–	–	436	–	–	–	n/a

1 30% based on relative TSR. 70% based on EPS growth. As set out in the 2018 Directors' Remuneration report, the base year EPS number for the 2017 award was adjusted to take into account the increased number of shares following the placing 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.

2 As set out in the Committee Chair's cover letter, the decision on the timing of the vesting of the 2017 award has been deferred for a period of up to one year by the Committee.

3 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".

Directors' Remuneration report

Continued

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 2019:

Director	Date of current service contract or appointment letter	Unexpired terms at 31 December 2019
A C Bromfield	21 June 2017	9 months
J D Carling	20 December 2017	1 year
S P Good ¹	4 September 2019	2 years and 3 months
G C McGrath	15 April 2019	–
D G Robertson	7 August 2017	8 months
D B Stirling	13 May 2019	–

¹ S P Good was appointed by the Board for a second three-year term in March 2019 and was re-elected by shareholders at the 2019 AGM. Copies of the Directors' service contracts and appointment letters are available for inspection at the Company's registered office.

External appointments

During 2019, Executive Directors did not receive any fees from external appointments.

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 (2019 to 2018)	% change in taxable benefits (2019 to 2018)	% change in annual bonus UK employees only (2019 to 2018)
Group CEO	14.16 ¹	(1)	(33.33)
Employee subset	2.3	–	(0.23)

¹ Context on the salary increase for the CEO is provided in detail in the 2018 Directors' Remuneration report.

The employees' salary review is negotiated with the unions, applied to all UK employees and a 2.3% increase was agreed in relation to 2019. The 2020 salary review for the employees has not yet been agreed.

The staff bonus in the UK was 0% of base salary in relation to 2019 (2018: 4.25% of base salary).

CEO pay ratio

New legislation requires companies with more than 250 employees to publish the CEO to employee pay ratio. The ratio compares the total remuneration of the Group CEO against the remuneration of the median employee, and employees in the lower and upper quartiles. These pay ratios form part of the information that is provided to the Committee on broader employee pay policies and practices. The Committee has considered the pay data and concluded that the CEO current ratio is proportionate and allows the business to retain high calibre individuals capable of delivering the growth strategy.

The ratios were calculated using the Option A methodology which uses the pay and benefits of all UK employees as it provides the most accurate information and representation of the ratios. The employee pay data used was based on the total remuneration of all Zotefoams plc's full-time employees as at 31 December 2019. The CEO's total remuneration has been taken from the single total figure of remuneration for 2019, as disclosed on page 65.

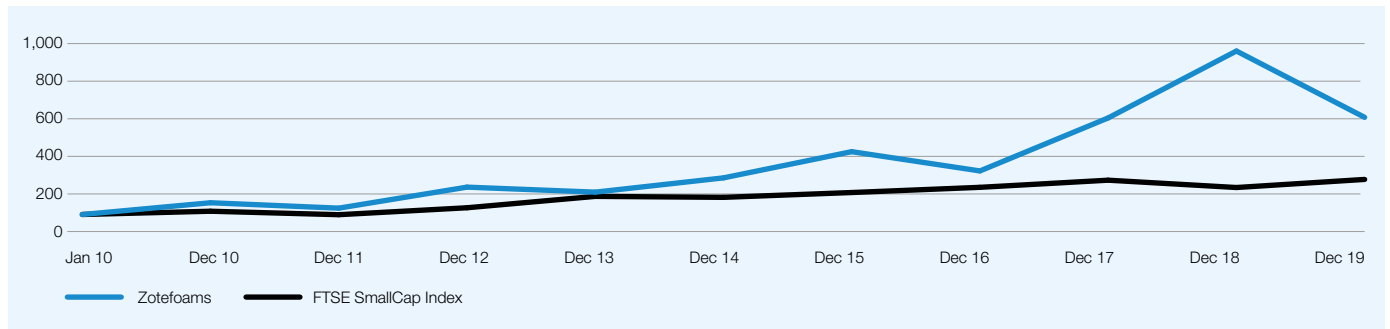
The Committee considers that the median CEO pay ratio at the 50th percentile is consistent with the relative roles and responsibilities of the CEO and the identified employees who are production operatives at this level, not professionals. Base salaries of all employees, including our Executive Directors, are set with reference to a range of factors, including market practice, location, experience and performance in role. The CEO's remuneration package is weighted towards variable pay (including the annual bonus, LTIP and DBSP) due to the nature of the role, which means that the ratio is likely to fluctuate depending on the outcomes of incentive plans in each year.

Year	Method	25th percentile pay ratio	50th percentile pay ratio	75th percentile pay ratio
2019	Option A	21:1	17:1	13:1

Pay data (£'000)	Base salary	Total pay
CEO's remuneration	290,500	637,473
UK employees 25th percentile	29,000	30,954
UK employees 50th percentile	35,694	38,604
UK employees 75th percentile	45,370	49,668

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.

**Workforce alignment**

While it remains important to set base salaries on a market-competitive basis reflective of the size and complexity of the business, the Committee has considered alignment of executive remuneration with workforce reward structures.

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)
2019	637,473	37.1	47.0	14.9	375.4
2018	794,905 ²	35.1	100.0	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 2016 LTIP value (vesting in respect of the performance period ending 31 December 2018) has been recalculated using a share price of £5.74 (previously £5.705) as described on page 69.

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 2019 and 2018.

	2019	2018
Total remuneration ¹ £'000	19,270	18,212
Executive Directors' remuneration £'000	1,049	1,356
Profit after tax £'000 (including exceptional item)	8,217	7,852
Shareholder distributions ² £'000	2,973	2,707

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

2 Shareholder distributions refer to the dividends paid during the year.

Directors' Remuneration report

Continued

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 2019 to the date of this report. All the members are independent Non-Executive Directors, with the exception of S P Good, who was independent on appointment as Chair of the Company. The Committee was chaired by A C Bromfield throughout the year. The Committee's Terms of Reference were last updated in December 2019 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 65 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 eight times in 2019 with full attendance at each meeting. The Company Secretary acts as secretary to the Committee.

In 2019, 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 the proposed Remuneration Policy put forward for approval at the 2020 AGM;
- ▶ approved the 2018 Directors' Remuneration report;
- ▶ 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 2019 and the vesting of awards made in 2016 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 2020 Executive Directors' bonus and Long-Term Incentive Plan awards.

Deloitte LLP was engaged in 2016 to assist and provide advice to the Remuneration Committee in relation to Directors' remuneration. They continued to work with the Committee through 2019 in respect of general remuneration advice and proposed changes to the Policy, which are tabled for approval at the 2020 AGM. 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:

	2019 (£)	2018 (£)
Deloitte LLP	32,700	18,950
Total	32,700	18,950

Shareholder voting (unaudited)

The table below sets out the results of the votes received on the 2018 Remuneration report at the 2019 AGM as well as the previous Directors' Remuneration Policy (approved at the 2017 AGM):

	Directors' Remuneration Policy	%	Annual Report on remuneration	%
Votes in favour	24,044,881	99.96	27,220,976	99.90
Votes against	279	0.00	21,598	0.08
Discretion	9,768	0.04	6,068	0.02
Total votes	24,054,648	100.00	27,248,642	100.00
Votes withheld	5,500	–	2,500	–

Directors' report

The Directors present their Annual Report and audited consolidated financial statements for the year ended 31 December 2019

Results and dividends

Profit attributable to shareholders for the year amounted to £8.22m (2018: £7.85m). An interim dividend of 2.03p (2018: 1.97p) per share was paid on 10 October 2019. The Board has a progressive dividend policy, recognising the importance to our shareholders of the dividend as part of their overall return. However, the extraordinary uncertainty posed by the COVID-19 outbreak means that the Board is focused on minimising cash outflows and strengthening the Company's and Group's financial position in the short term. As such, the Board believes it prudent not to recommend a final dividend for the year ended 31 December 2019 (2018: 4.15p). The Board will keep this situation under review and will determine the timing for resumption of dividends as economic conditions stabilise.

➤ For further information on the performance of the entity refer to the Strategic Report on pages 1 to pages 47, which should be read as forming part of the Directors' Report.

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 were in office during the year and up to the date of signing of the financial statements are set out on pages 48 and 49.

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.

D B Stirling and G C 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 2019. The Company has issued Deeds of Indemnity in favour of all Directors. These Deeds were in force throughout the year ended 31 December 2019 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 to Directors who are not interested in the matter. No new conflicts of interest were noted during 2019 or between the year end and the date of signing of the financial statements.

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 pages 50 to 52 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). Migration to ISO 45001:2018 will be conducted in March 2020 as part of a continual improvement plan.

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 (including financial and economic factors) affecting the performance of the Group; it also ensures that their views are taken into account in making decisions which are likely to affect their interests. 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, J Carling has attended meetings of the JCC in his capacity as Board representative, to provide employees with an opportunity to engage with the Board and allow the Board to have regard to employees' views in their decision-making.

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 directly 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.

Relationships with others

The Board has had regard to the fostering of the Group's business relationships with suppliers, customers and others in its decision-making process in order to achieve good-quality outcomes.

➤ Further information on this topic can be found on page 47 of the Strategic Report (the s172(1) statement), which is incorporated into this Directors' report by cross-reference.

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.

Directors' report
Continued**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 8 April 2020, had received notices of the following material interests of 3% or more in the issued ordinary share capital:

	Ordinary shares of 5.0p	Percentage of issued share capital
Schroders plc	5,674,351	11.75%
Invesco Ltd	4,007,910	8.29%
Sekisui Alveo AG	3,820,258	7.91%
Premier Miton Group plc	3,561,760	7.37%
Legal & General Investment Management	2,385,712	5.19%
Highclere International Investors LLP	2,432,527	5.04%
Canaccord Genuity Group, Inc	2,317,334	4.90%
BlackRock, Inc	2,150,385	4.45%
Nicholas Adrian Beaumont-Dark	1,938,352	4.01%
Claire and Marc Downes	1,935,019	4.01%

▶ Directors' shareholdings are shown in the Directors' Remuneration report on page 69.

Research and development

The amount spent by the Group on R&D in the year was £1,357,000 (2018: £1,350,000). In the opinion of the Directors £121,000 (2018: £243,000) of this expenditure met the requirements for capitalisation under IAS 38, while £1,236,000 (2018: £1,107,000) 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 2019, the Zotefoams Employees' Benefit Trust (EBT) held 178,395 shares (approximately 0.4% of issued share capital) (2018: 403,758 shares) to satisfy share plans as described in the Directors' Remuneration report. During the year, the EBT released 225,363 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 15 May 2019, 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 8 June 2020. The Directors seek new authorities for a further year, in line with market practice.

The Company was given authority at the 2019 AGM to purchase up to 4,830,123 of its ordinary shares. This authority will also expire on 8 June 2020 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 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 22 to the financial statements.

Future developments

▶ Information on future developments for the Group has been set out in an Introduction from our Chair and the Group CEO's review on pages 12 to 27.

Greenhouse gas emissions

▶ Information on the Group's greenhouse gas emissions may be found in the Sustainability report on page 46.

Pension schemes

Refer to the Post-employment benefits section of the Group CFO's review and note 24 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.

Events after the reporting period

Refer to page 32 of the CFO's review and note 29 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 in order 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.

On behalf of the Board.

G C McGrath

Director

9 April 2020

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's 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 position and performance, business model and strategy of the Group and Company.

With the exception of C Wall and A Fielding, whose appointments take place after the approval of these financial statements, each of the Directors, whose names and functions are listed on pages 48 and 49 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. The CFO's review provides a description of the principal risks and uncertainties faced by the Group and the Company.

Independent auditors' report to the members of Zotefoams plc

Report on the audit of the financial statements

Opinion

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

- ▶ give a true and fair view of the state of the Group's and of the Company's affairs as at 31 December 2019 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 Group 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 2019; the consolidated income statement and consolidated statement of comprehensive income, the consolidated and Company statements of cash flows, and 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.

Other than those disclosed in note 5 to the financial statements, we have provided no non-audit services to the Group or the Company in the period from 1 January 2019 to 31 December 2019.

Material uncertainty related to going concern – Group and Company

In forming our opinion on the financial statements, which is not modified, we have considered the adequacy of the disclosure made in note 2 to the financial statements concerning the Group's and Company's ability to continue as a going concern.

In light of the emerging impact of COVID-19 on the global economy, the Directors have sensitised their Board-approved forecasts ("base case scenario") to reflect what they consider to be a possible reduction in demand for the Group's and Company's products as a result of the impact of COVID-19 (their "downside scenario"). In the downside scenario, set out in further detail in note 2 to the financial statements, in the absence of any further mitigation actions that could be taken by management, the Group and Company would be in breach of their leverage banking covenant and would need to negotiate a waiver with their lenders in order to avoid borrowings becoming repayable immediately. These conditions, along with the other matters explained in note 2 to the financial statements, indicate the existence of a material uncertainty which may cast significant doubt about the Group's and Company's ability to continue as a going concern. The financial statements do not include the adjustments that would result if the Group and Company were unable to continue as a going concern.

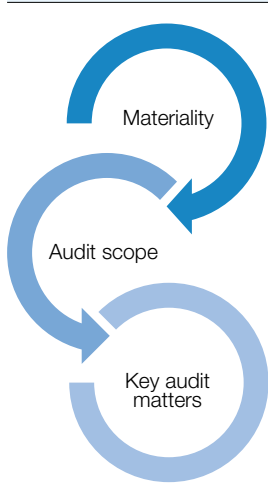
Audit procedures performed

In concluding there is a material uncertainty, our audit procedures included evaluating the Directors' assessment of the impact of COVID-19 on the financial performance, and in particular, on the Group's and Company's liquidity and its forecast covenant compliance.

In assessing the impact on the Directors' forecasts, which are referred to in note 2 of the financial statements, we performed the following procedures on the Directors' assessment that the Group and Company will continue as a going concern:

- ▶ checked the mathematical accuracy of the spreadsheet used to model future financial performance, agreed the underlying cash flow projections to management-approved forecasts, recalculated covenant compliance and liquidity headroom for the base case scenario;
- ▶ evaluated the assumptions regarding the loss in revenue and associated EBITDA impact, the associated potential cost savings and the potential decrease in working capital levels that could be achieved in the downside scenario;
- ▶ assessed the impact of the mitigating factors available to management in respect of the ability to restrict capital expenditure, cash payments associated with dividends, bonus and share options;
- ▶ recalculated the impact on the Group's and Company's banking covenants; and
- ▶ assessed whether management has adequately disclosed the conditions which cast significant doubt on the ability of the Group and Company to continue as a going concern in the financial statements.

Our audit approach

	Overview
	<ul style="list-style-type: none"> ▶ Overall Group materiality: £438,000 (2018: £525,000), based on 5% of profit before income tax and exceptional item. ▶ Overall Company materiality: £360,000 (2018: £500,000), based on 5% of profit before tax and exceptional item.
	<ul style="list-style-type: none"> ▶ There are nine trading companies (including joint ventures) within the consolidated financial statements, two based in the UK, one in Europe, 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. ▶ We audited property, plant and equipment in Zotefoams Poland Sp. z.o.o. ▶ The trading companies where we performed full audit procedures accounted for 93% of the Group's profit before tax and exceptional item. <hr/> <ul style="list-style-type: none"> ▶ Impairment of intangible assets in MuCell Extrusion LLC (Group) ▶ Defined benefit pension scheme assumptions (Group and Company) ▶ Going concern – refer to Material uncertainty section above (Group and Company)

The scope of our audit

As part of designing our audit, we determined materiality and assessed the risks of material misstatement in the financial statements.

Capability of the audit in detecting irregularities, including fraud

Based on our understanding of the Group and industry, we identified that the principal risks of non-compliance with laws and regulations related to the Listing Rules, 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. The Group engagement team shared this risk assessment with the component auditors so that they could include appropriate audit procedures in response to such risks in their work. Audit procedures performed by the Group engagement team and/or component auditors included:

- ▶ discussions with management, 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 and impairment of intangible fixed assets (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. In addition to going concern, described in the Material uncertainty related to going concern section above, we determined the matters described below to be the key audit matters to be communicated in our report. This is not a complete list of all risks identified by our audit.

Independent auditors' report to the members of Zotefoams plc

Continued

Key audit matter	How our audit addressed the key audit matter
<p>Impairment of intangible assets in MuCell Extrusion LLC (Group) Refer to note 28 of the financial statements (Key sources of estimation uncertainty for the Group).</p> <p>The Group's consolidated statement of financial position as at 31 December 2019 includes goodwill of £2.3m, which arose on the acquisition of MuCell Extrusion LLC (MuCell) in a previous accounting period, and other intangible assets of £2.2m.</p> <p>The carrying value of goodwill and other intangible assets is supported by future cash flows. There is a risk that, if these cash flows do not meet the Group's expectations, these intangible assets will be impaired. It is noted at this time that MuCell continues to be loss making.</p> <p>The impairment reviews performed by the Group contain a number of significant judgements and estimates, including revenue growth, profit margins, and long-term growth and discount rates. Changes in these assumptions can have a significant impact on the headroom available in the impairment calculations.</p> <p>The above factors represent a risk that the balance of goodwill and other intangible assets relating to MuCell could be misstated.</p>	<p>We obtained the Group's impairment analysis and tested the reasonableness of key assumptions, including profit and cash flow growth, terminal values and the discount rate. We also involved our valuations experts to benchmark the discount rate used by management in the impairment analyses.</p> <p>Where management included minimum guaranteed contractual revenues in their impairment analysis we have agreed these amounts to the customer contract. We considered the reasonableness of the remaining, non-contractual cash flows through comparison with current year actual sales.</p> <p>We verified the integrity and mathematical accuracy of supporting calculations. We obtained and evaluated management's sensitivity analysis to ascertain the impact of changes in key assumptions, and we performed our own independent sensitivity calculations to quantify the downside changes to management's models required to result in impairment.</p> <p>As a result of our work, we determined that the carrying values of goodwill and intangible assets are appropriate in the context of the consolidated financial statements taken as a whole.</p> <p>We reviewed the disclosures made in the financial statements, including sensitivity analysis and the reasonably possible downsides. We are satisfied that these disclosures are appropriate.</p>
<p>Defined benefit pension scheme assumptions (Group and Company) Refer to note 28 of the financial statements (Key sources of estimation uncertainty for the Group).</p> <p>The Group's closed defined benefit pension scheme represents one of the largest liabilities on the consolidated statement of financial position as at 31 December 2019.</p> <p>The valuation of the scheme's liabilities requires management to apply its 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. There is a risk of material misstatement as the calculation of the liability is highly sensitive to even small changes in certain key assumptions.</p>	<p>We assessed the competence of the Group's actuary.</p> <p>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 within ranges which we considered reasonable.</p> <p>Based on the procedures performed, we did not identify any material misstatements in the defined benefit pension obligation at the year end.</p> <p>We reviewed the disclosures made in the financial statements and are satisfied that these disclosures are appropriate.</p>

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. We also performed audit procedures on property, plant and equipment in Zotefoams Poland Sp. z o.o.

Materiality

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

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

	Group financial statements	Company financial statements
Overall materiality	£438,000 (2018: £525,000).	£360,000 (2018: £500,000).
How we determined it	5% of profit before income tax and exceptional item.	5% 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 £220,000 and £360,000. 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 £21,900 (Group audit) (2018: £26,250) and £21,900 (Company audit) (2018: £26,250) as well as misstatements below those amounts that, in our view, warranted reporting for qualitative reasons.

Going concern

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

Reporting obligation	Outcome
We are required to report if we have anything material to add or draw attention to in respect of the Directors' statement in the financial statements about whether the Directors considered it appropriate to adopt the going concern basis of accounting in preparing the financial statements and the Directors' identification of any material uncertainties to the Group's and the Company's ability to continue as a going concern over a period of at least 12 months from the date of approval of the financial statements.	We have nothing material to add or to draw attention to other than the material uncertainty we have described in the Material uncertainty related to going concern section above. 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.
We are required to report if the Directors' statement relating to going concern in accordance with Listing Rule 9.8.6R(3) is materially inconsistent with our knowledge obtained in the audit.	We have nothing to report.

Reporting on other information

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

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

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

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

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 2019 is consistent with the financial statements and has been prepared in accordance with applicable legal requirements. (CA06)

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

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

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

- ▶ the Directors' confirmation on page 52 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; and
- ▶ the Directors' explanation on page 39 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 enquiries 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 75, 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 page 54 describing the work of the Audit Committee does not appropriately address matters communicated by us to the Audit Committee; and
- ▶ 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.

Independent auditors' report to the members of Zotefoams plc

Continued

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 in respect of the financial statements set out on page 75, the Directors are responsible for the preparation of the financial statements in accordance with the applicable framework and for being satisfied that they give a true and fair view. The Directors are also responsible for such internal control as they determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

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

Auditors' responsibilities for the audit of the financial statements

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

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

Use of this report

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

Other required reporting

Companies Act 2006 exception reporting

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

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

We have no exceptions to report arising from this responsibility.

Appointment

Following the recommendation of the Audit Committee, we were appointed by the 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 8 years, covering the years ended 31 December 2012 to 31 December 2019.

Simon Bailey (Senior Statutory Auditor)

for and on behalf of PricewaterhouseCoopers LLP

Chartered Accountants and Statutory Auditors
Gatwick
9 April 2020

Consolidated income statement

For the year ended 31 December 2019

	Note	2019 £'000	2018 £'000
Revenue	3	80,860	81,037
Cost of sales		(52,270)	(52,034)
Gross profit		28,590	29,003
Distribution costs		(8,008)	(7,193)
Administrative expenses before exceptional item		(11,481)	(10,236)
Exceptional item	4	1,050	(950)
Total administrative expenses		(10,431)	(11,186)
Operating profit		10,151	10,624
Operating profit before exceptional item		9,101	11,574
Finance costs	7	(462)	(753)
Finance income	7	50	–
Share of profit/(loss) from joint venture	10	72	(16)
Profit before income tax		9,811	9,855
Profit before income tax and exceptional item		8,761	10,805
Income tax expense	8	(1,594)	(2,003)
Profit for the year		8,217	7,852
Profit for the year before exceptional item		7,167	8,641
Profit attributable to:			
Equity holders of the Company		8,217	7,852
		8,217	7,852
Earnings per share:			
Basic (p)	9	17.10	16.96
Diluted (p)	9	16.84	16.69

All activities of the Group are continuing.

The notes on pages 89 to 127 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 2019

	Note	2019 £'000	2018 £'000
Profit for the year		8,217	7,852
Other comprehensive (expense)/income			
Items that will not be reclassified to profit or loss			
Actuarial losses on defined benefit pension schemes	24	(319)	(1,449)
Tax relating to items that will not be reclassified		54	246
Total items that will not be reclassified to profit or loss		(265)	(1,203)
<i>Items that may be reclassified subsequently to profit or loss</i>			
Foreign exchange translation (losses)/gains on investment in foreign subsidiaries		(1,146)	1,442
Change in fair value of hedging instruments		(349)	(1,467)
Hedging gains reclassified to profit or loss		939	920
Tax relating to items that may be reclassified		(101)	93
Total items that may be reclassified subsequently to profit or loss		(657)	988
Other comprehensive expense for the year, net of tax		(922)	(215)
Total comprehensive income for the year		7,295	7,637
Total comprehensive income attributable to:			
Equity holders of the Company		7,295	7,637
Total comprehensive income for the year		7,295	7,637

The notes on pages 89 to 127 form an integral part of these financial statements.

Consolidated statement of financial position

As at 31 December 2019

	Note	2019 £'000	2018 £'000
Non-current assets			
Property, plant and equipment	11	85,652	67,607
Right-of-use assets	12	1,207	–
Intangible assets	13	6,614	6,515
Investments in joint venture	10	145	73
Trade and other receivables	16	166	439
Deferred tax assets	20	327	923
Total non-current assets		94,111	75,557
Current assets			
Inventories	15	18,604	17,894
Trade and other receivables	16	23,315	26,371
Derivative financial instruments	22	332	6
Cash and cash equivalents	17	6,656	7,073
Total current assets		48,907	51,344
Total assets		143,018	126,901
Current liabilities			
Trade and other payables	18	(6,831)	(11,328)
Derivative financial instruments	22	(134)	(399)
Current tax liability		(261)	(1,978)
Lease liabilities	12	(369)	–
Interest-bearing loans and borrowings	19	(15,717)	(14,500)
Total current liabilities		(23,312)	(28,205)
Non-current liabilities			
Lease liabilities	12	(836)	–
Interest-bearing loans and borrowings	19	(21,630)	(5,537)
Deferred tax liabilities	20	(674)	–
Post-employment benefits	24	(6,926)	(8,078)
Total non-current liabilities		(30,066)	(13,615)
Total liabilities		(53,378)	(41,820)
Total net assets		89,640	85,081
Equity			
Issued share capital	21	2,415	2,415
Share premium	21	44,178	44,178
Own shares held		(9)	(21)
Capital redemption reserve		15	15
Translation reserve		2,907	4,053
Hedging reserve		131	(358)
Retained earnings		40,003	34,799
Total equity		89,640	85,081

The notes on pages 89 to 127 form an integral part of these financial statements.

These financial statements on pages 81 to 88 were authorised for issue by the Board of Directors on 9 April 2020 and were signed on its behalf by:

G C McGrath
Group CFO

Company number: 2714645

Company statement of financial position

As at 31 December 2019

	Note	2019 £'000	2018 £'000
Non-current assets			
Property, plant and equipment	11	40,919	36,603
Right-of-use assets	12	1,064	–
Intangible assets	13	2,082	1,773
Investments in subsidiaries	14	30,576	23,549
Trade and other receivables	16	166	439
Deferred tax assets	20	–	292
Total non-current assets		74,807	62,656
Current assets			
Inventories	15	14,362	13,444
Trade and other receivables	16	42,546	37,121
Derivative financial instruments	22	332	6
Cash and cash equivalents	17	4,107	5,626
Total current assets		61,347	56,197
Total assets		136,154	118,853
Current liabilities			
Trade and other payables	18	(4,905)	(8,206)
Derivative financial instruments	22	(134)	(399)
Current tax liability		(261)	(1,797)
Lease liabilities	12	(291)	–
Interest-bearing loans and borrowings	19	(15,717)	(14,500)
Total current liabilities		(21,308)	(24,902)
Non-current liabilities			
Lease liabilities	12	(769)	–
Interest-bearing loans and borrowings	19	(21,630)	(5,537)
Deferred tax liabilities	20	(675)	–
Post-employment benefits	24	(6,926)	(8,078)
Total non-current liabilities		(30,000)	(13,615)
Total liabilities		(51,308)	(38,517)
Total net assets		84,846	80,336
Equity			
Issued share capital	21	2,415	2,415
Share premium	21	44,178	44,178
Own shares held		–	(21)
Capital redemption reserve		15	15
Hedging reserve		131	(358)
Retained earnings			
At 1 January		34,107	27,959
Profit for the year attributable to the owners		7,013	9,034
Other changes in retained earnings		(3,013)	(2,886)
		38,107	34,107
Total equity		84,846	80,336

The notes on pages 89 to 127 form an integral part of these financial statements.

These financial statements on pages 81 to 88 were authorised for issue by the Board of Directors on 9 April 2020 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 2019

	Note	2019 £'000	2018 £'000
Cash flows from operating activities			
Profit for the year		8,217	7,852
Adjustments for:			
Depreciation and amortisation	11,12,13	5,769	5,082
Disposal of assets		77	–
Finance costs	7	412	753
Share of (profit)/loss from joint venture	10	(72)	16
Net exchange differences	19	(999)	–
Employee defined benefit service charges	4	–	950
Equity-settled share-based payments	25	391	822
Taxation	8	1,594	2,003
Operating profit before changes in working capital and provisions		15,389	17,478
Decrease/(increase) in trade and other receivables		2,659	(6,361)
Increase in inventories		(883)	(3,751)
(Decrease)/increase in trade and other payables		(3,720)	366
Employee defined benefit contributions	24	(1,674)	(619)
Cash generated from operations		11,771	7,113
Interest paid		(88)	(485)
Income taxes paid, net of refunds		(2,334)	(2,136)
Net cash flows generated from operating activities		9,349	4,492
Cash flows from investing activities			
Interest received	7	50	–
Interest paid	7	(933)	(31)
Purchases of intangibles	13	(914)	(294)
Proceeds on disposal of property, plant and equipment		–	3
Purchases of property, plant and equipment		(23,473)	(15,796)
Net cash used in investing activities		(25,270)	(16,118)
Cash flows from financing activities			
Proceeds from options exercised and issue of share capital		92	31
Proceeds of share issue, net of expenses		–	20,078
Repayment of borrowings		(3,829)	(45,055)
Proceeds from borrowings		22,578	44,576
Principal elements of lease payments	12	(343)	–
Dividends paid to equity holders of the Company	9	(2,973)	(2,707)
Net cash generated from financing activities		15,525	16,923
Net (decrease)/increase in cash and cash equivalents		(396)	5,297
Cash and cash equivalents as 1 January		7,073	1,810
Exchange losses on cash and cash equivalents		(21)	(34)
Cash and cash equivalents at 31 December	17	6,656	7,073

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

During the year, the Group paid interest of £1,021k of which it capitalised £933k (2018: £31k) on qualifying assets under IAS 23 'Capitalisation of Borrowing Costs'. The interest paid has been split between operating activities of £88k (2018: £485k) and investing activities of £933k (2018: £31k) to reflect the Group's utilisation of the interest paid.

The net exchange differences of £999k within operating activities relate to the foreign exchange movement of the borrowings in the year. This has been disclosed separately this year due to materiality (2018: immaterial).

Refer to note 19 for a reconciliation of liabilities arising from financing activities.

The notes on pages 89 to 127 form an integral part of these financial statements.

Company statement of cash flows

For the year ended 31 December 2019

	Note	2019 £'000	2018 £'000
Cash flows from operating activities			
Profit for the year		7,013	9,034
Adjustments for:			
Depreciation and amortisation	11,12,13	3,253	3,040
Finance costs		325	469
Net exchange differences	19	(999)	–
Employee defined benefit service charges	4	–	950
Equity-settled share-based payments		391	822
Taxation		1,279	1,959
Operating profit before changes in working capital and provisions		11,262	16,274
Decrease/(increase) in trade and other receivables		3,372	(10,194)
Increase in inventories		(918)	(2,044)
(Decrease)/increase in trade and other payables		(3,468)	181
Employee defined benefit contributions	24	(1,674)	(619)
Cash generated from operations		8,574	3,598
Interest paid		(405)	(471)
Income taxes paid, net of refunds		(2,142)	(2,039)
Net cash flows generated from operating activities		6,027	1,088
Cash flows from investing activities			
Investment in subsidiaries	14	(7,027)	(3)
Interest received		26	102
Interest paid		(610)	–
Loans given to subsidiaries, net of prepayments		(8,431)	(6,828)
Purchases of intangibles	13	(707)	(251)
Proceeds on disposal of property, plant and equipment	11	–	1
Purchases of property, plant and equipment		(6,400)	(10,928)
Net cash used in investing activities		(23,149)	(17,907)
Cash flows from financing activities			
Proceeds from options exercised and issue of share capital		92	31
Proceeds of share issue, net of expenses		–	20,078
Repayment of borrowings		(3,829)	(39,922)
Proceeds from borrowings		22,578	44,576
Principal elements of lease payments		(265)	–
Dividends paid to equity holders of the Company	9	(2,973)	(2,707)
Net cash generated from financing activities		15,603	22,056
Net (decrease)/increase in cash and cash equivalents		(1,519)	5,237
Cash and cash equivalents as 1 January		5,626	406
Exchange losses on cash and cash equivalents		–	(17)
Cash and cash equivalents at 31 December	17	4,107	5,626

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

During the year, the Company paid interest of £1,015k of which it capitalised £610k (2018: nil) on qualifying assets under IAS 23 'Capitalisation of Borrowing Costs'. The interest paid has been split between operating activities of £405k (2018: £471k) and investing activities of £610k (2018: nil) to reflect the Company's utilisation of the interest paid.

The net exchange differences of £999k within operating activities relate to the foreign exchange movement of the borrowings in the year. This has been disclosed separately this year due to materiality (2018: immaterial).

Refer to note 19 for a reconciliation of liabilities arising from financing activities.

The notes on pages 89 to 127 form an integral part of these financial statements.

Consolidated statement of changes in equity

For the year ended 31 December 2019

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 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 recycling	-	-	-	-	-	93	-	93
Actuarial loss on Defined Benefit Pension Scheme	24	-	-	-	-	-	(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/(expenditure) for the year	-	-	-	-	1,442	(454)	6,649	7,637
Transactions with owners of the Parent:								
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 Parent	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
Balance as at 1 January 2019	2,415	44,178	(21)	15	4,053	(358)	34,799	85,081
Foreign exchange translation losses on investment in subsidiaries	-	-	-	-	(1,146)	-	-	(1,146)
Change in fair value of hedging instruments recognised in other comprehensive income	-	-	-	-	-	(349)	-	(349)
Reclassification to income statement – administrative expenses	-	-	-	-	-	939	-	939
Tax relating to effective portion of changes in fair value of cash flow hedges, net of recycling	-	-	-	-	-	(101)	-	(101)
Actuarial loss on Defined Benefit Pension Scheme	24	-	-	-	-	-	(319)	(319)
Tax relating to actuarial loss on Defined Benefit Pension Scheme	-	-	-	-	-	-	54	54
Profit for the year	-	-	-	-	-	-	8,217	8,217
Total comprehensive income/(expenditure) for the year	-	-	-	-	(1,146)	489	7,952	7,295
Transactions with owners of the Parent:								
Options exercised	-	-	12	-	-	-	80	92
Equity-settled share-based payments net of tax	-	-	-	-	-	-	145	145
Dividends paid	9	-	-	-	-	-	(2,973)	(2,973)
Total transactions with owners of the Parent	-	-	12	-	-	-	(2,748)	(2,736)
Balance as at 31 December 2019	2,415	44,178	(9)	15	2,907	131	40,003	89,640

The aggregate current and deferred tax relating to items that are credited to equity is £293k (2018: debited £515k).

The notes on pages 89 to 127 form an integral part of these financial statements.

Company statement of changes in equity

For the year ended 31 December 2019

	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 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 recycling		-	-	-	-	93	-	93
Actuarial loss on Defined Benefit Pension Scheme	24	-	-	-	-	-	(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 income/(expenditure) for the year		-	-	-	-	(454)	7,831	7,377
Transactions with owners of the Parent:								
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 Parent		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
Balance as at 1 January 2019		2,415	44,178	(21)	15	(358)	34,107	80,336
Change in fair value of hedging instruments recognised in other comprehensive income		-	-	-	-	(349)	-	(349)
Reclassification to income statement – administrative expenses		-	-	-	-	939	-	939
Tax relating to effective portion of changes in fair value of cash flow hedges, net of recycling		-	-	-	-	(101)	-	(101)
Actuarial loss on Defined Benefit Pension Scheme	24	-	-	-	-	-	(319)	(319)
Tax relating to actuarial loss on Defined Benefit Pension Scheme		-	-	-	-	-	54	54
Profit for the year		-	-	-	-	-	7,013	7,013
Total comprehensive income for the year		-	-	-	-	489	6,748	7,237
Transactions with owners of the Parent:								
Options exercised		-	-	21	-	-	80	101
Equity-settled share-based payments net of tax		-	-	-	-	-	145	145
Dividends paid	9	-	-	-	-	-	(2,973)	(2,973)
Total transactions with owners of the Parent		-	-	21	-	-	(2,748)	(2,727)
Balance as at 31 December 2019		2,415	44,178	-	15	131	38,107	84,846

The aggregate current and deferred tax relating to items that are credited to equity is £293k (2018: debited £515k).

The notes on pages 89 to 127 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 England, 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. During the year, the Group has applied the following standards and amendments for the first time for the financial year commencing 1 January 2019:

- ▶ IFRS 16 ‘Leases’;
- ▶ ‘Prepayments Features with Negative Compensation’ – Amendments to IFRS 9;
- ▶ ‘Long-term Interest in Associates and Joint Ventures’ – Amendments to IAS 28;
- ▶ ‘Annual Improvements to IFRS Standards 2015–2017 Cycle’;
- ▶ ‘Plan Amendments, Curtailment or Settlement’ – Amendments to IAS 19; and
- ▶ Interpretation 23 ‘Uncertainty over Income Tax Treatments’.

The Group also elected to adopt the following amendments early:

- ▶ ‘Definition of Material’ – Amendments to IAS 1 and IAS 8.

The Group had to change its accounting policies as a result of adopting IFRS 16 ‘Leases’. The Group elected to adopt the new rules retrospectively but recognised the cumulative effect of initially applying the new standard on 1 January 2019. This is disclosed in note 27. The other amendments listed above did not have any impact on the amounts recognised in prior periods and are not expected to significantly affect current or future periods.

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 28.

j) 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 1 to 47 and include the section entitled ‘Risk management and principal risks’ on pages 33 to 38. This also describes the financial position of the Group, its cash flows and liquidity position. In addition, note 22 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.

At 31 December 2019, the Group’s financing arrangements amounted to £55.2m, comprising a multi-currency term loan of £25m, a multi-currency revolving credit facility of £25m, and a remaining balance of £5.2m of a further £7.5m sterling annually renewable term loan, repayable in equal quarterly instalments. The bank facility is for a five-year period and expires in May 2023. At the date of the statement of financial position, £17.7m was undrawn on the facility.

The facility is subject to two covenants, which are tested semi-annually: net debt to EBITDA (leverage) and EBITDA to net finance charges. In recognition of the current macroeconomic uncertainty, the Group’s banks have amended the leverage covenant from 3.0x to 4.0x for the 12 months to 30 June 2020.

The Directors believe that the Group is well placed to manage its business risks and, after making enquiries including a review of forecasts and predictions, taking account of reasonably possible changes in trading performances and considering the existing banking facilities, including the available liquidity and increase in leverage covenant from 3.0x to 4.0x, 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.

The uncertainty as to the future impact on the Group of the current COVID-19 outbreak has been considered as part of the Group’s adoption of the going concern basis. Our China-based customers and our own relatively small processing facility for T-FIT® technical insulation in China returned to work at the beginning of March. Across the Group, public health measures advised by governments are being followed in support of their efforts to contain the spread of the virus, and the supply chain is being proactively managed, as are operating costs and the timing of capital expenditure. The Board has also resolved not to recommend a final dividend for the year ended 2019 and will determine the timing for resumption of dividends as economic conditions stabilise.

The Board has considered a downside scenario that reflects the current unprecedented uncertainty in the global economy and which we consider to be severe but plausible. The results of this scenario show that there is sufficient liquidity in the business for a period of at least 12 months from the date of approval of these financial statements but shows the potential for a covenant breach during the test period. The scenario considered Group revenue 20% below 2019 for the 12 months to 31 December 2020, and 25% below 2019 for the 12 months to 30 June 2021. It applied foreign exchange rates of \$1.30:£1 and €1.15:£1. Set against this were mitigating actions including tight management of headcount, significantly reduced capital expenditure, reduced SG&A expenditure and suspension of dividends. This severe but plausible scenario indicates a material uncertainty which may cast significant doubt over the Company’s and Group’s ability to continue as a going concern without further mitigating actions. The Company and Consolidated financial statements do not include the adjustments that would result if the Company and Group were unable to continue as a going concern.

After due consideration of the range and likelihood of potential outcomes, the Directors continue to adopt the going concern basis of accounting in preparing the financial statements.

Notes
Continued**2. Significant accounting policies (continued)****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.

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 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 expensed 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 acquiree 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.

2. Significant accounting policies (continued)

ii) Transactions 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 re-measured). 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 re-measured 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 22. Movements on the hedging reserve in other comprehensive income are shown in note 22. 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.

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 the hedging reserve within equity. The gain or loss relating to the ineffective portion is recognised immediately in the income statement within administrative expenses.

When forward contracts are used to hedge forecast transactions, the Group generally designates only the change in fair value of the forward contract related to the spot component as the hedging instrument. Gains or losses relating to the effective portion of the change in the spot component of the forward contracts are recognised in the cash flow hedge reserve within equity. The change in the forward element of the contract that relates to the hedged item ("aligned forward element") is recognised within other comprehensive income in the costs of hedging reserve within equity. In some cases, the entity might designate the full change in fair value of the forward contract (including forward points) as the hedging instrument. In such cases, the gains or losses relating to the effective portion of the change in fair value of the entire forward contract are recognised in the cash flow hedge reserve within equity.

When a hedging instrument expires or is sold or terminated, or when a hedge no longer meets the criteria for hedge accounting, any cumulative deferred gain or loss and deferred costs of hedging in equity at that time remain in equity until forecast transaction occurs, resulting in the recognition of a non-financial asset. When the forecast transaction is no longer expected to occur, the cumulative gain or loss and deferred costs of hedging that were reported in equity are immediately reclassified to the income statement.

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.

Notes
Continued**2. Significant accounting policies (continued)****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 financial year.

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 are 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.

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**

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 and are measured at amortised cost.

2. Significant accounting policies (continued)

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 a 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 financial year 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

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 22.

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. They are generally due for settlement within 30-90 days and are therefore all classified as current. Trade receivables are recognised initially at the amount of consideration that is unconditional, unless they contain significant financing components, in which case they are recognised at fair value. The Group holds the trade receivables with the objective of collecting the contractual cash flows, and so it measures them subsequently at amortised cost using the effective interest method.

Due to the short-term nature of the current receivables, their carrying amount is considered to be the same as their fair value. Information about the impairment of trade receivables and the Group's exposure to credit risk and foreign currency risk can be found in note 22.

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.

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 financial year 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.

Notes
Continued**2. Significant accounting policies (continued)****2.15 Employee benefits****i) Defined contribution schemes**

A defined contribution scheme is a pension scheme 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 schemes are recognised as an expense in the income statement as incurred.

For defined contribution schemes, 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 an 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 Benefit Schemes

A defined benefit scheme is a pension scheme that is not a defined contribution scheme. Typically, defined benefit schemes 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 schemes is the present value of the defined benefit obligation at the end of the financial year, 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 Pension Scheme, 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 year in which they arise.

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.

i) Own shares held by the Employee Benefit Trust (EBT)

Transactions of the EBT are treated as being those of the Group 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. Significant accounting policies (continued)

2.19 Revenue

Revenue comprises 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, which include a minimum royalty guarantee, to provide use of the Group's technology, are recognised at a point in time when it becomes unconditional.

2.20 Leases

From 1 January 2019, the Group implemented IFRS 16 'Leases' and changed its accounting policy for leases where the Group is the lessee. The new policy is described in note 12 and the impact of the change in note 27.

Until 31 December 2018, leases of property and equipment where the Group, as lessee, had substantially all the risks and rewards of ownership were classified as finance leases. Finance leases were capitalised, at the lease's inception at the fair value of the leased property or, if lower, the present value of the minimum lease payments. The corresponding rental obligations, net of finance charges, were included in other short-term and long-term payables. Each lease payment was allocated between the liability and finance cost. The finance cost was 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 and equipment acquired under finance leases was depreciated over the asset's useful life, or over the shorter of the asset's useful life and the lease term if there was no reasonable certainty that the Group would obtain ownership at the end of the lease term.

Leases in which a significant portion of the risks and rewards of ownership were not transferred to the Group as lessee were classified as operating leases. Payments made under operating leases (net of any incentives received from the lessor) were charged to the income statement on a straight-line basis over the period of the lease.

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. These 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.

Notes
Continued**2. Significant accounting policies (continued)****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.

i) New standards and amendments – applicable 1 January 2019

The following standards and interpretations apply for the first time to financial reporting periods commencing on or after 1 January 2019:

	Effective for accounting periods beginning on or after	Endorsed by the EU	Expected Impact
IFRS 16 'Leases'	1 January 2019	Yes	See note 27
Interpretation 23 'Uncertainty over Income Tax Treatments'	1 January 2019	Yes	None
'Prepayment Features with Negative Compensation' – Amendments to IFRS 9 'Financial Instruments'	1 January 2019	Yes	None
'Long-term Interests in Associates and Joint Ventures' – Amendments to IAS 28 'Investments in Associates and Joint Ventures'	1 January 2019	Yes	None
'Annual Improvements to IFRS Standards 2015–2017 Cycle'			
IFRS 3 'Business Combinations'	1 January 2019	Yes	None
IFRS 11 'Joint Arrangements'	1 January 2019	Yes	None
IAS 12 'Disclosure of Interests in Other Entities'	1 January 2019	Yes	None
IAS 23 'Borrowing Costs'	1 January 2019	Yes	None
'Plan Amendment, Curtailment or Settlement' – Amendments to IAS 19 'Employee Benefits'	1 January 2019	Yes	None

ii) Forthcoming requirements

As at 31 December 2019, the following standards and interpretations had been issued but were not mandatory for annual reporting periods ending on 31 December 2019.

	Effective for accounting periods beginning on or after	Endorsed by the EU	Expected Impact
IFRS 17 'Insurance Contracts'	1 January 2021	No	None
'Definition of Material' – Amendment to IAS 1 'Presentation of financial Statements'	1 January 2020	Yes	None
'Definition of Material' – Amendment to IAS 8 'Accounting Policies'	1 January 2020	Yes	None
'Definition of a Business' – Amendments to IFRS 3 'Business Combinations'	1 January 2020	No	None
Revised Conceptual Framework for Financial Reporting	1 January 2020	Yes	None
Interest rate benchmark reform – Amendments to IFRS 9 'Financial Instruments'	1 January 2020	No	None
Interest rate benchmark reform – Amendments to IAS 39 'Financial Instruments: Recognition and Measurement'	1 January 2020	No	None
Interest rate benchmark reform – Amendments to IFRS 7 'Financial Instruments: Disclosures'	1 January 2020	No	None
Sale or contribution of assets between an investor and its associate or joint venture – Amendments to IFRS 10 'Consolidated Financial Statements' and IAS 28 'Investments in Associates and Joint Ventures'	n/a*	n/a*	n/a*

* In December 2015, the IASB decided to defer the application date of this amendment until such time as the IASB has finalised its research project on the equity method.

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 CEO, D Stirling, who is considered to be the Chief Operating Decision-Maker for the purpose of evaluating segment performance and allocating resources. The Group CEO primarily uses a measure of profit for the year (before exceptional items) to assess the performance of the operating segments.

The Group manufactures and sells high-performance foams, and licenses related technology for specialist markets worldwide. The Group's 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: polyvinylidene fluoride (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	
	2019 £'000	2018 £'000	2019 £'000	2018 £'000	2019 £'000	2018 £'000	2019 £'000	2018 £'000	2019 £'000	2018 £'000
Group revenue	51,363	57,158	26,477	22,009	3,097	1,945	(77)	(75)	80,860	81,037
Segment profit/(loss) pre-amortisation	7,301	9,448	6,430	5,814	(1,270)	(1,628)	-	-	12,461	13,634
Amortisation of acquired intangible assets	-	-	-	-	(276)	(262)	-	-	(276)	(262)
Segment profit/(loss)	7,301	9,448	6,430	5,814	(1,546)	(1,890)	-	-	12,185	13,372
Foreign exchange (losses)/gains	-	-	-	-	-	-	-	-	(1,405)	818
Unallocated central costs	-	-	-	-	-	-	-	-	(1,679)	(2,616)
Operating profit before exceptional items	-	-	-	-	-	-	-	-	9,101	11,574
Financing costs	-	-	-	-	-	-	-	-	(462)	(753)
Financing income	-	-	-	-	-	-	-	-	50	-
Share of profit/(loss) from joint venture	72	(16)	-	-	-	-	-	-	72	(16)
Taxation (before exceptional items)	-	-	-	-	-	-	-	-	(1,594)	(2,164)
Profit for the year (before exceptional items)	-	-	-	-	-	-	-	-	7,167	8,641
Segment assets	100,497	95,153	34,088	22,903	8,106	7,922	-	-	142,691	125,978
Unallocated assets	-	-	-	-	-	-	-	-	327	923
Total assets	-	-	-	-	-	-	-	-	143,018	126,901
Segment liabilities*	(44,530)	(37,604)	(7,254)	(1,791)	(659)	(447)	-	-	(52,443)	(39,842)
Unallocated liabilities	-	-	-	-	-	-	-	-	(935)	(1,978)
Total liabilities	-	-	-	-	-	-	-	-	(53,378)	(41,820)
Depreciation of PPE	4,009	3,894	703	339	83	83	-	-	4,795	4,316
Depreciation of right-of-use assets	268	-	43	-	-	-	-	-	311	-
Amortisation	344	384	55	-	264	382	-	-	663	766
Capital expenditure:	-	-	-	-	-	-	-	-	-	-
Property, plant and equipment (PPE)	21,222	15,242	3,475	989	139	62	-	-	24,836	16,293
Right-of-use assets	804	-	126	-	-	-	-	-	930	-
Intangible assets	611	17	97	243	206	34	-	-	914	294

Unallocated assets are made up of deferred tax assets of £327k (2018: £923k). Unallocated liabilities are made up of corporation tax £261k (2018: £1,978k) and deferred tax liabilities £674k (2018: nil).

* Segment liabilities include current lease liabilities of £369k (2018: nil) and non-current lease liabilities of £836k (2018: nil) under the new IFRS 16 'Leases' standard, see note 27 for full financial impact in the year. These liabilities have been allocated to the segments as follows:

Polyolefin Foams: £1,042k (2018: nil), HPP: £163k (2018: nil) and MEL: £nil (2018: nil).

Segment profit/(loss) is made up of operating profit/(loss) before exceptional items, 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.

Notes
Continued**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 2019					
Group revenue from external customers	12,875	25,503	22,010	20,472	80,860
Non-current assets	44,231	13,038	35,908	462	93,639
Capital expenditure – PPE	7,239	12,069	5,380	148	24,836
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

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 £12,858k (2018: £10,092k) to the Group's revenue.

Analysis of revenue by category

Breakdown of revenues by products and services for the Group:

	2019 £'000	2018 £'000
Sale of foam	77,840	79,167
Licence and royalty income	836	895
Sale of equipment	2,261	1,050
Less: eliminations	(77)	(75)
Group revenue	80,860	81,037

4. Exceptional item

	2019 £'000	2018 £'000
Past service costs	–	950
Settlement income relating to legal claim	(1,050)	–

During the year, the Company was successful in a claim against the previous advisers to the Defined Benefit Pension Scheme (the "DB Scheme"), following legal advice that the linkage to future increases in salary had not been properly broken. The Company was awarded £1,050k following mediation and has recorded this as an operating exceptional item in the income statement. Of this amount, £941k was repaid to the DB Scheme and £109k expenses reimbursed to the Company.

During the prior year, following a High Court ruling regarding Guaranteed Minimum Pension (GMP) equalisation, the Company provided £940k for additional liabilities in its DB Scheme based on calculations by the Company's actuaries and £10k for related expenses.

5. Expenses by nature

	2019 £'000	2018 £'000
Included in profit for the year are:		
Changes in inventories of finished goods and work in progress	(784)	1,197
Changes in raw materials and consumables used	1,494	1,986
Inventory write-down	409	311
Employee benefits expenses	22,168	22,092
Operating lease charges (note 12)	233	415
Amortisation (note 13)	663	766
Depreciation of PPE and right-of-use assets (note 11 and note 12)	5,106	4,316
Disposal of assets	77	–
Research and development costs expensed	1,236	1,107
Development costs capitalised (note 13)	(121)	(243)
Net exchange losses/(gains)	1,405	(818)
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*	161	205
Fees payable to the external auditors and its associates in respect of other services:		
– audit-related assurance services	19	17
Total cost of sales, distribution costs and administrative expenses	70,709	70,413

* The 2018 amount includes fees of £60k for the audit of the financial statements for the year ended 31 December 2017.

6. Staff numbers and expenses

The monthly 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	
	2019	2018	2019	2018
Production	242	204	161	148
Maintenance	28	28	21	22
Distribution and marketing	78	74	46	44
Administration and technical	106	110	84	86
	454	416	312	300

The aggregate payroll costs of these persons were as follows:

	Group				Company			
	2019		2018		2019		2018	
	£'000	£'000	£'000	£'000	£'000	£'000	£'000	£'000
Wages and salaries*	18,132	17,090	12,959	12,425				
Social security costs*	2,508	2,108	1,290	1,225				
Share options granted to Directors and employees (note 25)	390	822	339	696				
Pension costs, including past service costs	1,138	2,072	845	1,948				
	22,168	22,092	15,433	16,294				
* Net of directly attributable costs capitalised	898	668	411	287				

Notes
Continued**6. Staff numbers and expenses (continued)**

Details of aggregate Directors' emoluments are provided below:

	2019 £'000	2018 £'000
Aggregate emoluments	645	568
Aggregate gains made on the exercise of the share options	740	306
Aggregate amounts receivable under long-term incentive schemes	338	730
Company contribution to money purchase pension scheme	66	56
	1,789	1,660

Further details on Directors' emoluments, including details of the highest-paid Director, are included in the Remuneration report on page 65.

7. Finance income and costs**Finance income**

	2019 £'000	2018 £'000
Interest income	(50)	–

Finance costs

	2019 £'000	2018 £'000
Finance costs on bank loans and lease liabilities	1,164	644
Lease liabilities interest	28	–
Amount capitalised	(933)	(31)
Finance costs expensed	259	613
Interest on defined benefit pension obligation (note 24)	203	140
	462	753

Capitalised borrowing costs

The capitalisation rate used to determine the amount of borrowing costs to be capitalised is the weighted average interest rate applicable to the entity's general borrowings during the year, in this case 3.38% (2018: 3.95%).

8. Income tax expense

	2019 £'000	2018 £'000
UK corporation tax	1,011	2,452
Overseas tax	11	20
Adjustment to prior year UK corporation tax charge	(405)	117
Total current tax	617	2,589
Deferred tax	977	(586)
Income tax expense	1,594	2,003

Factors affecting the tax charge

The weighted average applicable tax rate for the Group is 18.72% (2018: 17.99%). Differences arise on account of the following factors:

	2019 £'000	2018 £'000
Tax reconciliation		
Profit before tax	9,811	9,855
Tax at the UK tax rate of 19.00% (2018: 17.99%)	1,864	1,773
Effects of:		
Expenses not deductible for tax purposes	90	13
Research and development and other tax credits	(133)	(171)
Overseas tax losses for which no deferred income tax asset recognised	225	344
Effect of different overseas tax rates	(77)	–
Other differences	30	(73)
Adjustments to prior year UK corporation tax charge	(405)	117
	1,594	2,003

8. Income tax expense (continued)

Changes to UK corporation tax rates were substantively enacted as part of Finance Bill 2016 (on 6 September 2016). These include reductions to the main rate to reduce the rate to 17% from 1 April 2020. Deferred taxes at the balance sheet date have been measured using these enacted tax rates and reflected in these financial statements.

In November 2019, the Prime Minister announced that he intended to cancel the future reduction in corporate tax rate from 19% to 17%. This announcement does not constitute substantive enactment and therefore deferred taxes at the balance sheet date continue to be measured at the enacted tax rate of 17%. However, it is possible that the corporation tax rate remains at 19% after 1 April 2020.

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 2019 (2018: none).

9. Dividends and earnings per share

	2019 £'000	2018 £'000
Prior year final dividend of 4.15p (2018: 4.02p) per 5.0p ordinary share	1,996	1,763
Interim dividend of 2.03p (2018: 1.97p) per 5.0p ordinary share	977	944
Dividends paid during the year	2,973	2,707

The Board has a progressive dividend policy, recognising the importance to our shareholders of the dividend as part of their overall return. However, as described above, the extraordinary uncertainty posed by the COVID-19 outbreak means that we are focused on minimising cash outflows and strengthening our financial position in the short term. As such, the Board believes it prudent not to recommend a final dividend for the year ended 31 December 2019 (2018: 4.15p). The Board will keep this situation under review and will determine the timing for resumption of dividends as economic conditions stabilise.

Earnings per ordinary share

Earnings per ordinary share is calculated by dividing consolidated profit after tax attributable to equity holders of the Company of £8,217k (2018: £7,852k) 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 2019 was 178,395 (2018: 403,758). 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'.

	2019	2018
Weighted average number of ordinary shares in issue	48,054,819	46,310,356
Adjustments for share options	752,321	722,503
Diluted number of ordinary shares issued	48,807,140	47,032,859

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. The registered address is 100, Jayumuyeok 5-gil, Masanhoewon-gu, Chang-won-si, Gyeongsangnam-do, Republic of Korea. 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	
	2019 £'000	2018 £'000
Cash and cash equivalents	255	730
Other current assets (excluding cash)	981	1,009
Total current assets	1,236	1,739
Financial liabilities (excluding trade payables)	(40)	(12)
Other current liabilities (including trade payables)	(906)	(1,581)
Total current liabilities	(946)	(1,593)
Net assets	290	146

Notes
Continued**10. Investments in joint venture (continued)**

Summarised statement of comprehensive income:

	As at 31 December	
	2019 £'000	2018 £'000
Revenue	3,716	3,169
Finance costs	(3)	(2)
Profit/(loss) before tax	144	(32)
Income tax expense	–	–
Profit/(loss) after tax	144	(32)
Other comprehensive income	–	–
Total comprehensive income/(expense)	144	(32)
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:

	2019 £'000	2018 £'000
Opening net assets	146	178
Profit/(loss) for the year	144	(32)
Other comprehensive income	–	–
Closing net assets	290	146
Interest in joint venture @ 50%	145	73

	2019 £'000	2018 £'000
Information of the joint venture		
Carrying value at 1 January	73	89
Share of profit/(loss) for the year	72	(16)
Carrying value at 31 December	145	73

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 2018	16,656	62,293	7,401	432	27,250	114,032
Additions	–	1,670	155	–	14,468	16,293
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	126,248
Balance at 1 January 2019	18,984	80,813	3,297	432	22,722	126,248
Adjustment for change in accounting policy (note 27)	–	–	–	(432)	–	(432)
Additions	8	744	172	–	23,912	24,836
Disposals	–	(77)	(16)	–	–	(93)
Transfers	12,383	3,364	496	–	(16,243)	–
Effect of movement in foreign exchange	(300)	(870)	(34)	–	(859)	(2,063)
Balance at 31 December 2019	31,075	83,974	3,915	–	29,532	148,496
Accumulated depreciation						
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
Balance at 1 January 2019	10,961	45,441	2,113	126	–	58,641
Adjustment for change in accounting policy (note 27)	–	–	–	(126)	–	(126)
Depreciation charge for the year	657	3,784	354	–	–	4,795
Disposals	–	(8)	(8)	–	–	(16)
Effect of movement in foreign exchange	(147)	(281)	(22)	–	–	(450)
Balance at 31 December 2019	11,471	48,936	2,437	–	–	62,844
Net book value						
At 1 January 2018	5,608	17,596	3,279	383	27,250	54,116
At 31 December 2018 and 1 January 2019	8,023	35,372	1,184	306	22,722	67,607
At 31 December 2019	19,604	35,038	1,478	–	29,532	85,652

Depreciation is included in cost of sales in the income statement.

From 2019, leased assets are presented as a separate line item in the balance sheet, see note 12.

During the year, the Group has capitalised borrowing costs amounting to £933k (2018: £31k) on qualifying assets. Borrowing costs were capitalised at the rate of its specific borrowings of 3.95% (2018: 3.95%).

Bank borrowings are secured on property, plant and equipment. Refer to note 19 for details.

Notes
Continued**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 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
Balance at 1 January 2019	9,698	54,944	2,347	432	16,292	83,713
Adjustment for change in accounting policy (note 27)	–	–	–	(432)	–	(432)
Additions	2	352	84	–	6,801	7,239
Transfers	12,431	2,830	496	–	(15,757)	–
Balance at 31 December 2019	22,131	58,126	2,927	–	7,336	90,520
Accumulated depreciation						
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
Balance at 1 January 2019	6,896	38,619	1,469	126	–	47,110
Adjustment for change in accounting policy (note 27)	–	–	–	(126)	–	(126)
Depreciation charge for the year	222	2,123	272	–	–	2,617
Balance at 31 December 2019	7,118	40,742	1,741	–	–	49,601
Net book value						
At 1 January 2018	3,000	16,396	3,085	383	5,334	28,198
At 31 December 2018 and 1 January 2019	2,802	16,325	878	306	16,292	36,603
At 31 December 2019	15,013	17,384	1,186	–	7,336	40,919

12. Leases

(i) Amounts recognised in the statement of financial position relating to leases:

Right-of-use assets

	Group		Company	
	2019 £'000	1 January 2019* £'000	2019 £'000	1 January 2019* £'000
Property	72	133	–	–
Equipment	1,135	455	1,064	389
	1,207	588	1,064	389

Lease liabilities

	Group		Company	
	2019 £'000	1 January 2019* £'000	2019 £'000	1 January 2019* £'000
Current	369	131	291	108
Non-current	836	255	769	294
	1,205	386	1,060	402

* In the previous year, the Group only recognised leased assets and liabilities in relation to leases that were classified as "finance leases" under IAS 17 'Leases'. The assets were presented in property, plant and equipment and the liabilities as part of the Group's borrowings. For adjustments recognised on adoption of IFRS 16 on 1 January 2019, please refer to note 27.

12. Leases (continued)

Additions to the right-of-use assets during the 2019 financial year were £930k for Group and £914k for Company.

(ii) Amounts recognised in the income statement relating to leases:

Depreciation charge of right-of-use assets

	Group		Company	
	2019 £'000	1 January 2019* £'000	2019 £'000	1 January 2019* £'000
Property	61	–	–	–
Equipment	250	–	238	–
	311	–	238	–
Interest expenses (included in finance costs)	28		23	
Expense relating to short-term leases (included in cost of sales and administrative expenses)	233		24	
Expense relating to leases of low-value assets that are not shown above as short-term leases (included in administrative expenses)	19		2	

The total cash outflow for leases in 2019 was £343k for Group and £265k for Company.

(iii) The Group's leasing activities and how these are accounted for:

The Group leases property and various equipment. Rental contracts are typically 2–5 years. Lease terms are negotiated on an individual basis and contain a wide range of different terms and conditions. The lease agreements do not impose any covenants, but leased assets may not be used as security for borrowing purposes.

Until the 2018 financial year, leases of property, plant and equipment were classified as either finance or operating leases, see note 27 for details. Payments made under operating leases (net of any incentives received from the lessor) were charged to the income statement on a straight-line basis over the period of the lease.

From 1 January 2019, leases are recognised as a right-of-use asset and a corresponding liability at the date at which the leased asset is available for use by the Group. Each lease payment is allocated between the liability and finance cost. The finance cost is charged to the income statement over the lease period to produce a constant periodic rate of interest on the remaining balance of the liability for each period. The right-of-use asset is depreciated over the shorter of the asset's useful life and the lease term on a straight-line basis.

Assets and liabilities arising from a lease are initially measured on a present value basis. Lease liabilities include the net present value of the following lease payments:

- ▶ fixed payments (including in-substance fixed payments), less any lease incentives receivable;
- ▶ variable lease payments that are based on an index or a rate;
- ▶ amounts expected to be payable by the lessee under residual value guarantees;
- ▶ the exercise price of a purchase option if the lessee is reasonably certain to exercise that option; and
- ▶ payments of penalties for terminating the lease, if the lease term reflects the lessee exercising that option.

The lease payments are discounted using the Group's incremental borrowing rate, being the rate that the Group would have to pay to borrow the funds necessary to obtain an asset of similar economic environment within similar terms and conditions. Lease payments are allocated between principal and finance costs. 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 each period.

Right-of-use assets are measured at cost comprising the following:

- ▶ the amount of initial measurement of lease liability;
- ▶ any lease payments made at or before the commencement date less any lease incentives received;
- ▶ any initial direct costs; and
- ▶ restoration costs.

Payments associated with short-term leases, and leases of low value are recognised on a straight-line basis as an expense in the income statement. Short-term leases are leases with a lease term of 12 months or less. Low-value assets comprise of small items of office furniture and equipment.

Notes
Continued**13. 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 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
Balance at 1 January 2019	248	396	4,930	2,574	2,381	597	11,126
Additions	–	–	207	586	–	121	914
Effect of movement in foreign exchange	(8)	(9)	(168)	–	(77)	–	(262)
Balance at 31 December 2019	240	387	4,969	3,160	2,304	718	11,778
Accumulated amortisation							
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
Balance at 1 January 2019	211	396	2,605	1,399	–	–	4,611
Charge for the year	25	–	240	398	–	–	663
Effect of movement in foreign exchange	(8)	(9)	(93)	–	–	–	(110)
Balance at 31 December 2019	228	387	2,752	1,797	–	–	5,164
Net book value							
At 1 January 2018	109	26	2,386	1,551	2,255	354	6,681
At 31 December 2018 and 1 January 2019	37	–	2,325	1,175	2,381	597	6,515
At 31 December 2019	12	–	2,217	1,363	2,304	718	6,614

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 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 plus perpetuity.

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 believes that no reasonable change in any of the above assumptions would cause the carrying value of MEL goodwill to exceed its recoverable amount.

If the long-term growth rate was reduced to zero, the headroom would decrease by 23% but there would still be sufficient headroom. If the discount rate was increased to 13%, the headroom would decrease by 14% but there would still be sufficient headroom.

13. Intangible assets (continued)

Company

	Customer related £'000	Software related £'000	Capitalised development £'000	Total £'000
Cost				
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
Balance at 1 January 2019	121	2,574	597	3,292
Additions	–	586	121	707
Balance at 31 December 2019	121	3,160	718	3,999
Accumulated amortisation				
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
Balance at 1 January 2019	121	1,398	–	1,519
Charge for the year	–	398	–	398
Balance at 31 December 2019	121	1,796	–	1,917
Net book value				
At 1 January 2018	–	1,551	354	1,905
At 31 December 2018 and 1 January 2019	–	1,176	597	1,773
At 31 December 2019	–	1,364	718	2,082

14. Investment in subsidiaries

Company

	2019 £'000	2018 £'000
Shares in Group undertakings – at cost	23,549	23,546
Additions during the year	7,027	3
	30,576	23,549

During the year the Company, through its subsidiary Zotefoams International Limited, incorporated a new subsidiary T-FIT Insulation Solutions India Private Limited on 22 March 2019 for the consideration of £124k, and increased its share capital in Zotefoams Poland Sp. z.o.o. for the consideration of £6,904k.

Notes
Continued**14. 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
Zotefoams T-Fit Material Technology (Kunshan) 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
T-Fit Insulation Solutions India Private Limited (indirectly owned)	335 Udyog Vihar Phase IV Gurgaon, Gurgaon, Haryana 122015	100%	India

The principal activities of the subsidiary undertakings are as follows: Zotefoams International Limited is a holding company. Zotefoams Pension Trustees Limited and Zotefoams Technology Limited are currently inactive. Zotefoams Inc. purchases, manufactures and distributes cross-linked block foams. 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. MuCell Extrusion LLC holds and develops microcellular foam technology which it licenses to customers. Zotefoams Operations Limited is a trading company, distributes T-FIT technical insulation products and operated a branch in Thailand until March 2019, at which point closure procedures commenced. KZ Trading and Investment Limited is a holding and trading company for Zotefoams T-Fit Material Technology (Kunshan) Limited (previously known as Kunshan Zotek King Lai Limited), which is a trading company based in Kunshan, China, processing Zotefoams foams into T-FIT® technical insulation products and distributing them. Zotefoams France SAS is a wholly owned subsidiary of Zotefoams International Limited and did not engage in any trading activities in 2019. Zotefoams Poland Sp. z.o.o. is a wholly owned subsidiary of Zotefoams International Limited and did not engage in any trading activities in 2019. T-Fit Insulation Solutions India Private Limited incorporated and began trading in 2019, distributing T-FIT technical insulation products. 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 plc Employee Benefit Trust (EBT) is a wholly owned entity with its registered office at Gaspe House, 66–72 Esplanade, St Helier, Jersey, JE2 3QT. 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 2019 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 Italy. During the year it closed its branch in Germany.

15. Inventories

	Group		Company	
	2019 £'000	2018 £'000	2019 £'000	2018 £'000
Raw materials and consumables	9,542	8,048	8,131	6,905
Work in progress	4,827	5,561	3,302	3,450
Finished goods	4,235	4,285	2,929	3,089
	18,604	17,894	14,362	13,444
Inventories are shown net of:				
Provision for impairment losses	1,756	2,232	1,315	1,784

In 2019, the value of inventory recognised by the Group as an expense in cost of goods sold was £38,521k (2018: £40,318k).

15. Inventories (continued)

Movement in provision

Movements in the inventory provision during the financial year is set out below:

	Group		Company	
	2019 £'000		2019 £'000	
Provision for impairment losses as at 1 January 2019	2,232		1,784	
Inventories written off against provision	(409)		(311)	
Additional provisions recognised	422		312	
Unused amounts reversed	(489)		(470)	
Provision for impairment losses as at 31 December 2019	1,756		1,315	

16. Trade and other receivables

	Group		Company	
	2019 £'000	2018 £'000	2019 £'000	2018 £'000
Amounts falling due over one year:				
Prepayments and accrued income	166	439	166	439
Amounts falling due within one year:				
Trade receivables	19,448	23,753	13,736	16,575
Amounts owed by Group undertakings	–	–	27,979	18,686
Other receivables	2,832	2,240	490	1,732
Prepayments and accrued income	1,035	378	341	128
	23,481	26,810	42,712	37,560

Amounts owed by Group undertakings are payable on demand. The trading portion does not attract any interest. Unsecured loans provided to Zotefoams Inc, MuCell Extrusion LLC, KZ Trading and Investments Ltd and Zotefoams Poland Sp. z.o.o. through Zotefoams International Ltd during the year total £8,431k (2018: £6,828) and attract an interest charge of 3.29% for loans linked to US dollar LIBOR, 1.35% for euro and 2.54% for sterling (2018: 3.90% for Zotefoams Inc and 3.54% for MuCell Extrusion LLC).

Bank borrowings are secured on the trade receivables of the Group. Refer to note 19 for details.

17. Cash and cash equivalents

	Group		Company	
	2019 £'000	2018 £'000	2019 £'000	2018 £'000
Cash at bank and in hand	6,656	7,073	4,107	5,626

18. Trade and other payables

	Group		Company	
	2019 £'000	2018 £'000	2019 £'000	2018 £'000
Trade payables	3,066	6,301	2,555	4,587
Other taxation and social security	460	463	377	356
Other payables	737	1,441	385	1,055
Accruals and deferred income	2,568	3,123	1,588	2,208
	6,831	11,328	4,905	8,206

Amounts owed to Group undertakings are unsecured, repayable on demand and attract no interest.

Notes
Continued

19. Interest-bearing loans and borrowings

	Note	Group		Company	
		2019 £'000	2018 £'000	2019 £'000	2018 £'000
Current bank borrowings		15,717	14,500	15,717	14,500
Non-current bank borrowings		21,630	5,231	21,630	5,231
Non-current lease liabilities*		–	306	–	306
	22	37,347	20,037	37,347	20,037

In May 2018, the Group completed a debt refinancing to enable it to continue to grow capacity and meet its expected demand growth. These facilities are secured against the property, plant and equipment and trade receivables of the Group. The total facility of £55.2m comprises a £25m 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 £25m multi-currency revolving credit facility, repayable on demand and a further £5.2m sterling term loan, renewable annually and repayable over five years in equal quarterly repayments over the term. The negotiated facility also includes a £25m accordion feature to provide additional flexibility to pursue further investment opportunities in the future.

At the end of the financial year, the Group has utilised £21.9m (\$29m) of the multi-currency term loan, £10.7m (€12.5m) of the revolving facility and has an outstanding £5.2m on the sterling term loan. The total amount of £37.8m is gross of £0.5m loan origination fees paid upfront, being amortised over the period of the loan. The difference of £0.3m between the undrawn amount of £17.7m and £17.4m (£55.2m – £37.8m) is due to the different exchange rates used by the Group and the bank.

The Group and the Company have the following undrawn borrowing facilities:

	2019 £'000	2018 £'000
Floating rate:		
Expiring within one year	–	–
Expiring beyond one year	17,725	37,030
Total	17,725	37,030

The difference of £0.3m between the undrawn amount of £17.7m and £17.4m (£55.2m – £37.8m) is due to the different exchange rates used by the Group and the bank.

Reconciliation of liabilities arising from financing activities:

	Non-cash changes						2019 £'000
	2018 £'000	Net cash inflows/ (outflows) £'000	Loan origination fee £'000	Loan restructure £'000	Recognition of lease liabilities £'000	Foreign exchange movement £'000	
Group							
Long-term borrowings	5,231	7,846	(74)	9,108	–	(481)	21,630
Short-term borrowings	14,500	10,903	(60)	(9,108)	–	(518)	15,717
Non-current lease liabilities*	306	–	–	–	(306)	–	–
Total liabilities	20,037	18,749	(134)	–	(306)	(999)	37,347

* Lease liabilities have been reclassified as their own separate item in the statement of financial position. See note 27 for details about the impact from changes in accounting policies.

	Non-cash changes						2018 £'000
	2017 £'000	Net cash inflows/ (outflows) £'000	Loan origination fee £'000	Loan restructure £'000	Recognition of lease liabilities £'000	Foreign exchange movement £'000	
Group							
Long-term borrowings	8,155	(2,785)	(243)	–	–	104	5,231
Short-term borrowings	11,228	3,226	(71)	–	–	117	14,500
Non-current lease liabilities	383	(77)	–	–	–	–	306
Total liabilities	19,766	364	(314)	–	–	221	20,037

19. Interest-bearing loans and borrowings (continued)

Company	2018 £'000	Non-cash changes					2019 £'000
		Net cash inflows/ (outflows) £'000	Loan origination fee £'000	Loan restructure £'000	Recognition of lease liabilities £'000	Foreign exchange movement £'000	
Long-term borrowings	5,231	7,846	(74)	9,108	–	(481)	21,630
Short-term borrowings	14,500	10,903	(60)	(9,108)	–	(518)	15,717
Non-current lease liabilities*	306	–	–	–	(306)	–	–
Total liabilities	20,037	18,749	(134)	–	(306)	(999)	37,347

* Lease liabilities have been reclassified as their own separate item in the statement of financial position. See note 27 for details about the impact from changes in accounting policies.

Company	2017 £'000	Non-cash changes					2018 £'000
		Net cash inflows/ (outflows) £'000	Loan origination fee £'000	Loan restructure £'000	Recognition of lease liabilities £'000	Foreign exchange movement £'000	
Long-term borrowings	3,735	1,635	(243)	–	–	104	5,231
Short-term borrowings	10,698	3,756	(71)	–	–	117	14,500
Non-current lease liabilities	383	(77)	–	–	–	–	306
Total liabilities	14,816	5,314	(314)	–	–	221	20,037

20. 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	
	2019 £'000	2018 £'000	2019 £'000	2018 £'000	2019 £'000	2018 £'000
Property, plant and equipment	–	–	1,480	1,121	1,480	1,121
Rolled-over gain	–	–	548	548	548	548
Inventories	(190)	(277)	–	–	(190)	(277)
Derivatives financial instruments	–	(67)	34	–	34	(67)
Defined Benefit Pension Scheme	(1,177)	(1,373)	–	–	(1,177)	(1,373)
Share option charges	(211)	(521)	–	–	(211)	(521)
Tax value of recognised losses carried forward	(137)	(354)	–	–	(137)	(354)
	(1,715)	(2,592)	2,062	1,669	347	(923)
Set off	1,388	1,669	(1,388)	(1,669)	–	–
Deferred tax (assets)/liabilities	(327)	(923)	674	–	347	(923)

Unrecognised deferred tax assets

The Group has tax losses carried forward in the USA of \$1,608k (2018: \$3,295k), which expire between 2022 and 2037 under prevailing tax legislation. In addition to this, the Group has further tax losses in the USA of \$11,668k (2018: \$880k), which are carried forward indefinitely. At year-end exchange rates, these tax losses translate to £10,047k (2018: £3,251k). Of the above, the Board expects to utilise only tax losses of £657k (2018: £1,685k) in the upcoming years based on projections. Applying the enacted tax rate of 21% (2018: 21%), the Group has recognised a deferred tax asset of £137k (2018: £354k) on such tax losses expected to be utilised in future periods.

The Group can potentially recover £190k (2018: £344k) of the deferred tax asset within 12 months of the reporting period. The remainder of the deferred tax asset will be recovered more than 12 months after the reporting period.

The Group can potentially settle £34k (2018: £nil) of the deferred tax liability within 12 months of the reporting period. The remainder of the deferred tax liability will be settled more than 12 months after the reporting period.

Notes
Continued**20. 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 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	–	–	–	(93)	(246)	(176)	–	(515)
Balance at 31 December 2018	1,121	548	(277)	(67)	(1,373)	(521)	(354)	(923)
Balance at 1 January 2019	1,121	548	(277)	(67)	(1,373)	(521)	(354)	(923)
Charged to the income statement	360	–	87	–	250	64	216	977
Recognised in other comprehensive income	–	–	–	101	(54)	246	–	293
Balance at 31 December 2019	1,481	548	(190)	34	(1,177)	(211)	(138)	347

Deferred tax assets and liabilities – Company

Deferred tax assets and liabilities are attributable to the following:

	Assets		Liabilities		Net	
	2019 £'000	2018 £'000	2019 £'000	2018 £'000	2019 £'000	2018 £'000
Property, plant and equipment	–	–	1,481	1,121	1,481	1,121
Rolled-over gain	–	–	548	548	548	548
Derivative financial instruments	–	(67)	34	–	34	(67)
Defined Benefit Pension Scheme	(1,177)	(1,373)	–	–	(1,177)	(1,373)
Share option charges	(211)	(521)	–	–	(211)	(521)
	(1,388)	(1,961)	2,063	1,669	675	(292)
Set off	1,388	1,669	(1,388)	(1,669)	–	–
Deferred tax (assets)/liabilities	–	(292)	675	–	675	(292)

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 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	–	–	(93)	(246)	(176)	(515)
Balance at 31 December 2018	1,121	548	(67)	(1,373)	(521)	(292)
Balance at 1 January 2019	1,121	548	(67)	(1,373)	(521)	(292)
Charged to the income statement	360	–	–	250	64	674
Recognised in other comprehensive income	–	–	101	(54)	246	293
Balance at 31 December 2019	1,481	548	34	(1,177)	(211)	675

21. Issued share capital

Issued, allotted and fully paid ordinary shares of 5p each:

	Number of shares	Par value £'000	Share premium £'000	Total £'000
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
Closing balance 31 December 2019	48,301,234	2,415	44,178	46,593

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.

Nature and purpose of other reserves

Capital redemption reserve

On the buy-back and cancellation of preference shares, an amount equal to the par value was transferred from retained earnings to the capital redemption reserve for capital maintenance purposes.

Translation reserve

Exchange differences arising on translation of the foreign controlled entity are recognised in other comprehensive income and accumulated in a separate reserve within equity. The cumulative amount is reclassified to the income statement when the net investment is disposed of.

Hedging reserve

The hedging reserve includes the cash flow hedge reserve and the costs of the hedging reserve (see note 22 for details). The cash flow hedge reserve is used to recognise the effective portion of gains or losses on derivatives that are designated and qualify as cash flow hedges. Amounts are subsequently reclassified to the income statement as appropriate.

22. 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.

Notes
Continued**22. Financial instruments and financial risk management (continued)****Credit quality of financial assets**

	Group		Company	
	2019 £'000	2018 £'000	2019 £'000	2018 £'000
Counterparties without external credit rating:				
Existing customers with no defaults in the past	18,219	23,484	13,143	16,306
Existing customers with some defaults in the past, net of impairment allowance	1,229	269	593	269
	19,448	23,753	13,736	16,575

	Group		Company	
	2019 £'000	2018 £'000	2019 £'000	2018 £'000
Cash at bank				
Moody's P-1	6,656	7,073	4,107	5,626

	Group		Company	
	2019 £'000	2018 £'000	2019 £'000	2018 £'000
Derivative financial assets				
Moody's P-1	332	6	332	6

Trade receivables are analysed as follows:

While cash and cash equivalent are subject to impairment review under IFRS 9 'Financial Instruments', the identified impairment loss was immaterial (2018: immaterial).

	Group		Company	
	2019 £'000	2018 £'000	2019 £'000	2018 £'000
Gross carrying amount	19,560	23,778	13,786	16,600
– due for less than 60 days	18,733	22,688	13,786	16,306
– due for more than 60 days	827	1,090	–	294
Expected loss rate				
– due for less than 60 days	0.29%	0.00%	0.36%	0.00%
– due for more than 60 days	6.96%	2.29%	0.00%	8.50%
Loss allowance	112	25	49	25
Trade receivables net of allowances	19,448	23,753	13,737	16,575

Loss allowances analysed as follows:

	Group £'000	Company £'000
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
At 1 January 2019	25	25
Increase in loss allowance recognised in profit or loss during the year	177	114
Reversal of loss allowance on collection of dues	(90)	(90)
At 31 December 2019	112	49

The normal terms of trade are 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 2019 and 2018, the Group and Company insured a significant portion of its trade receivable balances to mitigate credit risk. The uninsured exposure as at 31 December 2019 for the Group was £8,992k (2018: £11,984k) and for the Company was £5,813k (2018: £7,463k). 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.

22. 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:

Group	2019			2018		
	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	2.51%	–	5,250	2.55%	–	6,435
Euro short-term borrowings	1.37%	–	10,598	–	–	–
Dollar long-term borrowings	3.34%	–	21,946	3.98%	–	5,231
Total*		–	37,794		–	19,731

Company	2019			2018		
	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	2.51%	–	5,250	2.55%	–	6,435
Euro short-term borrowings	1.37%	–	10,598	–	–	–
Dollar long-term borrowings	3.34%	–	21,946	3.98%	–	5,231
Total*		–	37,794		–	19,731

* The total amount of £37,794k is gross of £447k loan origination fees paid upfront, being amortised over the period of the loan.

The impact on post-tax profit of a 1% shift in the variable rate borrowings would be £306k (2018: £94k).

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 19) 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:

Group	2019					2018				
	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	(37,347)	(40,009)	(16,847)	(5,582)	(17,580)	(20,037)	(15,153)	(9,714)	(222)	(5,217)
Bank overdraft	–	–	–	–	–	–	–	–	–	–
Trade and other payables	(3,803)	(3,803)	(3,803)	–	–	(7,742)	(7,742)	(7,742)	–	–
Lease liabilities	(1,205)	(1,322)	(411)	(333)	(578)	–	–	–	–	–
Total non-derivative financial liabilities	(42,355)	(45,134)	(21,061)	(5,915)	(18,158)	(27,779)	(22,895)	(17,456)	(222)	(5,217)
Derivative financial liabilities	(134)	(134)	(134)	–	–	(399)	(399)	(399)	–	–

Notes
Continued

22. Financial instruments and financial risk management (continued)

Company	2019					2018				
	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	(37,347)	(40,009)	(16,847)	(5,582)	(17,580)	(20,037)	(15,153)	(9,714)	(222)	(5,217)
Bank overdraft	-	-	-	-	-	-	-	-	-	-
Trade and other payables	(2,940)	(2,940)	(2,940)	-	-	(5,642)	(5,642)	(5,642)	-	-
Amounts owed to Group undertakings	(1,060)	(1,117)	(316)	(292)	(509)	-	-	-	-	-
Total non-derivative financial liabilities	(41,347)	(44,066)	(20,103)	(5,874)	(18,089)	(25,679)	(20,795)	(15,356)	(222)	(5,217)
Derivative financial liabilities	(134)	(134)	(134)	-	-	(399)	(399)	(399)	-	-

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 euro. 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 policy is to use forward currency contracts to cover approximately two-thirds of the estimated net cash foreign exchange trading exposure for the euro and US dollar for the next 12 months, as well as cover approximately 25% of the estimated net cash foreign exchange trading exposure for the following six months. The Group also hedges its exposure to foreign currency denominated assets, where possible, by offsetting them with same-currency liabilities, primarily through borrowing in the relevant currency. These foreign currency denominated assets, which are translated on a mark to market basis every month and the movement taken to the income statement, include loans made by the Company to, and intercompany trading balances with, its overseas subsidiaries, the effect of which is cash neutral. They also include non-sterling accounts receivable, held on the Company's statement of financial position, the impact of which should reverse through forward currency contracts, but are subject to the timing between accounts receivable recording and cash received.

The euro and US dollar rates used in preparing the financial statements are as follows:

	2019		2018	
	Average	Closing	Average	Closing
Euro/sterling	0.88	0.85	0.88	0.90
US dollar/sterling	0.79	0.76	0.75	0.78

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.

22. 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:

	Euro £'000	US dollar £'000	Other £'000	Total £'000
Group – 2019				
Cash and cash equivalents	2,085	1,940	518	4,543
Trade receivables	3,476	11,312	2,931	17,719
Trade payables	(803)	(937)	(81)	(1,821)
	Euro £'000	US dollar £'000	Other £'000	Total £'000
Group – 2018				
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)
	Euro £'000	US dollar £'000	Other £'000	Total £'000
Company – 2019				
Cash and cash equivalents	1,219	718	174	2,111
Trade receivables	3,401	6,508	2,092	12,001
Trade payables	(786)	(567)	(32)	(1,385)
	Euro £'000	US dollar £'000	Other £'000	Total £'000
Company – 2018				
Cash and cash equivalents	1,679	932	43	2,654
Trade receivables	4,706	6,100	2,103	12,909
Trade payables	(2,867)	(47)	(27)	(2,941)

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 2019	Level 1 £'000	Level 2 £'000	Level 3 £'000	Total £'000
Assets				
Forward exchange contracts	–	332	–	332
Total assets	–	332	–	332
Liabilities				
Forward exchange contracts	–	(134)	–	(134)
Total liabilities	–	(134)	–	(134)

Notes
Continued**22. Financial instruments and financial risk management (continued)**

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)

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 2019 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 2019 or 2018 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); and
- ▶ 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 rates (2018: Handelsbanken and NatWest mid-market rates) at the statement of financial position date.

The maturity profile of the forward contracts as at 31 December is as follows:

	2019				2018			
	Foreign currency	Contract value £'000	Transaction fair value £'000	Contract fair value £'000	Foreign currency	Contract value £'000	Transaction fair value £'000	Contract fair value £'000
Group and Company:								
Sell EUR	–	–	–	–	€1,100	998	992	6
Buy EUR	–	–	–	–	–	–	–	–
Sell USD	\$23,751	18,172	17,974	198	\$17,450	13,184	13,583	(399)
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.

In respect of retranslation of monetary items, at 31 December 2019, 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 £29k (2018: £42k) before forward exchange contracts and £20k (2018: £14k) after forward exchange contracts are included.

In respect of retranslation of monetary items, at 31 December 2019, 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 £261k (2018: £302k) before forward exchange contracts and £20k (2018: £101k) after forward exchange contracts are included.

22. Financial instruments and financial risk management (continued)

Financial instruments by category

Group	2019			2018		
	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	22,280	-	-	25,993	-	-
Cash and cash equivalents	6,656	-	-	7,073	-	-
Bank overdraft	-	-	-	-	-	-
Derivative financial instruments – assets	-	332	-	-	6	-
– liabilities	-	(134)	-	-	(399)	-
Interest-bearing loans and borrowings	-	-	(37,347)	-	-	(20,037)
Trade and other payables	-	-	(3,803)	-	-	(7,742)
Lease liability	-	-	(1,205)	-	-	-

Company	2019			2018		
	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	42,205	-	-	36,993	-	-
Cash and cash equivalents	4,107	-	-	5,626	-	-
Bank overdraft	-	-	-	-	-	-
Derivative financial instruments – assets	-	332	-	-	6	-
– liabilities	-	(134)	-	-	(399)	-
Interest-bearing loans and borrowings	-	-	(37,347)	-	-	(20,037)
Trade and other payables	-	-	(2,940)	-	-	(5,642)
Lease liability	-	-	(1,060)	-	-	-

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, issue new shares, sell assets or manage investment expenditure to reduce debt.

The Group monitors capital on the basis of the following leverage ratio: net borrowings divided by EBITDA (as per bank facility agreement).

i) Loan Covenant

Under the terms of the major borrowing facilities, the Group is required to comply with the following financial covenants:

- ▶ The ratio of net borrowings on the last day of the relevant period to earnings before interest, tax, depreciation and amortisation, share of (profit)/(loss) from joint venture, equity-settled share-based payments and exceptional items (EBITDA) shall not exceed 3.00:1.00.
- ▶ The ratio of EBITDA to net finance charges in respect of the relevant period shall not be less than 4.00:1.00.

The Group has complied with these covenants throughout the financial year.

Notes
Continued**22. Financial instruments and financial risk management (continued)**

	As at 31 December 2019 £'000	As at 31 December 2018 £'000
Net borrowings	30,691	12,964
EBITDA	15,261	17,478
Net borrowings/EBITDA	2.01	0.74
Net finance charges	209	613
EBITDA/Net finance charges	73.16	28.51

Net borrowings comprise current and non-current interest-bearing loans and borrowings of £37,347k, as per note 19, and cash and cash equivalent of £6,656k as per note 17.

EBITDA comprises:

	Note	2019 £'000	2018 £'000
Profit for the year		8,217	7,852
Depreciation and amortisation	11,12,13	5,769	5,082
Finance costs	7	412	753
Share of (profit)/loss from joint venture	10	(72)	16
Equity-settled share-based payments	25	391	822
Taxation	8	1,594	2,003
Exceptional items	4	(1,050)	950
		15,261	17,478

Net finance charges comprise interest income of £50k and finance costs expensed of £259k as per note 7.

The Group's objective is to maintain the leverage ratio below the Board's appetite of 2.0x. However, it has accepted that this ratio will increase as the Group completes its capacity expansion programme, while remaining below the covenant level. This will reduce quickly back to below the Board's appetite, as this new capacity gets utilised.

The bank covenant definition does not include the impact of IFRS 16 'Leases', which would have moved the ratio from 2.01 to 2.09.

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 2019, the return on capital was 10.5% (2018: 16.5%). If the significant capacity investments were included, the return on capital was 8.1% (2018: 12.8%).

23. Commitments – Group

	Group		Company	
	2019 £'000	2018 £'000	2019 £'000	2018 £'000
Capital expenditure contracted for at the end of the reporting period but not yet incurred is as follows:				
Property, plant and equipment	2,966	4,054	2,118	1,540

24. Post-employment benefits**Defined Benefit Pension Scheme**

The Company operates a UK registered trust-based pension scheme (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.

24. Post-employment benefits (continued)

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 2019 was 17 years (2018: 18 years).

The Scheme closed to new entrants on 30 September 2001. With effect from 31 December 2005, the Scheme was closed to service accrual on pension benefits. All active members at that date became entitled to deferred benefits.

The manner in which the Scheme closed to the future accrual of benefits in 2005 has been reviewed by the Scheme's legal advisers, who have advised that, while the Scheme closure was effective in terminating all periods of active membership from the end of December 2005, the breaking of the salary linkage at that point was deemed to be invalid. The legal advisers advised that it was possible to break the link to salary, but only in respect of future salary increases and only with the informed consent of the affected members. The Trustees and the Company carried out an exercise to obtain the informed consent of the affected members and a Deed of Amendment was executed which specified that, for those members who provided consent, no allowance will be made for any further salary increases after 31 March 2018. For any affected members who did not provide consent, their benefits will remain calculated by reference to their Pensionable Salary as at the date of leaving service with the Employer.

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 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.

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 are 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 the 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 2019	As at 31 December 2018
Discount rate	1.90%	2.70%
RPI inflation (before retirement)	2.90%	3.20%
CPI inflation (before retirement)	1.90%	2.20%
RPI inflation (after retirement)	1.90%	3.20%
CPI inflation (after retirement)	1.90%	2.20%
Salary increases	1.90%	2.20%
Pension increases		
– Post 88 GMP	1.80%	2.00%
– Non GMP	2.90%	3.10%
Revaluation of deferred pensions in excess of GMP	1.90%	2.20%

Notes
Continued**24. Post-employment benefits (continued)**

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:

	2019	2018
For an individual aged 65		
– Male	22	22
– Female	23	24
At age 65 for an individual aged 45		
– Male	23	23
– Female	25	25

The table below outlines where the Company's post-employment amounts and activity are included in the financial statements.

	2019 £'000	2018 £'000
Statement of financial position for:		
– Defined Benefit Pension Scheme obligations	(6,926)	(8,078)
Income statement charge for:		
– Defined benefit pension interest cost	(203)	(140)
– Defined benefit pension past service costs	–	(940)
Actuarial (losses)/gains recognised in other comprehensive income for:		
– Defined Benefit Pension Scheme	(319)	(1,449)

The amounts recognised in the statement of financial position are determined as follows:

	2019 £'000	2018 £'000
Market value of plan assets	29,560	25,650
Present value of Defined Benefit Pension Scheme obligation	(36,486)	(33,728)
Deficit – recognised as a liability in the statement of financial position	(6,926)	(8,078)

The movement in the defined benefit obligation over the year is as follows:

	2019 £'000	2018 £'000
Value of defined benefit obligation at the start of the year	33,728	33,480
Interest cost	899	792
Benefits paid	(877)	(943)
Past service costs (refer to note 4)	–	940
Actuarial (gains)/losses: experience differing from that assumed	355	654
Actuarial (gains)/losses: changes in demographic assumptions	(827)	(202)
Actuarial losses/(gains): changes in financial assumptions	3,208	(993)
Value of defined benefit obligation at the end of the year	36,486	33,728

The movement in the value of the plan assets over the year is as follows:

	2019 £'000	2018 £'000
Market value of plan assets at the start of the year	25,650	27,312
Interest income	696	652
Actual return on plan assets	2,417	(1,990)
Employer contributions*	1,674	619
Benefits paid	(877)	(943)
Market value of assets at the end of the year	29,560	25,650

* The employer contributions amount includes £941k of the repayment made to the Deferred Benefit Pension Scheme as per note 4.

24. 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% p.a.	–8%/+9%
RPI inflation	+0.5%/–0.5% p.a.	+6%/–7%
Assumed life expectancy	+1 year	+4%

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 financial year – 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:

Asset class	Year ended 31 December 2019		Year ended 31 December 2018	
	Market value £'000	% of total Scheme assets	Market value £'000	% of total Scheme assets
Equities and other growth assets	14,634	50%	16,245	63%
Corporate bonds	–	0%	4,959	19%
Diversified Credit Funds	5,867	20%	–	0%
Gilts	–	0%	3,029	12%
Liability Driven Investments	7,001	23%	–	0%
Cash	1,081	4%	888	4%
Other	977	3%	529	2%
Total	29,560	100%	25,650	100%
Actual return on assets over the year	3,113		(1,338)	

All assets listed above have a quoted market price in an active market (except for the reserve for insured pensioners).

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 2019 were £828k (2018: £971k).

For certain non-UK based employees of the Company, the Company makes contributions into individual schemes. The contributions paid by the Company in 2019 were £17k (2018: £16k).

For USA-based employees, Zotefoams Inc. operates a 401(k) plan. The contributions paid by Zotefoams Inc. in 2019 were £246k (2018: £153k).

25. 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 Long-Term Incentive Plan (LTIP) for senior management personnel. Shares are awarded in the Company and vest after three years to the extent performance conditions are met. Depending 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 67 to 68.

Notes
Continued**25. Share-based payments (continued)****Movements in share options during the year are as follows:**

The options outstanding at 31 December 2019 have an exercise price between 245.7p and 572p and a weighted contractual life of 7 years (2018: 8 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.

	2019		2018	
	Number of share options	Weighted average exercise price (p)	Number of share options	Weighted average exercise price (p)
Outstanding at the beginning of the year	116,198	278	166,229	278
Exercised during the year	(27,584)	290	(36,574)	220
Granted during the year	15,164	572	–	–
Forfeited during the year	(6,658)	375	(13,457)	297
Outstanding at the end of the year	97,120	331	116,198	278
Exercisable at the end of the year	55,236	262	24,204	268

Movements in LTIP awards during the year are as follows:

	2019		2018	
	Number of share options	Weighted average exercise price (p)	Number of share options	Weighted average exercise price (p)
Outstanding at the beginning of the year	706,868	–	660,089	–
Exercised during the year	(176,062)	–	(85,118)	–
Granted during the year	216,250	–	193,667	–
Forfeited during the year	(5,289)	–	(61,770)	–
Outstanding at the end of the year	741,767	–	706,868	–
Exercisable at the end of the year	–	–	–	–

Movement in Deferred Bonus Plan awards during the year are as follows:

	2019		2018	
	Number of share options	Weighted average exercise price (p)	Number of share options	Weighted average exercise price (p)
Outstanding at the beginning of the year	50,796	–	46,520	–
Exercised during the year	(12,220)	–	(12,169)	–
Granted during the year	10,559	–	16,445	–
Outstanding at the end of the year	49,135	–	50,796	–
Exercisable at the end of the year	–	–	–	–

25. 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-15	17-Aug-15	05-Apr-16	27-Mar-17	24-Aug-17	16-Apr-19
Share price (p)	285	310	290	305.5	305.5	572
Exercise price (p)	285	301.7	290	305.5	327.5	572
Expected volatility	35%	35%	35%	35%	35%	25%
Option life	Five years	Five years	Five years	Five years	Five years	Three years
Expected dividends (p) (assumed to be increasing at 2.5% p.a.)	5.5	5.5	5.6	5.7	5.7	5.5
Risk free interest rate (based on national government bonds)	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
Fair value at grant date (p)	80	90	80	103.1	111.1	103

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:

	2019 £'000	2018 £'000
Within administrative expenses – share-based payment charge	390	822
– related National Insurance	(21)	222

Of the above, amounts relating to Directors of Zotefoams plc aggregate to £199k (2018: £644k).

26. Related parties

Directors

The Directors of the Company as at 31 December 2019 and their immediate relatives control approximately 1.9% (2018: 1.0%) of the voting shares of the Company. Details of Directors' pay and remuneration are given in the Remuneration report on pages 58 to 72. 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 joint venture and subsidiaries of the Company are set out in notes 10 and 14. These companies are considered to be related parties.

The following material transactions were carried out with related parties:

	2019 £'000	2018 £'000
Sale of goods: subsidiaries of the Company	7,481	9,892
Sale of services: subsidiaries of the Company	1,636	165
Loans given (net of repayments): subsidiaries of the Company	15,683	6,828
Interest income: subsidiaries of the Company	101	95
Sale of goods: joint venture of the Company	3,112	2,938
Sale of service: joint venture of the Company	813	–
Total	28,826	19,918

Notes
Continued**26. Related parties (continued)**

Balances between the Company and its active subsidiaries and joint venture are as follows:

	Receivable from/(payable to)		Investment in	
	2019 £'000	2018 £'000	2019 £'000	2018 £'000
Zotefoams Inc.	9,204	14,166	–	–
KZ Trading and Investment Ltd	1,895	2,133	–	–
Azote Asia Limited	907	1,601	145	73
MuCell Extrusion LLC	96	877	–	–
Zotefoams International Limited	–	–	30,576	23,549
Zotefoams Operations Limited	1	–	–	–
Zotefoams T-Fit Material Technology (Kunshan) Limited	22	53	–	–
Zotefoams Poland Sp. z.o.o.	809	1,566	–	–
T-Fit Insulation Solutions India Private Limited	131	–	–	–

27. Changes in accounting policies

This note explains the impact of the adoption of IFRS 16 'Leases' on the Group's financial statements.

The Group has adopted IFRS 16 'Leases' retrospectively from 1 January 2019 but has not restated comparatives for the 2018 financial year, as permitted under the specific transition provisions in the standard. The reclassifications and the adjustments arising from the new leasing rules are therefore recognised in the opening statement of financial position on 1 January 2019. The new accounting policies are disclosed in note 12.

On adoption of IFRS 16, the Group recognised lease liabilities in relation to leases which had previously been classified as "operating leases" under the principles of IAS 17 'Leases'. These liabilities were measured at the present value of the remaining lease payments, discounted using the lessee's banking borrowing rate as a proxy to the incremental borrowing rate as at 1 January 2019. The weighted average lessee's incremental borrowing rate applied to the lease liabilities on 1 January 2019 was 2.8%.

For leases previously classified as finance leases the entity recognised the carrying amount of the lease asset and lease liability immediately before transition as the carrying amount of the right-of-use asset and the lease liability at the date of initial application. The measurement principles of IFRS 16 are only applied after that date.

(i) Practical expedients applied

In applying IFRS 16 for the first time, the Group has used the following practical expedients permitted by the standard:

- ▶ the use of a single discount rate to a portfolio of leases with reasonably similar characteristics;
- ▶ reliance on previous assessments on whether leases are onerous;
- ▶ the accounting for operating leases with a remaining lease term of less than 12 months as at January 2019 as short-term leases;
- ▶ the exclusion of initial direct costs for the measurement of the right-of-use asset at the date of initial application; and
- ▶ the use of hindsight in determining the lease term where the contract contains options to extend or terminate the lease.

The Group has also elected not to reassess whether a contract is, or contains, a lease at the date of initial application. Instead, for contracts entered into before the transition date the Group relied on its assessment made by applying IAS 17 and IFRIC 4 'Determining whether an Arrangement contains a Lease'.

(ii) Measurement of lease liabilities

	2019 £'000
Operating lease commitments disclosed as at 31 December 2018	662
Discounted using the lessee's incremental borrowing rate at the date of initial application	644
Add: finance lease liabilities recognised as at 31 December 2018	306
(Less): short-term leases recognised on a straight-line basis as an expense	(559)
(Less): low-value leases recognised on a straight-line basis as an expense	(5)
Lease liability recognised as at 1 January 2019	386
of which are:	
Current lease liabilities	131
Non-current lease liabilities	255
	386

27. Changes in accounting policies (continued)

(iii) Measurement of right-of-use assets

The right-of-use assets for property and equipment leases were measured at the amount equal to the lease liability, adjusted by the amount of any prepaid or accrued lease payments relating to that lease recognised in the statement of financial positions as at 31 December 2018. There were no onerous lease contracts that would have required an adjustment to the right-of-use assets at the date of initial application.

(iv) Adjustments recognised in the statement of financial position on 1 January 2019

The change in accounting policy affected the following items in the statement of financial position on 1 January 2019:

- ▶ property, plant and equipment – decrease by £306k;
- ▶ right-of-use assets – increase by £588k;
- ▶ borrowings – decrease by £306k; and
- ▶ lease liabilities – increase by £588k.

The net impact on retained earnings on 1 January 2019 was £nil.

28. 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 13).

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 24 contains information about the assumptions relating to retirement benefit obligations.

Key judgements

i) Going concern

The financial statements have been prepared on a going concern basis. This requires significant judgment given the current unprecedented circumstances of the COVID-19 virus. Refer to note 2.1 i) for details of the judgements and assumptions made by the Directors in forming their view on going concern in preparing the financial statements.

ii) Unrecognised deferred tax assets

The Group currently has tax losses carried forward of £10,047k in respect of the USA business. Currently tax losses of £657k have been recognised in the statement of financial position and a deferred tax asset of £137k has been recognised by the Directors.

While in the longer term (over the next 5 to 10 years) the Directors expect to utilise the majority of the USA carried forward tax losses, given that the businesses in this tax jurisdiction have only been profitable for one financial year, the Directors do not yet consider it appropriate to fully recognise these assets based on the uncertainty around the future profitability of these businesses. However, the Directors note that if the USA tax group were to make sufficient levels of taxable profit in 2020, this position will be re-assessed and this may lead to a materially higher deferred tax balance being recognised. The Directors recognise that this is a significant judgement in preparing the Group's financial statements.

iii) Exceptional item

Due to the material and non-recurring nature of the items, the Group has disclosed the decrease in past service costs as an exceptional item in 2019 (2018: increase in past service costs).

29. Events after the reporting period

In early 2020, the emergence and spread of a new coronavirus, now known as COVID-19, is affecting business and economic activity around the world. The Group considers this outbreak to be a non-adjusting post balance sheet event as at 31 December 2019.

Five-year trading summary

	2019	2018	2017	2016	2015
	£m	£m	£m	£m	£m
Group revenue	80.9	81.0	70.1	57.4	53.9
Operating profit (excluding exceptional item)	9.1	11.6	9.4	7.6	6.3
Profit before tax (excluding exceptional item)	8.8	10.8	8.8	7.2	6.0
Profit before tax	9.8	9.9	7.5	7.0	6.0
Profit after tax	8.2	7.9	6.0	5.7	4.8
Capital expenditure (including intangibles)	24.4	16.1	12.2	12.6	9.1
Cash generated from operations	11.8	7.1	10.0	6.4	8.4
Basic earnings per share excluding exceptional item (p)	14.91	18.66	16.04	13.69	11.07
Basic earnings per share (p)	17.10	16.96	13.70	13.25	11.07
Dividends per ordinary share (p)	2.03	6.12	5.93	5.75	5.60

Notice of the 2020 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 are recommended to seek your own financial advice from your stockbroker, bank manager, solicitor, accountant or other independent adviser authorised under the Financial Services and Markets Act 2000 if you are resident in the UK or, if you reside elsewhere, another appropriately authorised financial adviser.

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 either to the purchaser or transferee or to the person who arranged the sale or transfer so they can pass these documents to the person who now holds the shares.

ZOTEFOAMS PLC Notice of Annual General Meeting

COVID-19

Zotefoams plc considers it vital to engage with investors and other stakeholders through the most appropriate channels. Shareholders' views are important and we want to ensure that they are given as much information as possible in good time to enable them to participate in the decision-making process.

The Stay At Home Measures ("Measures") in force at the time of issue of this notice prohibit public gatherings of more than two people.

Consequently, in order to ensure the safety of the attendees and allow the business of the meeting to be transacted, attendance by shareholders and proxies at the 2020 AGM will be prohibited while the Measures remain in place.

Shareholders are strongly encouraged to submit a proxy form indicating their votes in accordance with the notes below, and email any question for the Board to investorinfo@zotefoams.com a minimum of 48 hours prior to the AGM. The Board will do its best to answer these questions either during, or immediately after, the AGM, by email.

The Board is monitoring the situation and will make any further announcement required through the release of a RNS and on the AGM page of its website: <https://www.zotefoams.com/agm/>.

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 8 June 2020 at 10.00 am** for the following purposes. **In light of the Stay At Home Measures, no access to shareholders or proxies will be granted to the premises whilst the Measures remain in force.**

All resolutions will be proposed as ordinary resolutions, save for resolutions 14, 15, 16 and 17, which will be proposed as special resolutions.

Ordinary resolutions

- To receive the Annual Report of the Company for the year ended 31 December 2019.
- To approve the New Directors' Remuneration Policy set out on pages 58 to 63 in the Annual Report.
- To approve the Annual Statement by the Chair of the Remuneration Committee and the Annual Report on Remuneration for the year ended 31 December 2019 set out on pages 56 to 72 of the Annual Report.
- To elect A M Fielding as a Director.
- To elect C A Wall as a Director.
- To re-elect S P Good as a Director.
- To re-elect D B Stirling as a Director.
- To re-elect G C McGrath as a Director.
- To re-elect D G Robertson as a Director.

- To re-elect J D Carling as a Director.
- 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.
- To authorise the Audit Committee to determine the Auditor's remuneration.
- 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"):
 - 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
 - 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:
 - 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
 - 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;

- provided that, unless previously revoked, varied or extended, this authority shall expire on the earlier of 30 June 2021 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.

Special resolutions

- That if resolution 13 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:
 - 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
 - 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,

Notice of the 2020 Annual General Meeting

Continued

such authority to expire at the conclusion of the next Annual General Meeting of the Company (or, if earlier, on 30 June 2021) 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 if resolution 13 is passed, the Directors be authorised in addition to any authority granted under resolution 14 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 2021) 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.

16. 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 8 April 2020;
 - (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 2021 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.
17. That a general meeting other than an Annual General Meeting may be called on not less than 14 clear days' notice.

Dated: 9 April 2020
By order of the Board

Registered Office:
675 Mitcham Road
Croydon
CR9 3AL

L. Harratt
Company Secretary

The following notes are subject to Stay At Home Measures prohibiting attendance of the Annual General Meeting by a Member or Proxy

- (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 4 June 2020 (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 Chair 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 4 June 2020.
- (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 8 April 2020, 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 8 April 2020 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 business

Resolution 1 – Receiving the Annual Report

Shareholders will be asked to receive the Company's Annual Report for the financial year ended 31 December 2019, as required by law.

Resolutions 2 and 3 – Directors' Remuneration Policy and Remuneration Report

Resolution 2 seeks shareholder approval for the new Directors' Remuneration Policy, which can be found on pages 58 to 63 of the Annual Report. The new Directors' Remuneration Policy will replace the current Directors' Remuneration Policy which was approved at the AGM held on 17 May 2017. The new Directors' Remuneration Policy sets out the Company's future policy on Directors' remuneration, including the setting of the Directors' pay and the granting of share awards. Details on how the policy will be applied in practice in 2020 are set out in the Annual Report on Remuneration on pages 64 to 65 of the Annual Report. If Resolution 2 is approved, the new Directors' Remuneration Policy will become effective immediately.

Resolution 3 seeks shareholder approval of the remuneration report for the year ended 31 December 2019 which can be found on pages 56 to 72 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 76 to 80 of the Annual Report.

Resolutions 4 to 10 – Election and re-election of Directors

Resolutions 4 and 5 concern the election of A M Fielding and C A Wall, who were both appointed to the Board since the last AGM was held on 15 May 2019.

Resolutions 6 to 10 concern the re-election of the Directors, in accordance with the UK Corporate Governance Code.

Biographies for the Directors are set out on pages 48 to 49 of the report and financial statements for the year ended 31 December 2019. With the Chair having undertaken performance reviews of the Directors, and the Non-Executive Directors having undertaken a performance review of the Chair, the Board is satisfied that each Director continues to be effective and demonstrates commitment to the role and recommends that each Director should be elected/re-elected.

Resolutions 11 and 12 – Re-appointment of Auditor and their remuneration

Resolution 11 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 12 authorises the Audit Committee to determine the Auditor's remuneration.

Notice of the 2020 Annual General Meeting

Continued

Special Business

Resolution 13 – 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 8 April 2020, 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 13 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 8 April 2020, 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 13 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 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, which may include the allotment of shares to the Employee Benefit Trust for the purpose of fulfilling future potential awards.

Unless revoked, varied or extended, this authority will expire at the conclusion of the next AGM of the Company or 30 June 2021, whichever is the earlier.

Resolutions 14 and 15 – 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 14 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 8 April 2020, being the latest practicable date before publication of this notice. Resolution 15 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 2021, 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 16 – 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 8 April 2020, 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 2021, 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 8 April 2020, 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 679,320 ordinary shares in the capital of the Company representing 1.4% 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 1.5% of the Company’s issued ordinary share capital.

Resolution 17 – 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 17 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 EC2V 7QP

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London EC2Y 5ET

Financial Public Relations

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London EC3V 3ND

Auditor

PricewaterhouseCoopers LLP
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Crawley
Sussex RH10 1BG

Bankers

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3 Thomas More Square
London E1W 1WY

National Westminster Bank plc
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Crawley RH10 1DD

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Collyer Bristow LLP
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London WC1R 4TF

Registrars

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Financial calendar

AGM	8 June 2020
Payment of interim dividend	October 2020
Announcement of 2020 results	March 2021

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 BS13 8AE.

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www.investorcentre.co.uk/contactus



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