



Benchmark®

**DRIVING  
SUSTAINABILITY  
IN FOOD PRODUCTION**



**Benchmark Holdings plc**  
Annual Report 2018



# CONTENTS

## 01. Strategic Report

- 04 2018 Highlights
- 08 Benchmark at a Glance
- 10 Chairman's Statement
- 12 Market Overview
- 14 Investment Case
- 16 Business Model
- 18 Strategy and Progress
- 20 Strategy in Action
- 22 Chief Executive's Statement
- 28 Business Review
  - 28 Genetics
  - 30 Advanced Nutrition
  - 32 Animal Health
  - 34 Knowledge Services
- 36 Chief Scientific Officer's Statement
- 40 Financial Review
- 46 Sustainability
- 54 Our People
- 60 Risk Management
- 62 Principal Risks and Uncertainties

## 02. Governance

- 66 Introduction to the Board
- 70 Leadership
- 73 Effectiveness
- 76 Accountability
- 79 Remuneration
- 84 Shareholders
- 85 Directors' Report
- 89 Directors' Responsibility Statement

## 03. Financial Statements

- 92 Independent Auditor's Report
- 98 Consolidated Income Statement
- 99 Consolidated Statement of Comprehensive Income
- 100 Consolidated Balance Sheet
- 101 Company Balance Sheet
- 102 Consolidated Statement of Changes in Equity
- 103 Company Statement of Changes in Equity
- 104 Consolidated Statement of Cash Flows
- 105 Company Statement of Cash Flows
- 106 Notes Forming Part of the Financial Statements

## 04. Additional Information

- 156 Glossary
- 157 Advisers

Registered office:  
Benchmark Holdings plc  
Benchmark House  
8 Smithy Wood Drive  
Sheffield S35 1QN

Registered number:  
04115910



# 2018 HIGHLIGHTS

## Financial highlights

- Revenue increased by 8% to £151.5m. Revenue increased by 13% using the same foreign exchange rates experienced in 2017.
- Adjusted EBITDA<sup>1</sup> increased by 68% to £17.0m (2017: £10.1m). Margin increased to 11% (2017: 7%).
- Total investment in R&D (expensed and capitalised) of £19.4m. Driven by investment in next generation sea lice treatment.
- Operating loss for the period increased to £(9.1m) (2017: £(7.6m)).
- Loss for the period reduced to £(4.4m) (2017: £(7.1m)).
- Increase in net debt<sup>1</sup> to £55.7m (2017: £23.9m), primarily due to £32.7m capital investment.

## Operational highlights

### Animal Health

- Successful field trials of next generation sea lice treatment with three of the world's largest salmon producers showing 99%+ efficacy and no environmental impact.

### Genetics

- Successful trials of disease resistant shrimp in Vietnam, Thailand and China.
- Joint venture with AquaChile to accelerate penetration into world's second largest salmon market.
- Start of production at new land-based salmon egg production facility in Norway.

### Advanced Nutrition

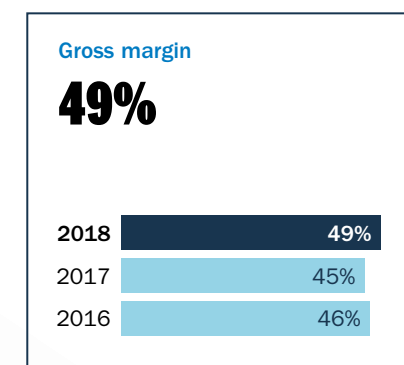
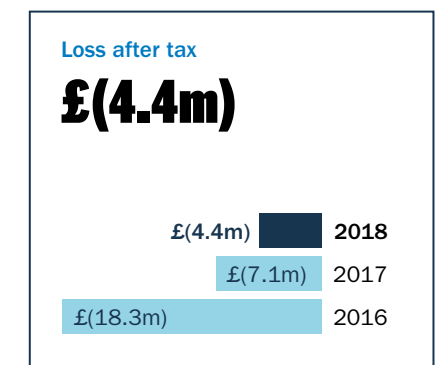
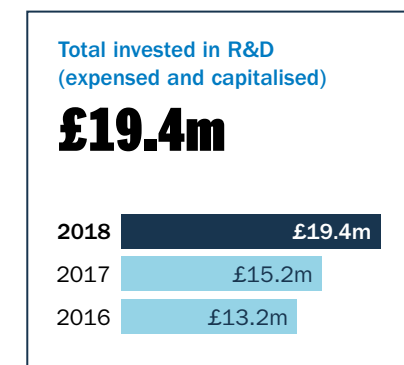
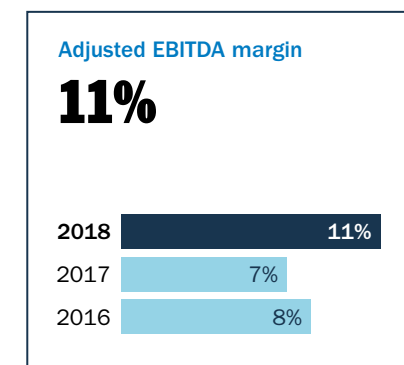
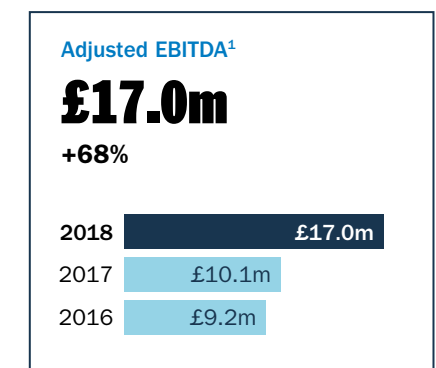
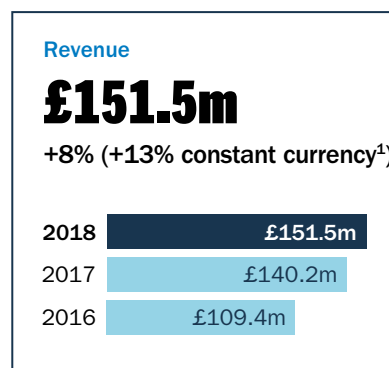
- Four new products launched and excellent progress made in the development of artemia replacement diets.

## Market leading positions

### #1 GLOBALLY

- Genomically selected salmon eggs
- Genetics services for global aquaculture breeding programmes
- Enhanced and enriched live feed (artemia)
- Specialist diets for early-stage shrimp and sea bass/bream
- Probiotics for early-stage shrimp and sea bass/bream

## Growth in revenues and Adjusted EBITDA<sup>1</sup>



<sup>1</sup> See financial review for definition of adjusted measures.





# 01

## STRATEGIC REPORT

- 04 2018 Highlights
- 08 Benchmark at a Glance
- 10 Chairman's Statement
- 12 Market Overview
- 14 Investment Case
- 16 Business Model
- 18 Strategy and Progress
- 20 Strategy in Action
- 22 Chief Executive's Statement
- 28 Business Review
  - 28 Genetics
  - 30 Advanced Nutrition
  - 32 Animal Health
  - 34 Knowledge Services
- 36 Chief Scientific Officer's Statement
- 40 Financial Review
- 46 Sustainability
- 54 Our People
- 60 Risk Management
- 62 Principal Risks and Uncertainties

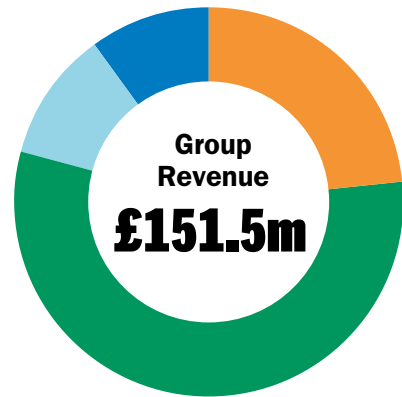


Image: Benchmark's new land-based salmon egg production facility, Salten, Norway.



BENCHMARK AT A GLANCE

# DRIVING SUSTAINABILITY IN FOOD PRODUCTION



- Genetics
- Animal Health
- Advanced Nutrition
- Knowledge Services

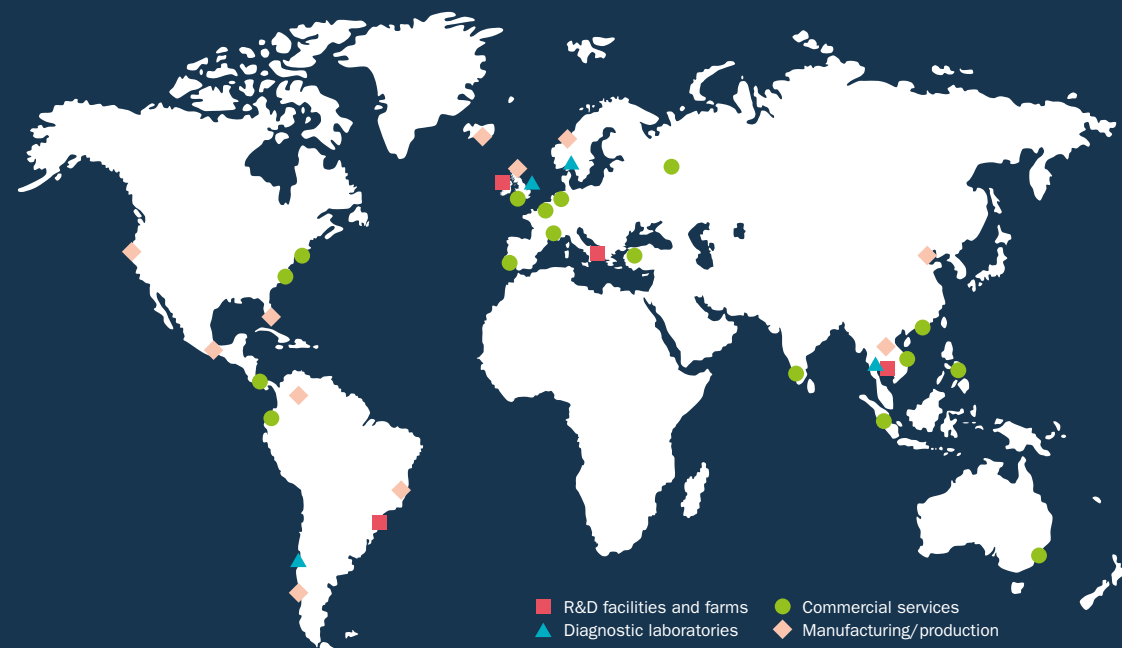
Our mission is to enable food producers to improve their sustainability and profitability.

We bring together biology and technology, to develop innovative products, which improve yield, quality and animal health and welfare for our customers.

We aim to be aquaculture's leading provider of solutions in genetics, health and specialist nutrition.

### Being close to our customers is key

We have large-scale production facilities in seven countries, covering the main aquaculture regions, supported by a network of R&D and commercial operations in an additional 20 countries. Having a strong local presence is important for an efficient supply chain and to minimise the regulatory risk.

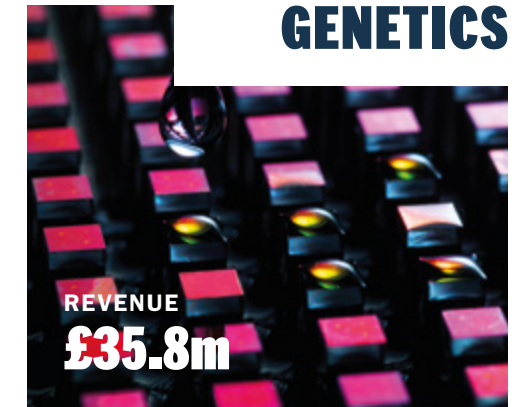


## OUR DIVISIONS

We are a world-leading provider of aquaculture genetics. By combining our long-established breeding programmes and the latest genomic tools, we continuously grow better fish and shrimp to help aquaculture producers increase quality, yield, health and welfare. We do this by analysing DNA and identifying markers that are linked to desirable traits like growth, quality and disease resistance. We then select fish and shrimp with the strongest genetic profile and breed them to continuously improve; offering the resulting eggs, breeders or fry to our customers.

We aim to remain at the forefront of technology, and constantly evaluate new techniques including gene editing, where we are participating in a research programme with the Roslin Institute in Edinburgh.

### GENETICS



### ADVANCED NUTRITION



We are a world-leading provider of specialist nutrition, preventative health products and environment solutions for the early stages of shrimp and fish production. We have secure access to high-quality live feed (artemia) which, enhanced by our technology, improves nutrition and resilience.

Fry and larvae quality is one of the main drivers for successful fish and shrimp farming. This is why we develop products that help early-stage fish and shrimp develop to their full potential throughout the production chain. Every day our products and protocols prove their added value in hundreds of hatcheries and farms worldwide.

### ANIMAL HEALTH



Disease outbreaks and parasites remain the largest restriction on the growth of the aquaculture industry. Benchmark is developing solutions for some of the most persistent diseases in salmon, shrimp and marine finfish, including sea lice in salmon and viral diseases of fish. We tackle unmet needs with both preventative methods and treatments, including vaccines, medicines and sea lice treatments.

Our locations around the world give us first-hand knowledge of emerging health issues in the key aquaculture regions and species, permitting more effective diagnosis, treatment and disease management advice.

### KNOWLEDGE SERVICES



The Knowledge Services division helps Benchmark maintain key opinion leader status in the aquaculture industry. Our Knowledge Services Division also complements our product offering across Genetics, Advanced Nutrition and Animal Health by delivering education and data solutions which help our customers manage their farms, train their employees and adopt new products and technologies.

Our education solutions include professional certifications, training, news platforms and industry events. Our data solutions include a new fish health portal which is being trialled by 70% of Norwegian fish health providers.



## CHAIRMAN STATEMENT

# COMMERCIAL DELIVERY OF PIPELINE CONTINUES TO BE STRATEGIC PRIORITY



I am confident that we are well positioned to be aquaculture's leading provider of solutions in genetics, health and specialist nutrition. Our medium-term target is to generate double digit compound annual growth in revenues and underlying profits and to deliver a 25% Group Adjusted EBITDA<sup>1</sup> margin.

**Peter George**  
Chairman

## Introduction

I am pleased to present my first report as Chairman having joined the Board in May 2018. I was excited to join the Group given its prospects, and since joining I have seen first-hand the excellent market positions, people and technology across the Group.

The year under review has been a successful one for Benchmark with growth in revenues and underlying profits alongside good progress in developing our strategy, completing major projects and strengthening the management team.

## Strategy review

My first priority as Chairman was to conduct a detailed review of our strategy, the results of which are very encouraging. We have strong positions in each of our established markets, with capacity to grow.

In salmon, where we are the world's leading provider of salmon eggs and genetic services to the aquaculture industry, our new facility in Norway and our Joint Venture in Chile will help us to grow organically in all our key markets. In shrimp, where we are the leaders in specialist nutrition for hatchery, we are uniquely positioned to introduce our disease resistant shrimp, leveraging our capabilities in genetics — unlike in salmon, development of genetic improvement for disease resistance in shrimp is at an early-stage. Combined with the scale of shrimp aquaculture, this represents a very significant opportunity for Benchmark.

In Animal Health, our youngest business, commercial delivery of our pipeline continues to be a strategic priority to drive investment returns.

Our continued success with commercial-scale field trials for our next generation sea lice treatment combined with our breakthrough CleanTreat® system gives us confidence in the potential of our solution. With Alex Raeber joining Benchmark as Chief Scientific Officer we have greatly strengthened our leadership team, particularly with regards to the aquaculture health opportunity. Alex's focus will be on delivery of the key elements of the pipeline and on taking full advantage of our R&D capabilities across the Group.

Our review has brought clarity to our strategy in our Knowledge Services division. We have identified certain non-core activities from which we are exiting or disposing, and have refocused our efforts on areas that position us as key opinion leaders in our markets and strengthen and differentiate our offering — data services, education and training, and veterinary consulting.

Early in the year we announced the review of the activities that fall outside of aquaculture. As a result we decided to pursue a licensing agreement for our companion animal products in the pipeline. The out-licensing process is ongoing with substantial progress being made. We have received strong interest, and expect to provide an update in the coming months.

Going forward, the Group's strategy will focus upon improving delivery of shareholder returns, by focusing on the efficient use of capital and implementing strategic KPIs that will drive our growth, profitability and cash flow. Our medium term target is to generate double digit compound annual growth in revenues and to deliver a 25% Group Adjusted EBITDA<sup>1</sup> margin.

## Summary — strong market drivers and opportunities

There are very strong drivers in our markets, including the increasing consolidation and professionalisation of our aquaculture customers; the regulatory emphasis on environmental impact and biosecurity; and consumer trends, such as interest in provenance and in reducing the use of antibiotics.

We are extremely well placed to be aquaculture's leading provider of solutions in genetics, health and specialist nutrition taking advantage of the significant opportunities these markets segments, which are growing considerably faster than the overall aquaculture market, present. These three complementary areas contribute significantly to increase yield, quality and animal health and welfare for our customers which is our primary aim.

In the next three years we expect to deliver commercial success for our next generation sea lice treatment and CleanTreat® building up to peak revenues of at least £45m; deliver double digit returns on the Salten capital investment of £40m and establish ourselves as a leading global provider of shrimp genetics.

I believe that Benchmark is a highly valuable and attractive asset given its skilled team, market leading positions, well invested platform and growth strategy. Our business model is already delivering high margins and cash generation is expected to come through, which will enable us to both de-gear and continue to invest.

My job is to support the management team by helping them focus on making this happen.

<sup>1</sup> See financial review for definition of adjusted measures.



MARKET OVERVIEW

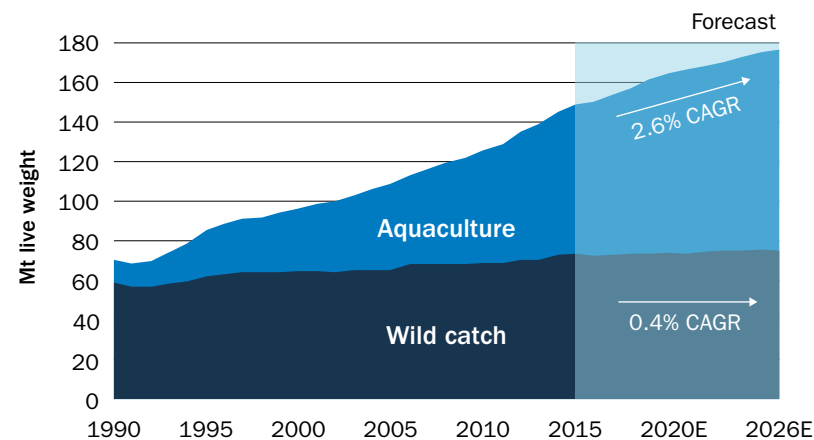
# SUSTAINABLE FOOD PRODUCTION IS ONE OF THE BIGGEST CHALLENGES TODAY



Benchmark addresses this challenge by delivering solutions that improve the sustainability and profitability of aquaculture producers.

### Aquaculture plays a big and increasing role in meeting the global protein demand, which is expected to double by 2050

- Aquaculture already accounts for 50% of the world's fish consumed as food.
- Fish consumption is growing faster than all other major animal protein sources.
- With wild catch capped, the aquaculture industry faces a great opportunity as well as the challenges that come with accelerated growth.



Source: United Nations, OECD-FAO Agricultural Outlook 2017-2026

### Benchmark's large and growing markets

Genetics, Health and Nutrition play a fundamentally important role in addressing the needs of producers, consumers and regulators by improving sustainable productivity at the key stages in the production life cycle.

Increasing recognition of the value of these solutions and greater professionalism in the industry are driving more rapid adoption of new products and technologies, meaning that our market segments are growing at a much faster rate than the already growing aquaculture industry.

## MARKET DRIVERS

### Producers' continuous drive for productivity, profitability and growth

The most important driver of productivity and profitability for fish and shrimp farmers is **biological performance**, which combines **growth, health and survivability**.

Benchmark's products deliver substantial value for our customers. For example, in the area of genetics, Benchmark's IPN (infectious pancreatic necrosis) resistant salmon eggs can reduce mortality by as much as 85% while delivering significant growth improvement.

### Growing consumer awareness

Consumers today are increasingly concerned with the use of **antibiotics, environmental impact, climate change** and **fish welfare** putting pressure on retailers and producers. Benchmark's focus on developing sustainable solutions aligns the interests of consumers, retailers and producers.

**Benchmark's unique approach to disease management reduces the need for medicines and antibiotics:** Benchmark offers disease resistance through genetics and vaccines, resilience through advanced nutrition and targeted treatments for disease outbreaks.

**Breakthrough solutions to reduce environmental impact:** Benchmark's CleanTreat® system eliminates medicinal residues addressing one of the industry's main concerns.

**Fish welfare is one of the pillars of Benchmark's sustainability strategy:** In every product we develop and in each of our operations welfare is a core criterion and goal. Our deep understanding of fish biology and farming methods uniquely position us to drive improvement in the global aquaculture markets.

### Increasing regulatory standards

Governments want to ensure that the growing aquaculture sector is sufficiently regulated to address **sustainability concerns**, while continuing to play a key role in satisfying protein demand and in promoting economic growth.

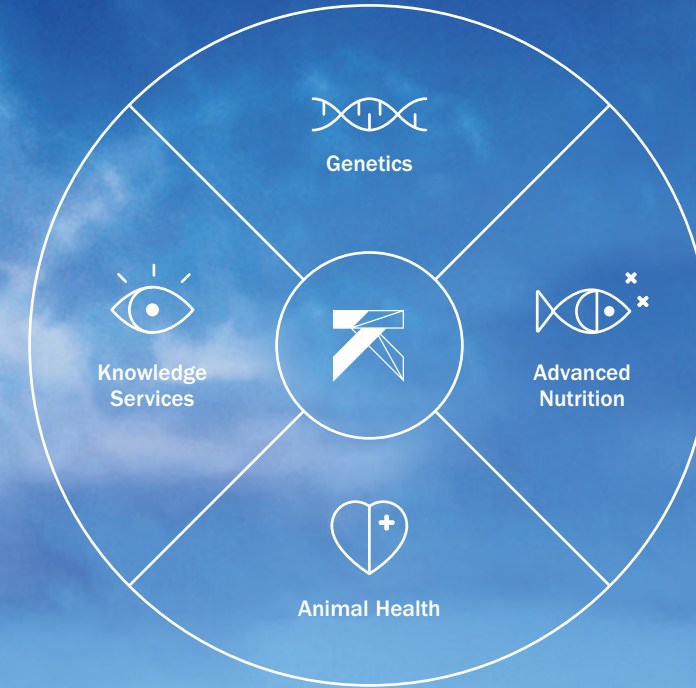
Benchmark's unique position as a technology and thought leader allows us to anticipate future trends, developing products and services that help our customers grow profitably while meeting the evolving regulatory standards.

### Our products contribute significantly to our customers' success

<p><b>SALMON</b></p> <p><b>85%</b></p> <p>reduction in Infectious pancreatic necrosis (IPN) introduction of quantitative trait loci (QTL)</p>	<p><b>TILAPIA</b></p> <p><b>15%</b></p> <p>growth gain per generation</p>	<p><b>Thought leadership in action</b></p> <p>In 2018 Benchmark became a founding member and only foreign entity in the Chinese National Shrimp Alliance, set up by the Chinese Government to raise the standard of Chinese shrimp farming.</p>
---	---	---



# INVESTMENT CASE



## High growth markets

Genetics, health and specialist nutrition are growing faster than the already growing aquaculture industry.

## Unique model

Benchmark has a differentiated model bringing together genetics, animal health and advanced nutrition which, when combined, generate synergies and contribute significantly to improve the sustainability and profitability for our customers.

## Barriers to Competition

We are market leaders with strong customer relationships, leading brands, deep market insight and long-established genetic breeding programmes.

## Scalable

Following a period of investment and past peak capital expenditure, we have production capacity and a global distribution network to support organic growth.

## Potential to deliver attractive returns

Our platform is capable of delivering double-digit growth and a 25% Adjusted EBITDA<sup>1</sup> margin in the next three to five years.

<sup>1</sup> See financial review for definition of adjusted measures.



Image: Benchmark's land-based salmon egg production facility, Chile.



# BUSINESS MODEL

Benchmark has a broad portfolio of products and solutions to serve our customers in the global aquaculture industry. Our main products are salmon eggs, live feed (artemia) and sea lice treatments.

## KEY ASSETS

### Insight

Our industry knowledge, strong customer relationships and team of experts in all key aquaculture regions provide us with deep insight into existing and emerging challenges for producers.

### Innovation

We have a team of over 100 scientists and a network of relationships with scientific organisations which have enabled us to build a valuable portfolio of patents and a pipeline of innovative solutions to unmet needs.

### Our people and culture

The founding vision for Benchmark was based on the need to build a global food chain that is more efficient, economical, ethical, environmentally friendly and fit for the future. This is part of our culture and our people are driven by the desire to make a difference.

### State-of-the-art manufacturing

We operate secure and scalable manufacturing facilities with capacity for growth.

### Distribution

We have a unique distribution network in aquaculture which allows us to serve more than 1,400 customers in 70 countries.

## OUR TECHNOLOGY

We develop genetics, nutrition and health solutions that help producers improve their sustainability and profitability. Our knowledge services offering, focused on education and data services are contributing enablers of our solutions.

**Genetics**

Improved genetics are the best start for disease resistance.

**Advanced Nutrition**

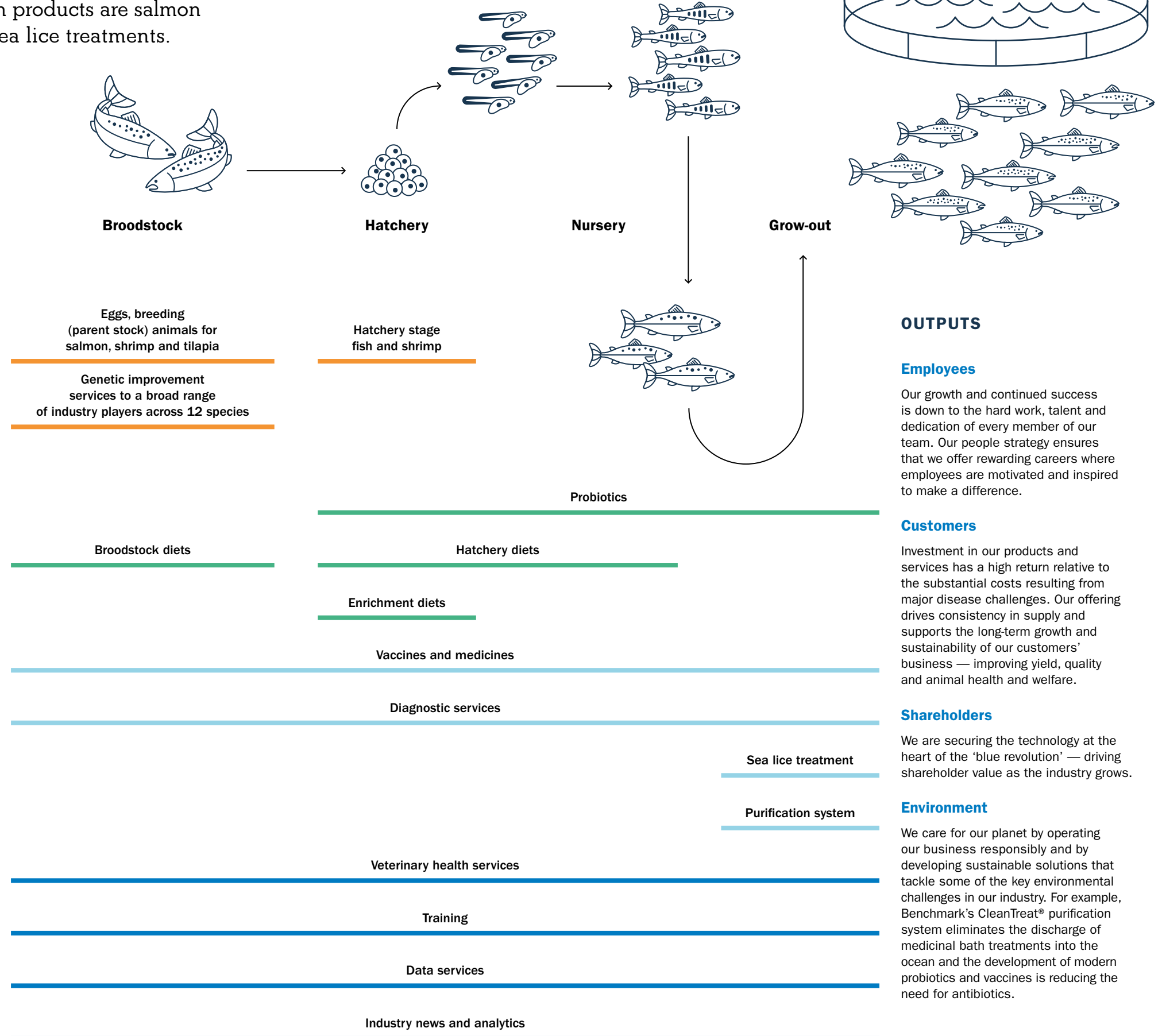
Specialist feed promotes growth and immunity.

**Animal Health**

New vaccines prevent disease and targeted treatments manage disease outbreaks.

**Knowledge Services**

Our offering includes industry education through accredited courses, training, conferences and publications and data and consultancy solutions.



## OUTPUTS

### Employees

Our growth and continued success is down to the hard work, talent and dedication of every member of our team. Our people strategy ensures that we offer rewarding careers where employees are motivated and inspired to make a difference.

### Customers

Investment in our products and services has a high return relative to the substantial costs resulting from major disease challenges. Our offering drives consistency in supply and supports the long-term growth and sustainability of our customers' business — improving yield, quality and animal health and welfare.

### Shareholders

We are securing the technology at the heart of the 'blue revolution' — driving shareholder value as the industry grows.

### Environment

We care for our planet by operating our business responsibly and by developing sustainable solutions that tackle some of the key environmental challenges in our industry. For example, Benchmark's CleanTreat® purification system eliminates the discharge of medicinal bath treatments into the ocean and the development of modern probiotics and vaccines is reducing the need for antibiotics.



# STRATEGY AND PROGRESS

Our vision is to be the leading provider of solutions in genetics, health and specialist nutrition.

We have market leading positions, a portfolio and pipeline of innovative products and a global commercial, production and distribution platform to achieve our vision.

## OUR STRATEGY

### 1 Grow in established markets from existing capacity and through partnerships

We have invested in a platform that allows us to deliver organic growth and operational leverage without significant additional investment.

### 2 Commercial delivery of pipeline products

A key priority for Benchmark is to commercialise its rich pipeline of products developed over the last 10 years.

### 3 Focused investment in markets that leverage Group platform

By applying our technologies across species and geographies we will penetrate new attractive markets, realising synergy opportunities across the Group.

### 4 Position Benchmark in areas of future growth

Through our technology platform and industry knowledge we are well-placed to establish an early position in new areas as aquaculture develops.

## 2018 PROGRESS

- Increased our salmon egg production capacity by 75% through our new facility in Norway and entered into a JV with AquaChile. The increased capacity leverages our market and technology leadership in genetics, setting the foundation for future growth.
- Identified opportunity to expand our Advanced Nutrition business into the farm segment of shrimp production with our specialist nutrition products including probiotics.

- Significant milestones achieved in the commercial launch of our next generation sea lice treatment and CleanTreat®.
- Superior performance in trials of sea bass and sea bream vaccine.
- Progressed partnership options for commercialisation of companion animal products in the pipeline.

- Successful trials conducted in Thailand and Vietnam for our disease resistant shrimp (SPR). Addressing a significant unmet need in the market. This initiative leverages our expertise in genetics and our market presence in shrimp hatcheries.
- Identified probiotics as an opportunity to apply our expertise in shrimp, to salmon and tilapia.

- Continued breeding and genetics programme for tilapia.
- Provided genetics consulting services and managed genetic programmes for 12 species.
- Continued to develop proof of concept products and platform technologies including oral delivery of vaccines.

## 2019 PRIORITIES

- Full commercial opening of land-based salmon egg production facility in Norway with additional fish brought into the facility in 2019 to ramp up egg volumes.
- Expanding egg production to meet the requirements of the Chilean market through enhancement of infrastructure and optimisation of production systems and genetics.
- Development of commercial capabilities to increase penetration of farm grow-out segment for shrimp.

- Continue next generation sea lice treatment field trials with extension into new region.
- Commence additional trials for bivalent and multivalent sea bass/bream vaccines.
- Continue development of salmon vaccine portfolio.
- Finalise partnership for companion animal products.

- Conduct commercial-scale trials for our disease resistant shrimp.
- Establish supply chain to commence sales of SPR shrimp into first Asian market.

- Continue development aligned to industry trends and Group priorities.

## Enablers of our strategy

We have identified four areas of focus to support the delivery of our strategy

## INNOVATION

Our goal is to be a recognised technology leader through our breakthrough solutions and superior products.

- Innovation is at the heart of what we do. We use our industry insight, and R&D and technology expertise, supported by data, to maintain a focused pipeline of innovative solutions targeted at unmet needs which are commercially attractive.
- The appointment of Alex Raeber as our Chief Scientific Officer brings leadership and a wealth of experience to our R&D programmes across the group, facilitating the prioritisation of opportunities and optimal utilisation of resources across the Group.

## INTEGRATION

Further integration across the Group will allow us to realise synergies and to accelerate our commercial progress.

- We continue to tighten our organisational structure to drive integration and have identified brand development as an opportunity to streamline our marketing and customer services across the Group.
- This effort is being led by Doerte Laue who joined Benchmark as Group Marketing Director in October 2018 and brings over 20 years of marketing experience in the sector.

## EFFICIENCY

The efficient allocation of capital and resources are a Group priority that will drive shareholder value.

- As a growth company with large opportunities we are highly focused on maintaining an efficient cost structure and clearly defined investment criteria to support capital allocation.
- The implementation of Group wide KPIs aligned to execution milestones and operating performance further aligns our efforts with Group priorities.

## PEOPLE

Our people are key to delivering our strategy and we continue to invest in developing a team with the specialist skills and experience to execute our strategy.

- Our focus is on attracting, developing and retaining the best talent who are passionate about our vision.
- We continue to invest in people with the specialist skills, relationships and reputation in the sector, including Alex Raeber and Doerte Laue's appointments. We will also continue to invest in training and development programmes to develop our team.
- In 2019 we will launch an employee "Being Well" programme to help our people reach their personal potential at Benchmark.



STRATEGY IN ACTION

# GROWTH IN ESTABLISHED MARKETS

## Salmon eggs produced to the highest quality and biosecure standards.

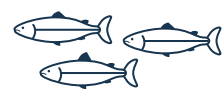
Farmed salmon is a highly efficient source of protein production, and continues to outperform other protein sectors (chicken, beef, pork) when it comes to key data such as feed conversion ratios, protein retention and carbon footprint. Aquaculture is one of the most eco-efficient ways of producing protein, and salmon farming is leading the way in aquaculture innovation.

During the year, Benchmark achieved two significant milestones in its strategy to serve producers with high-quality, robust salmon to help grow their profitability and sustainability, as well as to establish a leading position in key markets.



### Salmon farming — carbon footprint<sup>1</sup>

A carbon footprint measures the total greenhouse gas emissions caused directly by the production of a product. Carbon footprint is measured in tons of carbon dioxide equivalent (tCO<sub>2</sub>e) per ton edible protein of the product.



**9.8**

**SALMONIDS**



**42.3**

**CHICKEN**



**56.7**

**PORK**

**Salmonids:** includes farmed salmon and trout.

CO<sub>2</sub>e is calculated by multiplying the emissions of each of the six greenhouse gases (CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs, PFCs and SF<sub>6</sub>) by its 100-year global warming potential (GWP)

<sup>1</sup> Improving Productivity and Environmental Performance of Aquaculture — World Resources Institute and Global Salmon Initiative.



Image: Benchmark Genetics Chile team.

### Joint venture with AquaChile

In June 2018 Benchmark and AquaChile, the world's 6th largest salmon producer, signed an agreement to form a breeding and genetics joint venture. The joint venture, named Benchmark Genetics Chile, will produce eggs in high-quality biosecure land-based facilities in Chile, supported by Benchmark Genetic's land-based breeding operations in Iceland and genetic technology from Benchmark's Akvaforsk Genetics in Norway. Benchmark Genetics Chile is expected to supply AquaChile's entire Atlantic salmon egg requirement and other customers.

Matias Del Campo, CEO of Benchmark Genetics Chile (pictured 2nd from left), commented:



We are very pleased to have the key people in the new management in place and ready to take on strategic efforts to establish the company as an independent genetics supplier to the Chilean aquaculture industry.

**Matias Del Campo**  
CEO of Benchmark Genetics Chile

The new Company will combine leading-edge technology in salmon genetics and genomics from Benchmark and AquaChile to drive progress in the future on many of the key traits to the Chilean Industry, including resistance to diseases such as SRS and sea lice.

### Progressive step for salmon production in Norway

Following two years of construction, Benchmark's new SalmoBreed Salten land-based salmon-egg production facility was completed and delivered on time in September 2018. The 10,000 square-metre facility increases Benchmark's salmon egg production capacity by 150 million eggs per year and serves growing global demand for year-round ova from land-based, biosecure facilities.

The project marks a first for salmon production in Norway. The site has 14 employees and has already produced around 15 million eggs.

Malcolm Pye, commented:

"At Salten we are pushing forward the technology first developed in Iceland that gives us highly biosecure production and the ability to supply our customers outside the natural spawning season with top quality eggs every week of the year."



## CEO STATEMENT

2018 WAS A  
SUCCESSFUL YEAR

We are looking forward to bringing further important new products and disruptive technologies into the market in the next phase of our growth.

**Malcolm Pye**  
Chief Executive Officer

2018 was a successful year for Benchmark. The Group achieved good growth in revenues, delivered Adjusted EBITDA<sup>1</sup> ahead of market expectations and made substantial progress in implementing its strategy. Particular highlights in the year included the joint venture with AquaChile to accelerate penetration in the world's second largest salmon market; the opening of a new state-of-the-art salmon egg production facility in Norway; the continued success of commercial-scale trials for our next generation sea lice treatment with CleanTreat®; and the successful field trials for our disease-resistant shrimp in three key Asian markets. These strategic projects will drive future growth and profitability.

In addition, we made good progress in our product pipeline and launched six new products across the Group. We are well placed to capture the significant opportunities in our markets, which have stronger drivers than ever before amid increasing recognition from consumers, producers and regulators of the need for sustainable solutions for the aquaculture industry.

Our clear focus remains on aquaculture. Our strategy for the companion animal products in our pipeline is to establish a licensing agreement with a suitable partner. We have made substantial progress towards this during the year, with strong interest received from industry leaders. I look forward to providing a further update in the coming months.

#### Group performance

The Group performed well during the year, with revenue and Adjusted EBITDA up by 8% to £151.5m and 68% to £17.0m respectively. Our target is to generate double-digit compound annual growth in revenues and Adjusted EBITDA, reaching a 25% Adjusted EBITDA margin for the Group within five years. Genetics and Advanced Nutrition, two of our three core divisions delivered Adjusted EBITDA margins above 20% this year. In Animal Health, our third division, there is increasing visibility of future profitability as we progress our field-scale trials for our sea lice treatment and for our sea bass/bream vaccines. We have also re-focussed our Knowledge Services division which delivered positive Adjusted EBITDA during the year. This, together with our ongoing work to realise efficiencies and reduce our cost base, gives us confidence in our ability to reach our target.

#### Genetics

Our Genetics division delivered another robust performance with revenues and Adjusted EBITDA increasing by 17% and 36% to £35.8m and £7.9m respectively, achieving an Adjusted EBITDA margin of 22%. This is a result of our technology leadership and strong position in our key markets and growing demand for salmon eggs with a superior genetic profile.

We are continuously working to offer incremental genetic improvements to our customers, particularly in the area of disease resistance. During the year we launched new cardiomyopathy syndrome (CMS) resistant eggs which were very well received with demand outstripping supply and demand for our sea lice resistant eggs also exceeded supply. Our new facilities in Salten, Norway, and Chile, through the JV with AquaChile, enable us to meet that demand and underpin our future growth and profitability in salmon genetics.

In shrimp, the first field trials with our new Specific Pathogen Resistant (SPR) shrimp breeding stock also got underway during the year in the key markets of Vietnam, China and Thailand. I am very pleased that these trials reported very encouraging initial results, regarding disease resistance and growth performance, which we believe will enable us to build a very significant new business in shrimp genetics.

#### Advanced Nutrition

Advanced Nutrition also performed strongly with revenues rising by 2% to £85.8m and Adjusted EBITDA by 22% to £21.6m, and an Adjusted EBITDA margin of 25%. There was increasing demand for our higher margin, specialist replacement diets and health products as shrimp producers increasingly recognise the benefits that our products have on their yield and profitability. We expect this trend to continue benefitting from the ongoing consolidation and professionalisation in the shrimp production industry which favours our innovative products.

During the year we launched four new products in Advanced Nutrition, completed upgrades on well-established brands and continued the development of our artemia replacement diets according to plan. Post period end, we announced the successful defence of a patent infringement in Asia relating to our artemia technologies. We have a strong patent portfolio across the Group with a portfolio of 240 patents which we will continue to robustly defend in each of our markets.

#### Animal Health

In Animal Health our focus has been on delivering the products in our pipeline that are in the later stages of development, particularly our highly innovative next generation sea lice treatment. This is in commercial-scale field trials with three of the world's largest salmon producers and these are progressing well, having delivered almost 100% efficacy with improved animal welfare and no environmental impact. We are continuing trials in Norway and are preparing for field trials in other markets. Feedback from customers so far points to a high acceptance of our new treatment as sea lice continues to be recognised as the biggest challenge for the salmon aquaculture industry.

In our sea bream and sea bass vaccine portfolio, recent trials show strong performance of our products and as a result, we have prioritised their development with commercial field trials expected to commence during 2019. Aquaculture vaccines is a fast-growing market which is forecast to double by 2025. We continue to progress our portfolio of new vaccines across the major finfish species.

During the year we conducted a review of our pipeline of new products in Animal Health. This has resulted in a more efficient and streamlined approach to R&D spend and a focus on those opportunities where we can achieve the highest risk-adjusted return. It has also resulted in the deceleration of some less strategic products that target longer term market opportunities.

#### Knowledge Services

Knowledge Services, our smallest division, performed well with revenues rising by 14% to £15.8m and Adjusted EBITDA improving from a loss of £0.9m to a profit of £0.2m. During the year we conducted a review of the division with particular focus on those activities that fall outside of our core aquaculture markets. As a result, we disposed of certain elements of our publishing business and closed two sites in our veterinary services practice. This review has identified other opportunities which we expect to deliver on during the coming period. These changes are expected to improve our focus and profitability.

Knowledge Services, which includes our aquaculture veterinary consulting services, data services, education and training, is an important component of our differentiated offering, contributing to the success of our customers in maximising yield and managing disease,

<sup>1</sup> See financial review for definition of adjusted measures.



and helping us to take a thought leadership position in our industry. Knowledge Services will play an important role as we continue to integrate our aquaculture solutions, developing protocols across genetics, health and nutrition to address our customers' needs. Our recently launched health portal, a data collaboration tool for salmon, is now being trialled by 70% of the fish veterinary practices in Norway.

### Our markets and strategy

During the year we concluded an in-depth strategic review of our business. Our strategy is guided by our mission to drive improvements in sustainability in aquaculture production that lead to profitable outcomes for our customers. We seek to achieve this by developing innovative products that improve yield, quality and fish health.

Over the past years, through acquisitions and organically, we have built a scalable, technology rich platform with leading market positions. Looking forward, our strategy is to grow organically by leveraging the capabilities across the Group taking advantage of the very significant opportunities facing us in the fast evolving aquaculture sector. Further integration of the Group will be an important enabler of our strategy.

### Our markets

Our markets in Genetics, Advanced Nutrition and Animal Health complement each other and play a critical role in aquaculture production. They drive biological performance which in turn drives productivity. They also have the potential to address consumers' growing concerns on animal welfare, use of antibiotics and sustainability. Animal welfare is intrinsically linked to productivity; poor animal welfare reduces biological performance and raises the cost of production. A good example of how our three areas of technology complement each other is Benchmark's approach to sea lice, where we are developing a holistic solution that maximises resistance through genetics and vaccines, and that, in the case of an outbreak, offers a treatment which has no impact on animal welfare or on the environment. We are also developing probiotics for salmon which are designed to increase resilience in the fish overall. We believe our platform across the three critical technology areas gives us a unique position in the market.

We estimate our markets in salmon and shrimp, our two main target species, to be c. £1bn each in size, and growing faster than the aquaculture industry itself. They provide significant

### Strategy

Our five-year strategy can be summarised in four main components which are aimed at delivering growth and profitability and at positioning Benchmark as aquaculture's leading provider of solutions in genetics, animal health and advanced nutrition.

1. Grow in established markets from existing capacity

2. Commercial delivery of pipeline products

3. Focused investment in markets that leverage Group platform

4. Position Benchmark in areas of future growth

opportunity for Benchmark to grow and to generate attractive shareholder returns through a combination of growth in our key markets and organic expansion into new areas.

#### 1. Grow in established markets

There is significant potential for organic growth in our business in established markets where we have a strong market position. During the year we built additional capacity in Genetics and made excellent progress in the development of our artemia replacement diets which will support future growth in our core markets. Going forward we see an opportunity to expand from our strong position in hatchery and nursery into the shrimp farm grow-out segment with a targeted offering from our Advanced Nutrition portfolio.

#### 2. Commercial delivery of pipeline products

The commercial delivery of our animal health products continues to be a key priority for the Group as a driver of future profitability and industry leadership. We made good progress towards the commercialisation of our next generation sea lice treatment and of our sea bass/bream portfolio of vaccines with more to follow.

#### 3. Focused investment in new markets that leverage the Group's platform

##### SPR shrimp

Shrimp genetics is an attractive growth opportunity for the Group which leverages our capabilities and experience in salmon and our leading position in shrimp hatchery diets, where we believe we can achieve a high return on our R&D investment to date. Shrimp genetics that provide disease resistance is an unmet need which we are well placed to address. In late 2017, we commenced trials of our SPR shrimp in Vietnam, Thailand and China. The results to date show our stock performing strongly both in terms of survival and growth.

Our SPR shrimp has genetic resistance to a number of diseases including white spot and EMS which have been responsible for high mortality rates in Asia and Latin America in recent years. We plan to roll out our product in the five main shrimp producing countries in Asia with the first markets coming onstream in late 2019. Our strategy envisages leveraging our strong relationships in these markets by establishing joint ventures to accelerate the roll-out and reduce our capital commitment. Over time we anticipate disease resistant shrimp genetics to follow the experience of the salmon industry where the penetration of professional genetics is estimated to be more than 90%.

##### Probiotics

Probiotics improve the animal's gut health and prevent the establishment of invasive bacteria. This reduces the need for treatment with antibiotics. Probiotics also increase food conversion efficiency and improve sustainability of production. This is a fast developing area of technology with great potential.

Benchmark has an established portfolio of probiotics for shrimp and sea bass and bream which it continues to develop. Our five-year strategy envisages leveraging our technology expertise and our strong position in salmon to develop and launch a range of probiotics for salmon.

#### 4. Position Benchmark in areas of future growth

We believe that our technology platforms together with our international footprint and network, uniquely position us to establish a strong position in emerging aquaculture markets as they develop, including tilapia. Our experience and involvement in genetics of setting up and managing breeding programmes across more than 12 species and technologies in health and nutrition provide a solid platform for future growth in new species.

### Outlook and current trading

The growth drivers for our business remain strong, with an increasing need for solutions that improve productivity in the growing aquaculture sector to support sustainable food production meaning that the areas of the market we address are growing considerably faster than the overall aquaculture market.

The Group has started the current financial year trading ahead of the same period last year, and is trading in line with expectations for the full year. Trading has commenced strongly in Genetics, with high demand for our disease and sea lice resistant salmon eggs. Our Advanced Nutrition business in shrimp has started relatively slowly due to temporary volatility in the global

shrimp market, but the outlook from spring onwards is positive. In Animal Health, we are planning to extend trials of our next generation sea lice treatment into new markets in 2019. We are making substantial progress towards establishing a partnership for our companion animal products.

The Group continues to monitor developments regarding the UK's forthcoming exit from the European Union and any potential impact on the Group's business. The Group has developed mitigating actions and contingency preparations which will enable it to maintain the supply of its products to customers, and remains confident in its strategy and flexibility to adapt to changes.

Over the next 18 months we expect to see our investment in a number of areas, such as our next generation sea lice treatment, our disease resistant shrimp and our new facility in Norway, starting to deliver, resulting in high growth in revenues, attractive margins and cash generation, which will increase our financial flexibility and deliver attractive shareholder returns.



Image: Benchmark's state-of-the-art vaccine manufacturing facility, Braintree, UK.



STRATEGY IN ACTION

# FOCUSED INVESTMENT IN MARKETS THAT LEVERAGE OUR PLATFORM

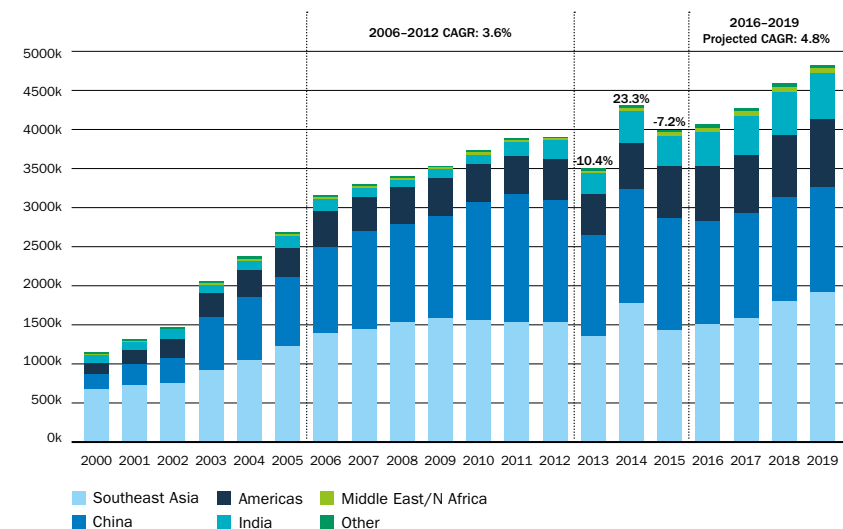


Shrimp and prawns are some of the most popular types of seafood consumed worldwide, driven by a trend for high protein, low-fat foods in both developed and developing countries.

### Top producing countries

Southeast Asia is the biggest producer of shrimp, of which China represents the largest market in terms of production, followed by the Americas and India.

Shrimp aquaculture production by world region: 2000-2019



Sources: Global Aquaculture Alliance (2017). FAO (2017) for 2000-2009; GOAL (2011-2016) for 2010-2015; GOAL (2017) for 2016-2019. Southeast Asia includes Thailand, Vietnam, Indonesia, Bangladesh, Malaysia, Philippines, Myanmar and Taiwan. *M. rosenbergii* is not included.

Based on species, the market is segmented into:



*Penaeus vannamei* (or whiteleg shrimp)



*Penaeus monodon* (or black tiger shrimp)

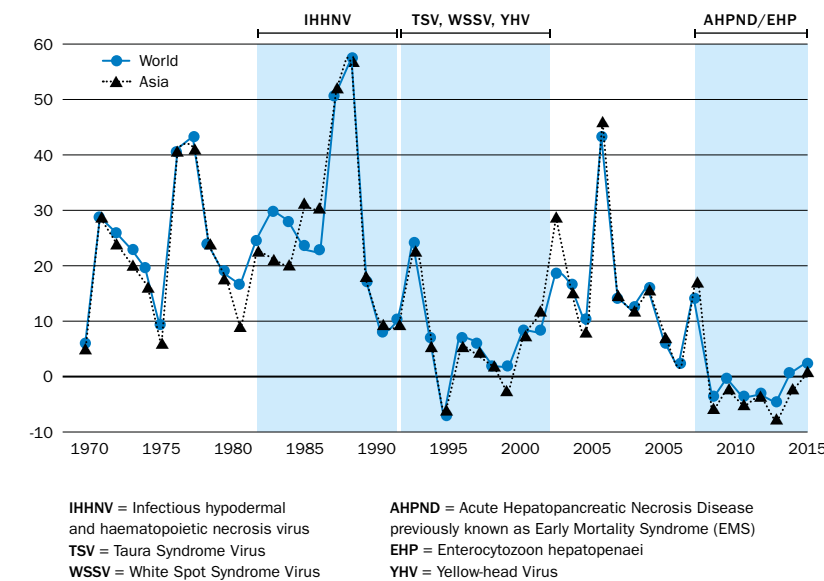


*Macrobrachium rosenbergii* (or giant freshwater river prawn)

### Disease constrains growth

At least \$45 billion was lost to shrimp diseases in white leg shrimp (*P. vannamei*) production alone over the past decade and is the biggest barrier to sustainable production.<sup>1</sup>

The percentage year-on-year change in the growth of Asian and global shrimp production. Episodes of disease have been a key factor in shaping growth.



Current disease management strategies have not been effective in controlling disease epidemics, which continue to threaten and sporadically decimate shrimp aquaculture in the region.

The use of disease-free and disease-resistant populations offers the opportunity to stabilise shrimp production. Benchmark's shrimp breeding programme has developed robust populations which are selected for growth, survival and performance and have high levels of resistance to the major pathogens affecting the global industry. This is achieved by uniquely combining Specific Pathogen Free (SPF) and Specific Pathogen Resistant (SPR) approaches, made possible by Benchmark's advanced breeding programme design — similar to those underpinning genetic improvement work in our advanced salmon programs.

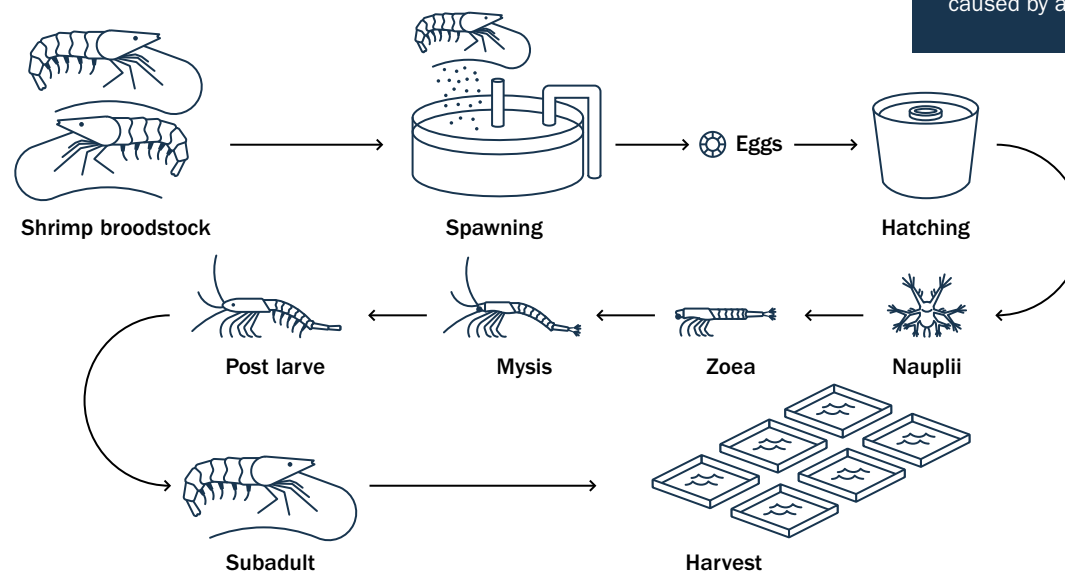
### Shrimp production life cycle

Larvae quality is one of the main drivers for successful shrimp farming which is why Benchmark is developing products that help early-stage shrimp develop to their full potential throughout the production chain.

Our products include specialist nutrition for the hatchery to nursery stages and broodstock and nauplii (larvae) from our Specific Pathogen Resistant (SPR) breeding programme.

### What is Specific Pathogen Resistant?

Specific Pathogen Resistant (SPR) shrimp refers to genetic characteristics that allow them to be resistant to infection from a particular pathogen or tolerant to the development of the disease caused by a particular pathogen.



<sup>1</sup> Shinn, A. Pratoomyot, J; Metselaar, M; Gomes, G. (2018). Diseases in aquaculture — counting the costs of the top 40. Fish Vet Group.



## BUSINESS REVIEW: GENETICS

# DELIVERING CONTINUOUS GENETICS IMPROVEMENT FOR OUR CUSTOMERS

## CONTINUED GENETIC INNOVATIONS LEADING TO INCREASED MARKET PENETRATION

## SCALING UP CAPACITY TO MEET FUTURE GROWTH

### Genetic innovations

- Very positive results of Specific Pathogen Resistant (SPR) shrimp in trials conducted in Vietnam, Thailand and China, three key markets for shrimp. The trials show high survival and good growth of the Benchmark strain compared to competing strains in each of the countries.
- Significant genetic marker identified for cardiomyopathy syndrome (CMS) in salmon. Eggs with CMS resistance launched autumn 2018 and experiencing high demand.
- Significant improvements in salmon growth rates at land-based production site in Iceland through innovations in the oxygenation system improved genetics and better rearing techniques. Fish are now able to grow to market size within 11-13 months compared to 16-18 months three years ago.
- Continued participation in three-year funded project on gene editing research including the Roslin Institute. The project investigates the potential for gene editing to increase resistance against infectious salmon anaemia (ISA).

### Increased market penetration and growth

- Continued growth supported by demand for our disease resistant eggs, including sea lice where demand outstripped supply.
- Established market-leading position in land-based salmon farming supported by Benchmark's ability to deliver highly biosecure eggs adapted for this technology.
- Entered new market in Canada through supply of sterile salmon eggs to Grieg Newfoundland. Egg deliveries will begin in 2019.

### Scaling up production and accelerating entry in Chile

- First production at Salten, our new state of the art biosecure land based salmon egg production facility, which increases Benchmark's production capacity by 75%.
- Entered into Joint Venture with AquaChile to accelerate and de-risk Benchmark's strategy in world's second largest salmon market. The new brand, Benchmark Genetics Chile was successfully launched at trade show AquaSur.

# 23%

FY18 REVENUE  
CONTRIBUTION

# 150

EMPLOYEES



“ We are seeing increasing demand for our products in recognition of the benefits they provide, improving disease resistance, yield and growth. This year we added a new trait which delivers resistance against CMS in salmon and have substantially increased our capacity to support future growth with our land-based salmon egg production facility in Norway and our Joint Venture in Chile.

**Jan-Emil Johannessen**  
Head of Benchmark Genetics

### Financial performance

Benchmark Genetics delivered strong revenue growth in salmon genetics. This was driven by increased volumes and higher prices, the success of new higher value products, and winning an increased market share. The valuation of biological assets increased by £4.0m (2017: £4.2m) driven by the growth in sales in the year, the strong order book at the year end and the first year of production at the new land-based broodstock facility in Norway. This supported growth in gross margins which, combined with operating leverage, resulted in a 36% growth in Adjusted EBITDA<sup>1</sup> to £7.9m (2017: £5.8m) with a margin of 22% (2017: 19%).

Summary Income Statement	2018 £m	2017 £m
Revenue	35.8	30.5
Cost of Sales	(14.8)	(13.8)
Gross Profit	20.9	16.7
Research and development costs	(3.6)	(2.7)
Operating costs	(9.1)	(8.2)
Share of profit/(loss) of equity-accounted investees, net of tax	(0.4)	-
Adjusted EBITDA	7.9	5.8
Exceptional including acquisition related items	(1.0)	7.0
Depreciation and amortisation	(3.5)	(3.3)
Operating profit	3.4	9.5

#### Genetics Division Revenue

2018	£35.8m
2017	£30.5m

#### Genetics Division Adjusted EBITDA

2018	£7.9m
2017	£5.8m

<sup>1</sup> See financial review for definition of adjusted measures.



## BUSINESS REVIEW: ADVANCED NUTRITION

# HIGH-PERFORMANCE NUTRITIONAL SOLUTIONS

## STRONG DEMAND FOR PREMIUM SPECIALIST DIETS FOR SHRIMP AND MARINE FISH

## SIGNIFICANT PROGRESS IN INNOVATION AND DELIVERY OF PIPELINE

### Strong growth in established markets

- Significant Adjusted EBITDA<sup>1</sup> growth driven by sales of our premium specialist diets for shrimp, and new hatchery and nursery feeding protocols for inducing faster growth of sea bass/bream fry.
- Good harvest of artemia at the Great Salt Lake in Utah underpinning the Group's access to high quality artemia, the main source of live feed for early stage nutrition.

### Continued product innovation — four new products launched

- Easy Dry Selco (Marine Fish), a flagship product and part of pioneering live food enrichment diets.
- NATURA (Marine Fish), an upgraded premium co-feeding diet.
- Sanocare FIT (shrimp), a product to reduce stress impact of transporting early-stage shrimp from hatchery to ponds.
- Sanolife PRO-2 (shrimp) an upgraded high performance probiotic for the farm segment.
- Development of artemia replacement diets continued to make excellent progress.
- 78 new product registrations approved in 2018 and 82 applications in the process of approval.

### Increasing market penetration

- Thailand factory awarded certification to allow exports into Ecuador — the top shrimp producer in the Americas.
- Joined the recently inaugurated China Shrimp Breeding Innovation Alliance as the only foreign founding member. The goal of the Alliance is to lift the performance of Chinese shrimp aquaculture through technology and capacity building.
- Establishing local service centre to better support customers in Vietnam.

### Manufacturing excellence

- Thailand factory recognised as the most advanced speciality product manufacturer for aquaculture. The site has an extensive list of certifications (GMP, HACCP, GLOBALG.A.P) and received the following awards this year: 'ECO Factory' from the Industrial Estate Authority of Thailand and the 'establishment of outstanding employee relations and welfare 2018' from the labour department.

# 56%

FY18 REVENUE  
CONTRIBUTION

# 510

EMPLOYEES

# “



Our science-based, market driven approach ensures that we continue to be an innovator in the industry. During the year we launched four new products and have seen a significant increase in sales of our specialist diet products reflecting the need for high-performance nutritional solutions that help early-stage fish and shrimp exploit their full potential throughout the production life cycle.

**Philippe Léger**

Head of Benchmark Advanced Nutrition

### Financial performance

Advanced Nutrition experienced strong growth in higher value live feed replacement and health diets. Sales volumes of live feed products also increased (+9.1%) but significant oversupply in Asia resulted in soft market prices for some products and revenue growth for this product category was restricted as a result. The consequent change in sales mix delivered strong overall improvement in gross margin. The division reported Adjusted EBITDA of £21.6m (2017: £17.7m) with an Adjusted EBITDA margin of 25% (2017: 21%).

Summary Income Statement	2018 £m	2017 £m
Revenue	85.7	83.7
Cost of Sales	(41.0)	(42.8)
Gross Profit	44.7	40.9
Research and development costs	(2.8)	(3.0)
Operating costs	(20.3)	(20.2)
Adjusted EBITDA	21.6	17.7
Depreciation and amortisation	(16.2)	(16.6)
Operating profit	5.4	1.1

#### Advanced Nutrition Division Revenue

2018	£85.7m
2017	£83.7m

#### Advanced Nutrition Division Adjusted EBITDA

2018	£21.6m
2017	£17.7m

<sup>1</sup> See financial review for definition of adjusted measures.



## BUSINESS REVIEW: ANIMAL HEALTH

CUTTING EDGE  
HEALTH PRODUCTSACHIEVED SIGNIFICANT MILESTONES TOWARDS  
COMMERCIAL LAUNCH OF KEY PIPELINE PRODUCTS

## RE-PRIORITISATION OF PIPELINE AND R&amp;D SPEND

## Successful field trials for next generation sea lice treatment

- Conducted commercial field trials with three of the world's largest salmon producers showing close to 99%+ efficacy, excellent fish welfare and no environmental impact.
- Breakthrough product for single largest reported issue in salmon production.
- Expanding trials into new markets in 2019; process to obtain marketing authorisation progressing as planned.

## Environmental protection — continued optimisation of CleanTreat® technology

- Benchmark's CleanTreat® technology addresses industry-wide need to eliminate discharge of medicinal residues from bath treatments into the water.
- Core element of the Group's next generation sea lice treatment with potential to expand use to other medicinal treatments.
- Efficiency of the system has increased significantly during 2018, doubling throughput.

## Pipeline progress — sea bass/bream vaccines

- Noda Virus vaccine continues to demonstrate high efficacy in farm-scale trials (mortality from Noda Virus outbreak can be over 90%).
- Decision to accelerate development of multi-valent vaccines based on successful trial results, with commercial field trials expected in 2019.
- Mobile diagnostic kits (cPCR) for key sea bass/bream diseases deployed for field validation. Kits will support disease management in the Mediterranean.

## Outlicensing of companion animal products

- The outlicensing of our companion animal business is ongoing with substantial progress being made and strong interest received.
- HypoCat vaccine successfully completed key safety and efficacy trials and in the process of transfer to GMP.

## In-house manufacturing capabilities

- Development work at Braintree facility progressing well with transfer of six antigens from R&D into commercial batch scale-up.

## Pipeline Review — prioritisation and focus

- Pipeline review resulted in re-prioritisation of R&D spend, focusing development effort on vaccine portfolios for sea bass/bream and salmon.

11%

FY18 REVENUE  
CONTRIBUTION

207

EMPLOYEES



“ This year we made significant progress towards the commercialisation of our next generation sea lice treatment and CleanTreat®. Our new solution addresses the biggest challenge in salmon farming and represents a transformational change towards a future where no medicinal residues are discharged directly into the oceans.

**John Marshall**  
Head of Animal Health

## Financial performance

Animal Health sales increased following the successful commencement of field trials of Benchmark's next generation sea lice treatment and CleanTreat®. In addition, underlying sales volumes of the division's existing mature sea lice treatment, Salmosan, were up whilst revenues were held back by the previously reported one off credits related to buy back of distributor inventory. Expensed R&D reduced by £1.7m to £5.6m reflecting focus on progressing products nearest to market for which costs are capitalised. Costs related to field trials are capitalised and will be amortised once the relevant product achieves its Marketing Authorisation (full licence). Total investment in R&D including capitalised costs increased to £12.2m (2017: £8.9m). Operating costs increased due to investment in management to deliver the pipeline of new products to market. The division delivered a reduced Adjusted EBITDA<sup>1</sup> loss of (£11.0m) (2017: loss of (£11.6m)).

Summary Income Statement	2018 £m	2017 £m
Revenue	16.2	15.1
Cost of Sales	(13.5)	(13.9)
Gross Profit	2.7	1.3
Research and development costs	(5.6)	(7.3)
Operating costs	(8.1)	(5.5)
Adjusted EBITDA	(11.0)	(11.6)
Exceptional including acquisition related items	-	(0.6)
Depreciation and amortisation	(2.6)	(1.4)
Operating loss	(13.6)	(13.6)

## Animal Health Division Revenue

2018	£16.2m
2017	£15.1m

## Animal Health Division Adjusted EBITDA

2018	£11.0m
2017	£11.6m

<sup>1</sup> See financial review for definition of adjusted measures.



## BUSINESS REVIEW: KNOWLEDGE SERVICES

# PROFESSIONAL EDUCATION AND DATA SOLUTIONS

## INCREASING UPTAKE OF EDUCATION SERVICES REFLECTED IN THE INCREASING TREND FOR PROFESSIONALISATION IN THE INDUSTRY

### Growth in established markets

- 190% growth in molecular diagnostic revenue in UK through design and implementation of bespoke disease monitoring programmes for major Scottish producers.
- Benchmark's 2018 Aquaculture UK event — shining a spotlight on research, innovation and technology — saw a 47% increase in floor space sales and hosted 2,400 visitors from 30 countries, up by 50%.
- New two-year contract with Ireland's Seafood Development Agency for an aquatic veterinary service and research programme around key issues such as cardiomyopathy syndrome (CMS), gill health and cleaner fish health and welfare.
- Successful tender for major programme of diagnostic work into gill health in Scottish farmed salmon.
- Launch of General Practitioner Advanced Certificate for veterinary professionals across three state-of-the-art European training centres with first edition of the courses fully booked.
- Two-day practical veterinary courses launched in USA with plan to expand offering next year.

### Commercial delivery of new innovative data technology platform

- Acquisition of Videntis (post year-end) whose technology enables producers to have real-time data and feedback on feed efficiency, welfare and product quality.
- iWise HealthPortal a collaborative tool aimed at improving the management of fish health in the Salmon industry launched in Norway. 70% of Norwegian fish health providers are already early users.
- Secured a new three-year contract with McDonald's Corporation for sustainability data tracking and delivery of consultancy services.

### Review of activities

During the period we conducted a review of our activities to identify opportunities for synergies, efficiencies and rationalisation. This resulted in:

- Closure of two sites in our veterinary services business and alignment of our veterinary activities to support our service and training offering in aquaculture.
- Disposal of non-core technical titles in our publishing business.

# 10%

FY18 REVENUE  
CONTRIBUTION

# 160

EMPLOYEES



“ Knowledge drives change. Benchmark's data and education services help customers manage their farms and businesses more effectively. We help customers develop teams with the ability to manage day-to-day operations, assessment and adoption of new technologies in order to drive the industry's sustainable future.

**James Banfield**  
Head of Knowledge Services

### Financial performance

Following management reorganisation Knowledge Services reported an improved Adjusted EBITDA<sup>1</sup> profit of £0.2m (2017: loss of (£0.9m)). Progress with the Division's Data and Education based strategy delivered increased sales alongside a largest ever Aquaculture UK conference which, when coupled with cost control, sets the course for improving results and delivered the anticipated move into profitability.

Summary Income Statement	2018 £m	2017 £m
Revenue	15.8	13.8
Cost of Sales	(9.8)	(9.4)
Gross Profit	6.0	4.4
Operating costs	(5.8)	(5.2)
Adjusted EBITDA	0.2	(0.9)
Exceptional including acquisition related items	-	(0.1)
Depreciation and amortisation	(2.4)	(1.9)
Operating loss	(2.2)	(2.9)

#### Knowledge Services Division Revenue

2018	£15.8m
2017	£13.8m

#### Knowledge Services Division Adjusted EBITDA

2018	£0.2m
2017	£(0.9)m

<sup>1</sup> See financial review for definition of adjusted measures.



## CSO STATEMENT

# STREAMLINING PRODUCT INNOVATION AND EXPLOITING SYNERGIES



I was attracted to Benchmark by its enviable market position in aquaculture, scale and global footprint. The combination of our R&D pipeline, diagnostics and on the ground insight means that we are in a unique position to develop highly effective solutions to improve the sustainability and profitability of the aquaculture industry.

**Alex Raeber**  
Chief Scientific Officer

Since joining the Benchmark Board in October 2018 (post year-end), my priorities for the first quarter were to conduct a review of our product pipelines and establish a cross group Innovation Leadership team. I am fortunate that we have some of the world's leading scientists in aquaculture with deep expertise, as well as young talent who I am confident are capable to be successors in the future.

## R&D

Our goal is to drive growth across the organisation through technology innovation and Benchmark's platform technologies in genetics, advanced nutrition and animal health are well positioned to deliver this. The newly formed Innovation Leadership team are responsible for product innovation across the group, exploiting synergies and exploring disruptive technologies to maintain and grow our technology leadership. This year we will streamline our Group wide R&D and product commercialisation effort to drive efficiencies in development, including optimising utilisation of our trials facilities.

## Intellectual Property

As a result of our advanced innovation, R&D and subsequent investment, we have a strong patent portfolio across our products and processes in our three core divisions. Our portfolio with 28 families and 240 patents is well balanced, with a mixture of robust granted applications to protect current products and new patent applications to support the business in the future.

We will continue our strategy and approach to IP and product registration, and IP protection will also be a core strategic area of focus. Post year-end we successfully defended a patent infringement in Asia which related to our Artemia hatching and enrichment technology, demonstrating the robustness of our patents.

## Product pipelines and 2019 priorities

We have set out Benchmark's genetics, advanced nutrition and health pipelines below and overleaf. Our top priorities for 2019 include continued delivery of trials for our next generation sea lice treatment and CleanTreat®, obtaining Marketing Authorisation for our first sea bass/bream vaccines and commencing trials of bi-valent and tri-valent vaccines (targeted at multiple diseases) for sea bass/bream.

I believe I've joined Benchmark at a very exciting time. I am confident that our platform of technologies, deep expertise and commercialisation network will allow us to become the leading provider of solutions in genetics, health and advanced nutrition. I look forward to updating you on our progress throughout the year.

## Genetics pipeline

Product code (peak projected sales (£))	Pre-Project				Project phase	Test development		Launch	
Salmon				DH021 (1.0m) 2020		DH022 (0.5m) 2020	DS011 (1.5m) 2021	Genomics GS-Quality (0.01m) 2018	
Tilapia	DT003 (6.0m) 2021	DT006 (4.5m) 2020	DT005 (3.0m) 2020	DT004 (3.0m) 2020				DT002 (4.5m) 2018	DT001 (4.5m) 2018
Shrimp						DP002 (23.0m) 2019	DP001 (27.0m) 2019		
Peak sales	£17.5m					£52.0m		£9.01m	

Note: Dates refer to calendar years.



### Advanced Nutrition pipeline

Product code (peak projected sales (£))	Development			Field verification	Market preparation		Start of sales
Shrimp	SD03 (23.0m)	SL18 (0.1m)	SL20 (2.0m)		ART01 (3.8m)	ART02 (0.1m)	SL16 (3.2m)
	SL22 (0.1m)	SG25 (7.0m)		SG28 (8.5m)			SD29, SC15 (2.4m)
Marine fish	FD05 (7.0m)	FD31 (2.0m)	SG26 (1.0m)		ART02 (0.4m)		FD06 (3.0m)
	SL19 (0.3m)	(SL20) 0.1m					SL23 (0.2m)
							FD07 (0.4m)
Tilapia	SC12 (3.3m)	SG34 (0.1m)	SL20 (0.1m)				
Salmon	SL32 (1.9m)			FD33 (0.5m)			
Peak sales	£48.0m			£9.0m	£4.3m		£9.2m

Note: Dates refer to calendar years.

### Animal Health pipeline

Product code (peak projected sales (£)), date of first sales (incl. field trials)	Discovery				Passed proof of concept	Development Trials			Regulatory process begins	Field Trials	Species total
Sea bass/bream						PAQ009 (18m) 2020	VAQ007 (3m) 2019	VAQ011 + 008 (9m) 2019		VAQ016 (1m) 2016	£31m
Salmonids	PAQ024 (25m) 2021	VAQ017 (50m) 2021	VAQ006 + 31 + 032 + 002 (18m) 2022	VAQ038 (19m) 2021	VAQ029 + 015 + 009 (17m) 2022	VAQ019 (1m) 2019	VAQ022 + 021 + 020 (15m) 2022	VAQ028 (19m) 2019	PAQ014 (1m) 2018	PAQ008 (45m) 2018	£210m
Tilapia	VAQ034 (3m) 2022	VAQ036 (1m) 2021	VAQ025 (1m) 2021				VAQ004 (4m) 2020	VAQ024 (1m) 2019			£10m
Number of products	7 products				1 product				3 products		
Peak sales	£117m				£17m				£47m		£251m
Est. prob success	(10%)				(30%)				(80%)		

Note: Dates refer to calendar years.





## FINANCIAL REVIEW

GROWTH IN REVENUE  
AND ADJUSTED EBITDA

Our strategy to focus on added value products coupled with recent significant investment in production capacity and in new products in the final stages of development will drive further increased Adjusted EBITDA margins and cash generation.

**Mark Plampin**  
Chief Financial Officer

£m	2018	2017	Change %
Revenue	151.5	140.2	+8%
EBITDA <sup>1</sup>	15.8	15.7	+1%
Adjusted EBITDA <sup>2</sup>	17.0	10.1	+68%
Adjusted Operating Profit <sup>3</sup>	10.2	5.2	+96%
Operating loss	(9.1)	(7.6)	-20%
Loss before tax	(13.7)	(8.1)	-69%
Loss for the period	(4.4)	(7.1)	+38%
Basic earnings/(loss) per share (p)	(0.94)	(1.43)	+34%
Net debt <sup>4</sup>	(55.7)	(23.9)	-

<sup>1</sup> EBITDA is earnings before interest, tax, depreciation and amortisation and impairment — see income statement.

<sup>2</sup> Adjusted EBITDA which reflects underlying profitability, is earnings before interest, tax, depreciation, amortisation, impairment, exceptional items and acquisition related expenditure — see income statement.

<sup>3</sup> Adjusted Operating Profit is operating loss before exceptional items including acquisition related items and amortisation and impairment of intangible assets excluding development costs — see below.

<sup>4</sup> Net debt is cash and cash equivalents less loans and borrowings — see below.

## Financial highlights

- Revenue increased by 8% to £151.5m (2017: £140.2m). Using the same foreign exchange rates experienced in 2017 (constant currency), revenue increased by 13%
- 17% growth (21% using constant currency) in salmon genetics revenues driven by increased volumes and average prices resulting from customer demand, the success of new products launched and winning market share
- 2% (9% using constant currency) growth in sales of nutrition products driven by ongoing increased demand for higher value live feed replacement and health diets, growth in sales volumes of live feeds not reflected in revenue due to low market prices for some products
- 7% growth in animal health sales driven by first commercial field trials of Benchmark's next generation sea lice treatment and CleanTreat® coupled with stable Salmosan revenues
- Significant strengthening in gross margin to 49% (2017: 45%) reflecting the Group's strategic focus on added value products and services
- Total operating costs increased by 13% to £44.6m (2017: £39.3m) due to staff bonuses reflecting improved performance, strengthening of management and of sales and product support teams
- Expensed R&D reduced by £1.1m to £12.0m reflecting focus on progressing products nearest to market for which costs are capitalised
- Investment in field trials for nearer to market products, particularly Benchmark's next generation sea lice treatment and CleanTreat®, meant that total investment in R&D increased to £19.4m (2017: £15.2m) or 13% (2017: 11%) of revenue
- Adjusted EBITDA increased by 68% to £17.0m (2017: £10.1m) reflecting growth in sales volumes and prices coupled with lower expensed R&D
- Adjusted EBITDA margin increased to 11% (2017: 7%)
- Operating Loss increased to £(9.1m) (2017: £(7.6m)) influenced by improved trading and:
  - Higher depreciation following recent investment in production capacity
  - Acquisition related expenditure of £1.2m, whereas 2017 benefited from a £5.6m credit
- Reported loss for the period reduced to £(4.4m) (2017: £(7.1m)) due to:
  - £9.3m tax credit (2017: credit £1.0m) principally due a large credit arising from a reduction in the corporate tax rate in Belgium which reduced the deferred tax liability on intangibles arising from the acquisition of INVE
  - Offset by the impact of foreign exchange movements in finance costs, £2.5m expense (2017: credit of £1.2m)
- £40m investment in state-of-the-art additional genetics production capacity at Salten which was completed shortly after the year end
- Net debt increased to £55.7m (2017: £23.9m), primarily due to £32.7m capital expenditure (including £17.9m investment in Salten facility and investment associated with the field trials of the new sea lice treatment). Net debt includes £27m ringfenced non-recourse debt to fund the Salten facility
- Investment in working capital resulting from top line growth and strategy to secure key supplier and key customer relationships
- Subsequent to the year end, the Group's bankers agreed to provide an additional \$20m under the existing facility and relax the leverage covenant to provide additional liquidity
- The \$20m additional facility combined with the year end cash balance of £24.1m provides the Group with funding for continuing growth and additional headroom



## Adjusted measures

We continue to use adjusted results as our primary measures of financial performance. In line with many of our peers in the sector we highlight expensed R&D on the face of the income statement separate from operating expenses. Furthermore, we report earnings before interest, tax, depreciation and amortisation ("EBITDA") and EBITDA before including exceptional and acquisition related items ("Adjusted EBITDA"). The activities of the Group's equity accounted investees are closely aligned with the Group's principal activities, as these arrangements were set up to exploit opportunities from the intellectual property held within the Group.

As a result, to ensure that adjusted performance measures are more meaningful, the Group's share of the results of these entities is included within Adjusted EBITDA. We are also reporting this adjusted measure after depreciation and amortisation of capitalised development costs ("Adjusted Operating Profit") for the first time as the board consider this reflects the result after taking account of the utilisation of the recently expanded production capacity. We believe that these adjusted measures enable a better evaluation of our underlying performance. This is how the Board monitors the progress of the Group.

	Revenue				Adjusted EBITDA			
	Actual currency		Constant Currency		Actual currency		Constant Currency	
	2018 £m	2017 £m	Movement %	Movement %	2018 £m	2017 £m	Movement %	Movement %
Animal Health	16.2	15.1	7%	7%	(11.0)	(11.6)	(5)%	(4)%
Genetics	35.8	30.5	17%	21%	7.9	5.8	36%	40%
Advanced Nutrition	85.7	83.7	2%	9%	21.6	17.7	22%	31%
Knowledge Services	15.8	13.8	14%	18%	0.2	(0.9)	(123)%	(102)%
Other/intersegment	-2.0	-2.9	-31%	-16%	(1.7)	(0.9)	78%	64%
<b>Total</b>	<b>151.5</b>	<b>140.2</b>	<b>8%</b>	<b>13%</b>	<b>17.0</b>	<b>10.1</b>	<b>69%</b>	<b>86%</b>

Constant currency represents the movement retranslating FY18 figures using the same foreign exchange rates experienced during FY17.

	Average	2018 £000	2017 £000
<b>Adjusted Operating Profit</b>			
Revenue		151.5	140.2
Cost of sales		(77.5)	(77.8)
<b>Gross profit</b>		<b>74.0</b>	<b>62.4</b>
Research and development costs		(12.0)	(13.1)
Other operating costs		(44.6)	(39.2)
Depreciation		(6.8)	(4.9)
Amortisation of capitalised development costs		-	-
Share of profit of equity-accounted investees, net of tax		(0.4)	0.0
<b>Adjusted Operating Profit</b>		<b>10.2</b>	<b>5.2</b>
Exceptional including acquisition related items		(1.2)	5.6
Amortisation of intangible assets excluding development costs		(18.1)	(18.4)
<b>Operating Loss</b>		<b>(9.1)</b>	<b>(7.6)</b>

	2018 £m	2017 £m
<b>Net debt</b>		
Cash and cash equivalents	24.1	18.8
Bank borrowings and other loans — current	(0.9)	(6.0)
Obligations under finance leases — current	-	(0.2)
-	(0.9)	(6.2)
Bank borrowings and other loans — non-current	(78.9)	(36.5)
<b>Net debt</b>	<b>55.7</b>	<b>23.9</b>

## Revenue and Adjusted EBITDA

Group revenue increased by 8% to £151.5m in the year (2017: £140.2m). Using the same foreign exchange rates experienced in 2017 (constant currency) revenue increased by 13%.

Adjusted EBITDA increased by 68% to £17.0m (2017: £10.1m). Using constant currency Adjusted EBITDA increased by 86%. Adjusted Operating Profit increased to £10.2m (2017: £5.2m) as the improved trading result was partially offset by increased depreciation charges reflecting the contribution that recently constructed production assets have begun to deliver.

Benchmark Genetics delivered strong revenue growth in salmon genetics. This was driven by increased volumes and higher prices, the success of new higher value products, and winning an increased market share. The valuation of biological assets increased by £4.0m (2017: £4.2m) driven by the growth in sales in the year, the strong order book at the year end and the first year of production at the new land-based broodstock facility in Norway. This supported growth in gross margins which combined with operating leverage resulted in a 36% growth in Adjusted EBITDA to £7.9m (2017: £5.8m) with a margin of 22% (2017: 19%).

Advanced Nutrition experienced strong growth in higher value live feed replacement and health diets. Sales volumes of live feed products also increased (+9%) but significant oversupply in Asia resulted in soft market prices for some products and revenue growth for this product category was restricted as a result. The consequent change in revenue mix delivered strong overall improvement in gross margin. The division reported Adjusted EBITDA of £21.6m (2017: £17.7m) with a margin of 25% (2017: 21%).

Animal Health sales increased following the successful commencement of field trials of Benchmark's next generation sea lice treatment and CleanTreat®. In addition, underlying sales volumes of the division's existing mature sea lice treatment, Salmosan, were up whilst revenues were held back by the previously reported one off credits related to buy back of distributor inventory. Expensed R&D reduced by £1.7m to £5.6m reflecting focus on progressing products nearest to market for which costs are capitalised. Costs related to field trials are capitalised and will be amortised once the relevant product achieves its Marketing Authorisation (full licence). Total investment in R&D for the Animal Health division including capitalised costs increased to £12.2m (2017: £8.9m). Operating costs increased due to investment in sales and product support teams to ensure successful launch of the pipeline of new products. The division delivered a reduced Adjusted EBITDA loss of (£11.0m) (2017: loss of (£11.6m)).

Following management reorganisation Knowledge Services reported an improved Adjusted EBITDA profit of £0.2m (2017: loss of (£0.9m)). Progress with the division's data and education based strategy delivered increased sales alongside a largest ever Aquaculture UK conference which, when coupled with cost control, sets the course for improving results and delivered the anticipated move into profitability.

Total Group operating costs increased by 13% to £44.6m (2017: £39.3m). This increase reflects the impact of staff bonuses reflecting improved performance, increase in sales and product support headcount to deliver growth, strengthening of Plc and Operations boards and an increase in professional fees due to an enhanced focus on protecting the IP of our products.

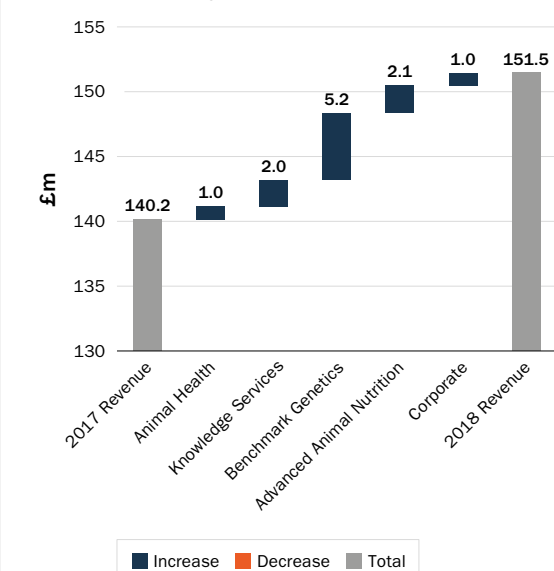
Total investment in expensed R&D reduced by £1.1m to £12.0m (2017: £13.1m). This reduction reflects the fact that an increasing number of new products in the pipeline are reaching the final stages of development and consequently the proportion of total R&D investment that is capitalised is increasing. Expensed R&D as a percentage of sales fell to 8% (2017: 9%). Total investment in R&D increased to £19.4m (2017: £15.2m) or 13% (2017: 11%) of revenue.

Acquisition related items relate largely to the costs associated with completing the genetics JV with Empresas AquaChile.

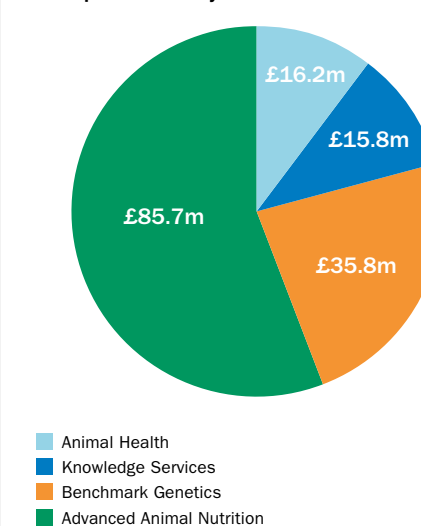
### Group Revenue



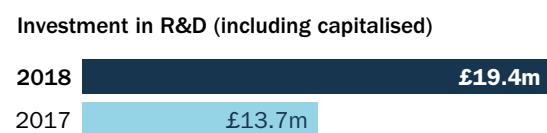
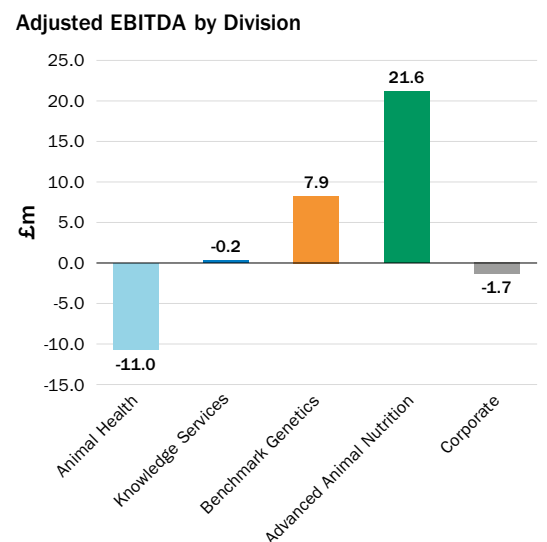
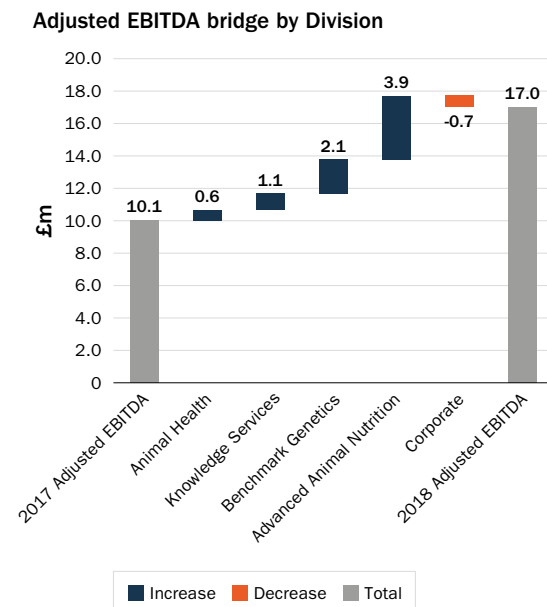
### Group Revenue by Division



### Group Revenue by Division







**Net finance costs**

The Group incurred net finance costs of £4.6m during the year (2017: £0.5m). Interest charged on the Group's interest bearing debt facilities was £2.4m (2017: £2.0m) reflecting a higher level of net debt during the year. The revolving credit facility incurs interest in the range of 1.9% to 3.5% over LIBOR. Interest on other debt facilities ranges from 2.65% to 4.2% above Norwegian base rates.

During the year, a foreign exchange loss of £2.5m arose due to the movement in exchange rates and has been included within finance costs (2017: £1.2m foreign exchange gain).

**Statutory loss before tax**

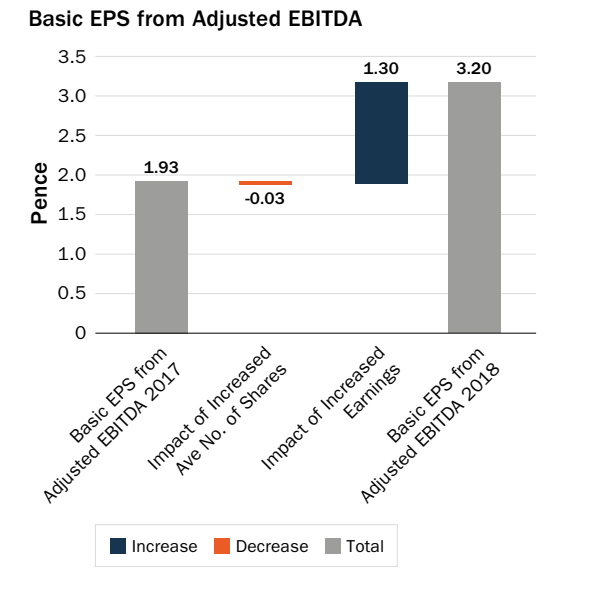
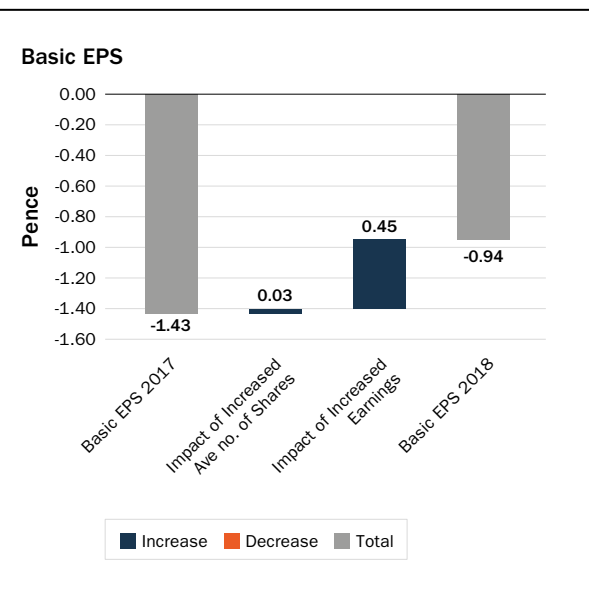
The loss before tax for the year at £13.7m is higher than the prior year (2017: loss of £8.1m) due to the impact of the improved trading outlined above being offset by higher depreciation, amortisation and impairment charges of £24.8m (2017: £23.4m) principally from the new production facilities coming on stream, coupled with the increase in finance costs as outlined above and a credit in exceptional costs in the prior year of £5.6m (£1.2m cost in 2018) relating to the release of a provision for deferred consideration on previous acquisitions.

**Taxation**

There was a tax credit in the period of £9.3m (2017: credit £1.0m), mainly due to a reduction in the corporation tax rate in Belgium from 34% to 25%. The largest elements of the remainder of the charge relate to overseas tax charges in the Genetics division of £1.6m and in the Advanced Nutrition division of £4.5m, offset by deferred tax credits on intangible assets arising on consolidation from recent acquisitions. No deferred tax assets have been provided on any losses made in the period.

**Earnings per share**

Basic loss and diluted loss per share were both -0.94p (2017: loss per share -1.43p). The movement year on year is due to a combination of the improved result for the year as noted above, and the higher average number of shares in 2018 due to the new shares issued in the equity raise used to fund the Genetics JV with AquaChile in June 2018.



**Dividends**

No dividends have been paid or proposed in the year (2017: £nil) and the Board is not recommending a final dividend in respect of the year ended 30 September 2018.

**Biological assets**

A feature of the Group's net assets is its investment in biological assets, which under IAS 41 are stated at fair value. At 30 September 2018, the carrying value of biological assets was £20.4m (2017: £16.5m). The movement in the overall carrying value of biological assets is due principally to the increase in sales of and future orders for the Company's salmon eggs as well as expansion of own production.

**Intangibles**

Capitalised R&D increased by £5.1m to £7.2m (2017: £2.1m). R&D costs related to products that are close to commercial launch have to be capitalised when they meet the requirements set out under IFRS. As Benchmark goes through a period of an increasing number of new products approaching launch this capitalisation will be an increasing feature in the mid-term.

**Capital expenditure**

Tangible fixed asset additions of £25.1m (2017: £36.1m) includes £17.9m cash investment in the construction of the new salmon egg production facility in Norway which concluded post year end.

**Cash flow**

Net cash flow from operations was an outflow of £3.7m (2017: inflow of £13.4m) principally due to working capital increases related to growth in trading and the strategy to secure key supplier and key customer relationships and also because prior year capital expenditure creditors were settled on completion of the new Salten facility. Proceeds from increased borrowings of £41.2m were used to part fund some of the capital expenditure outlined above, with total cash outflow on tangible and intangible capital additions totalling £32.7m (2017: £35.2m). Cash at the period end stood at £24.1m (2017: £18.8m) with net debt finishing the year at £55.7m (2017: £23.9m).

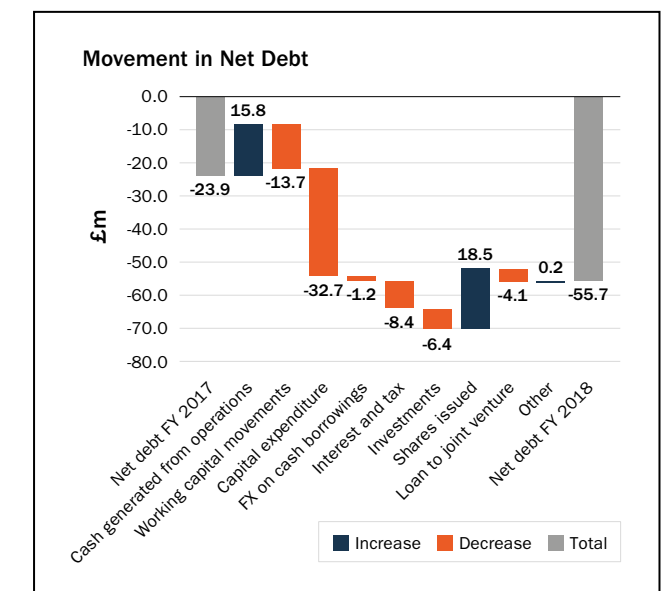
**Liquidity and net debt**

The Group's finance function is responsible for sourcing and structuring borrowing requirements. The Group had £79.8m in bank borrowings at the end of the year. Reported debt includes £27.3m in relation to the funding of the Group's new salmon egg production facility in Norway. This is ringfenced debt without recourse to Benchmark. At the year-end a maximum of £54m was available on the Group's key revolving credit facility, of this £53m had been drawn. Net debt increased to £55.7m during the year as investment in working capital expanded and available long-term capital was invested in R&D and production capacity.

As outlined in the Basis of Preparation in Note 1 to the financial statements, a limit within the borrowing facility in relation to the amount of development funding provided to certain subsidiary companies ("leakage") has been exceeded, which could have caused the outstanding loan of £52.3m (2017: £36.4m) to become repayable on demand by the lenders. A waiver from this leakage condition was received from the lenders on 7 January 2019 subject to the position being remedied by 31 March 2019. The process agreed with the lenders to reduce total leakage is underway and will be completed within the required timescale.

Subsequent to the year end the Group's lenders agreed to advance a further \$20m using the accordion clause in the existing revolving credit facility and to relax the leverage covenant over the remaining term of the facility to provide additional liquidity. Simultaneously DNB joined the group banking syndicate, their significant experience of the aquaculture sector complements the global food and agri business expertise of the existing banks.

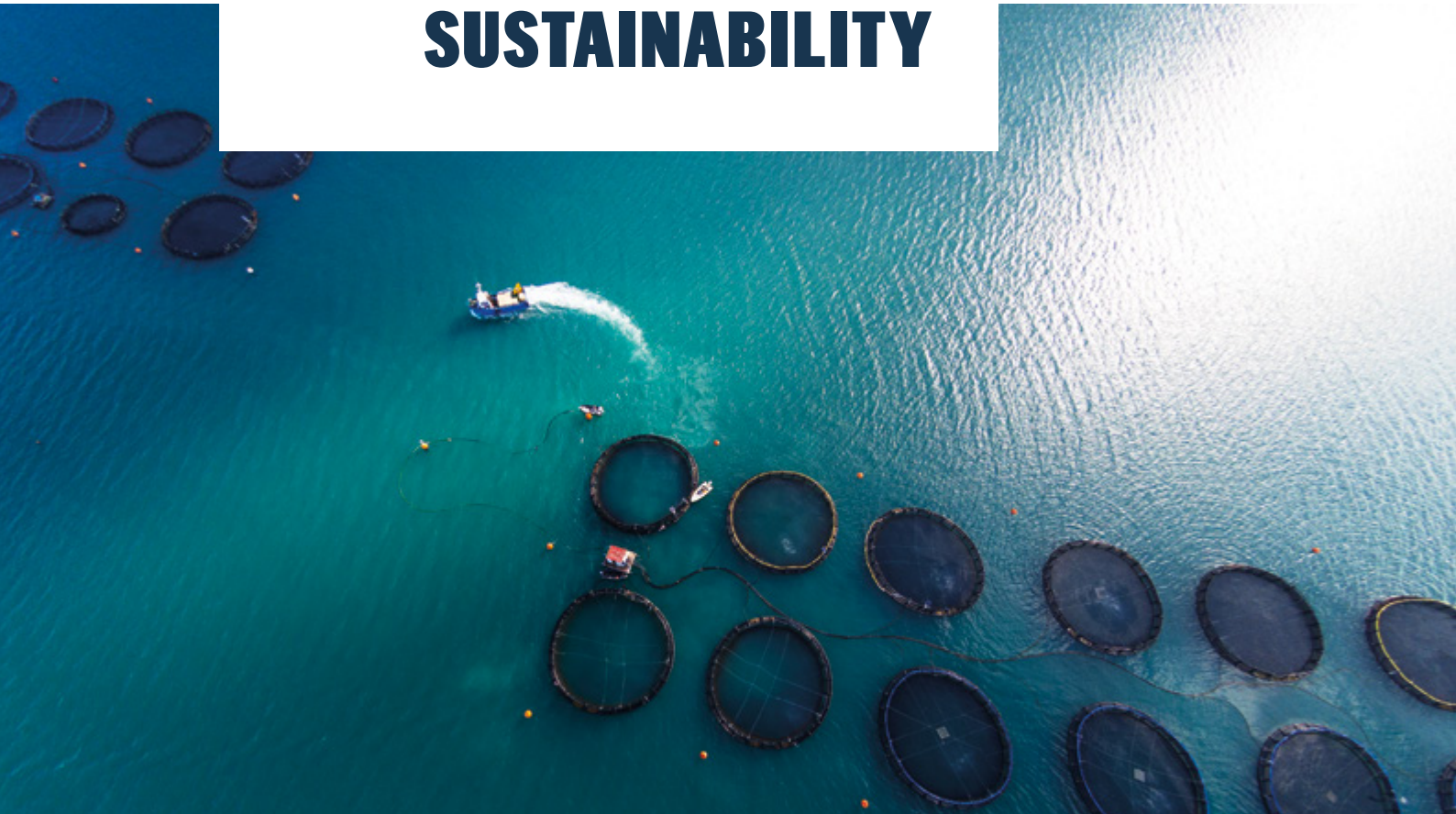
The available maximum drawdown therefore increased to £69m post year end. The additional facility combined with the year end cash balance of £24.1m provides the Group with funding for continuing growth and additional headroom.





## SUSTAINABILITY

# THERE IS NO RECIPE BOOK FOR SUSTAINABILITY



It is not a simple standard or a tick-box. It is not a set path. It is defined with every step we take and redefined as we learn more. It is never something we have done or achieved, for its results are always in the future. Our approach is anchored in practical, on the ground experience — from the farm to the Boardroom.

We understand the challenges and we identify the best, leading-edge science and practices to address those challenges. Our framework places equal value on ethics, environment and economics. We call this the 3Es of sustainability.

## Increasing our impact

The 3Es provides a foundation from which we are able to pursue our commercial interests in a manner that ensures consideration, respect and a positive impact on:

- Our people and partners
- The animals under our care and those we impact upon
- The communities and environments in which we operate
- Our planet considered as a whole

Sustainability has always been part of Benchmark's DNA and, as we grow, so too must our commitment and impact. To accelerate our progress, in 2017 we created a dedicated Sustainability Committee that reports directly to the Board on achievements, performance and future plans, and a Sustainability Working Group to help drive forward our sustainability strategy across the Group. The Committee and the Working Group work alongside Benchmark's Operations Board to ensure that we continue to deliver value for our customers, partners and investors while making sure that sustainability is embedded within our business.

This year our Sustainability Committee carried out an in-depth review of our existing sustainability strategy and

operations against our 3Es framework using information and data gathered from employee surveys, interviews and focus groups; strategy working groups and risk analysis; liaison with external bodies including NGOs, thought leaders, industry bodies and investors; and insights from our food production and retail clients. This has been invaluable in shaping our priorities moving forward and helping us to identify where we can have the most impact from a sustainability perspective.

## Employee engagement

During the year, we carried out our widest employee survey to date to gain employee feedback about our sustainability work. The survey, which was translated into five languages, encouraged participation from every part of the business, across all our geographies. Feedback from the survey was followed up with a series of focus groups and was used by the Sustainability Committee to help define our strategy in this area.

Focus groups were held across a number of sites in the UK and Europe to help us engage with colleagues in more depth on Benchmark's Sustainability work, as well as other key areas such as our Gender Pay Gap report, integration across our divisions, and internal

communications. In addition to helping to shape our sustainability work, a report compiling the results of each of the sessions, which were held in Sheffield, Inverness and Dendermonde Belgium, is being used to inform Benchmark's People and Communications team strategies and future initiatives. The results and recommendations have been presented to the Operations and PLC Board to ensure that the feedback given is understood at every level of the business.

## Our business as a force for good

A strong theme that came out in both the employee survey and the focus groups on the topic of sustainability was that our people felt strongly that Benchmark should play a greater leadership role in the industry, particularly with regards to animal welfare and our impact on the environment. Overall, consensus was that we must better utilise the knowledge and expertise that we have across the Group in order to set higher ambitions and drive greater progress and impact using our business as a force for good.

“



Benchmark has reaffirmed its commitment to becoming a leader in corporate sustainability and has put this into action through the foundational work we undertook in 2018. This is the start of something that, if we work together across the Company, can serve as a model for corporate sustainability across the sector and create happier people, animals with lives worth living and a healthier environment and planet.

**Ruth Layton**  
Group Sustainability Director




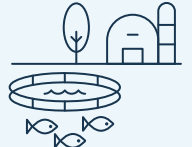



# BENCHMARK SUSTAINABILITY PROGRAMME

Information gathered from the focus groups was used to inform the development of our five sustainability workstreams (see table to the right). These five defined areas of work fit with our 3Es framework of taking care of people and animals (ethics), the environment and economic parameters. This programme has been presented to the Operations Board and is now agreed.

Work is now underway to develop a three year programme of objectives, actions and key sustainability indicators for each of the programme areas.

Benchmark has reaffirmed its commitment to becoming a leader in corporate sustainability and has put this into action through the foundational work we undertook in 2018. This is the start of something that, if we work together across the Company, can serve as a model for corporate sustainability across the sector and create happier people, animals with lives worth living and a healthier environment and planet.

PROGRAMME AREA	GOAL	ISSUES BEING ADDRESSED	WHAT WE HAVE DONE THIS YEAR
<b>Being well</b> 	Care for our people and empowering them to reach their personal potential.	<ul style="list-style-type: none"> <li>• Employment</li> <li>• T&amp;Cs</li> <li>• Diversity</li> <li>• Career development</li> <li>• Health &amp; Safety</li> <li>• Living wage</li> <li>• Stress</li> </ul>	<p>Developed a tailored mindfulness programme in cooperation with Imperial College which commences February 2019.</p> <p>Conducted employee focus groups to identify areas of opportunity for our being well programme. This will be followed up by an employee survey which will enable us to track progress.</p> <p>Launched an Employee Assistance Programme for UK employees offering a complete support network of expert advice and compassionate guidance 24 hours a day, seven days a week.</p> <p>Piloted a series of health workshops in the UK and Thailand to promote positive health, including mental health, in the work place.</p>
<b>Business leadership</b> 	Leading by example and engaging, supporting and developing initiatives that promote 3Es sustainability in the food chain.	<ul style="list-style-type: none"> <li>• Living the Benchmark values</li> <li>• Living the 3Es</li> <li>• Benchmark's perception and stakeholder relationships</li> <li>• Key sustainability areas (e.g. antibiotic resistance, climate warming, living wage, diversity)</li> <li>• Practical and validated measures to compare and monitor data</li> </ul>	<p>Active member of Global Salmon Initiative (GSI).</p> <p>Ongoing promotion via clients, publications and conferences of the 3Rs (replace, reduce, refine) approach to Antimicrobial Stewardship in food supply chains.</p> <p>Shortlisted for the Newton prize for our research into sea lice and Salmonid Rickettsial Septicaemia (SRS).</p> <p>Included in 5th edition of '1000 Companies to Inspire Britain'; one of only five companies to make the list for five consecutive years.</p>
<b>Environment</b> 	Care for our planet whilst operating our business responsibly.	<ul style="list-style-type: none"> <li>• Land use change</li> <li>• Climate warming</li> <li>• Pollution</li> <li>• Ocean acidification</li> <li>• Biodiversity</li> <li>• Quality of local environment</li> <li>• Stakeholder relationships</li> <li>• Practical and validated measures to compare and monitor data</li> </ul>	<p>25% of energy use across the Group is now from renewable sources.</p> <p>25% reduction in total distance travelled per UK traveller.<sup>1</sup></p> <p>25%+ reduction in CO<sub>2</sub> emissions, as a result of reduced travel in the UK.<sup>2</sup></p> <p>Advanced Animal Nutrition factory in Thailand received:</p> <ul style="list-style-type: none"> <li>• 'ECO Factory' Award from the ECO Factory Project, which recognises sustainable businesses that have a strong focus on the environment.</li> <li>• National Excellence Award in recognition of their work on Health, Safety, Environment and Corporate and Social Responsibility (CSR).</li> </ul>
<b>Animal health &amp; welfare</b> 	Care for all our animals and those impacted by our products and services by providing what keeps them healthy and what they want. <sup>3</sup>	<ul style="list-style-type: none"> <li>• Injuries</li> <li>• Mortality</li> <li>• Behaviour</li> <li>• Mobility</li> <li>• Disease</li> <li>• Valid measures</li> <li>• Antibiotic use (criticals)</li> </ul>	<p>Ongoing contribution to the development and roll out of RSPCA Assured standards (or equivalent) across multiple species and geographical locations.</p> <p>Ongoing implementation of best-practice animal husbandry training for employees and clients.</p> <p>Over 650 people — including companies, NGOs government representatives, industry bodies and students — have attended training courses, technical visits, workshops and field days at Benchmark sites.</p> <p>Funding secured for research into gill disease in Norwegian farmed salmon.</p> <p>Participation in research to develop disease resistance in salmon.</p> <p>Launch of new salmon health portal to improve fish health management in Norway.</p>
<b>Communities</b> 	Making a meaningful and positive impact on the communities in which we operate.	<ul style="list-style-type: none"> <li>• Poverty</li> <li>• Physical safety of local environment</li> <li>• Diversity</li> <li>• Living wage</li> <li>• Quality of local environment</li> <li>• Job security</li> </ul>	<p>Continued support for the Mama Magda Aquaculture Fund (MMAF) which offers young researchers from developing countries up to 15,000 EUR for a research stay of six months at Ghent University in preparation for a joint PhD between Ghent University and their host institution in developing countries.</p> <p>Ongoing contributions to local community projects in Thailand, including donations of food, electronic devices and essential supplies to local police forces, hospitals and schools.</p> <p>Partnered with local representatives in Sao Paulo Brazil to provide nutritional support for poor communities.</p> <p>Won 2018 local business charity award for Benchmark's support for FarmAbility, a charity helping people with learning disabilities and autism get into employment.</p>

<sup>1</sup> Figure relates only to UK employees using Corporate Traveller.

<sup>2</sup> As above.

<sup>3</sup> Marian Stamp Dawkins (2008), Department of Zoology, University of Oxford, UK; The Science of Animal Suffering.



SUSTAINABLE DEVELOPMENT GOALS

# BENCHMARK CONTRIBUTION TO THE UN'S SUSTAINABLE DEVELOPMENT GOALS



Established by the United Nations (UN) as part of their 2030 agenda for sustainable development, the Sustainable Development Goals (SDGs) are a universal call to action to end poverty, protect the planet, and ensure that all people enjoy peace and prosperity. Benchmark recognises the significant value of the Goals and our mission of driving greater sustainability in the food chain is closely aligned with their aspirations.



There is a great deal of alignment and synergy between Benchmark's work and the aspirations of the Goals. Benchmark directly and indirectly contributes to the delivery of them, in particular, [Goal 14: Life below water](#), which runs through everything we do, including:

- Collaborating with long-standing partner, Espersen, and other industry partners to develop new technologies with improved selectivity to reduce by-catch, increase fuel efficiency and reduced environmental impact — including damage to the ocean floor.
- Improving fish genetics to increase yield, quality and health. Providing advanced nutrition to enhance fish growth and health thereby contributing to a sustainable source of protein to feed a growing population.
- Developing health products and solutions that reduce waste from disease or sub-optimal production;
- Providing training and data solutions to educate and upskill stakeholders throughout aquaculture and the food chain.
- Investing in research, development and innovation to solve the most pressing challenges to achieving greater sustainability.





## SUSTAINABILITY

## COMMUNITIES

We believe business can be a force for good and aim to have a positive impact in the communities in which we work. In the UK, Benchmark has shared its farm with a local charity, FarmAbility, for over six years, positively impacting the lives of over 100 people with learning disabilities and autism.

## What our charities say about us

On 5th June, Benchmark won a 2018 Local Business Charity Award for its support of FarmAbility — a charity helping people with learning disabilities and autism get into employment. Benchmark was one of dozens of Oxfordshire businesses and individuals nominated at the 2018 Local Business Charity.

Read below FarmAbility Director, Sarah Giles, abridged speech about why she nominated Benchmark.

“Companies give to charities in different ways; through corporate volunteering, in-kind donations of time and skills, and of course financial support.

“What makes Benchmark’s support of our charity almost unique, and the reason I nominated them for this award, is the nature of the support we receive, and the impact this has on our charity.

“Benchmark’s support comes in the shape of the farm — they share their farm with us, and this provides the environment and all the key ingredients we need to run programmes for co-farmers.

“Their contribution doesn’t stop at sharing their physical space and animals with us, as significant as that is. The myriad people who either regularly or occasionally meet our co-farmers on the farm — from managers and farm staff, to their science and operations team, visiting personnel from the wide range of Benchmark companies both national and international, and the plc’s own CEO and CFO; they are all interested in and committed to the concept of using the farm to bring value to the lives of people who face challenges.

“This model of support is a brave and innovative one — many commercial farms would simply see too many barriers and challenges to welcoming us onto their farm, and to allowing us to be such a prescient and vocal presence on their farm!

“I nominated Benchmark because we reckon they don’t shout nearly often enough and never loud enough about what they do for us. We are so grateful for what they give us and we would like them to be recognised and applauded for their commitment to inclusion and to meaningful occupation for everyone.”



Image: FarmAbility activities at Benchmark’s farm in Oxford, UK.

## Supporting the next generation

Creating sustainability in aquaculture isn’t just about supporting our customers and partners, or ensuring we have a positive impact on the industry we serve and the planet, it’s also about investing in future generations — particularly in emerging or rapidly developing aquaculture markets.

Through the Mama Magda Aquaculture Fund, which was established by Ghent University in 2010, we are contributing to educating and upskilling the next generation of aquaculture researchers, farmers, producers and specialists in developing countries.

Under the initiative, and in cooperation with leading aquaculture-specialist universities in Asia, South America and South Africa, we are supporting students to take part in a six-month research stay at Ghent University. Thanks to decades of aquaculture experience and expertise, Ghent University is able to offer students leading-edge research and technical capabilities, whilst also supporting the remainder of the course which is managed by the partner university in the student’s home country.

As well as creating better links between leading aquaculture universities in developed and developing countries, and ensuring students have access to the most experienced tutors and resources, the programme aims to equip aquaculture’s next generation with the knowledge and skills they need to forge a healthier more sustainable future for the industry in their home countries.

## What is the Mama Magda Aquaculture Fund?

The Mama Magda Aquaculture Fund (MMAF) offers young researchers from developing countries up to 15,000 EUR for a research stay of 6 months at Ghent University in preparation for a joint PhD between Ghent University and their host institution.

The fund was established in memory of Magda Vanhooren — wife of Ghent University Professor, Patrick Sorgeloos — who took care of social matters for the foreign students at the Laboratory of Aquaculture & Artemia Reference Center from 1978 until her passing in 2010. Her devotion to the well-being and happiness of all students and colleagues earned her the nickname ‘Mama Magda’.

For more information, please visit [mamamagda.ugent.be](http://mamamagda.ugent.be)



## OUR PEOPLE

OUR VALUES  
DEFINE US

Our people are our most valuable asset and play a vital role in helping us pursue our strategic goals. We are a global business employing a talented and diverse workforce of 1066 people from 42 different nationalities, spanning a range of languages and cultures.

**1066**  
PEOPLE

**42**  
NATIONALITIES

Our people uphold the core values that underpin Benchmark. We are committed to continuously attracting and retaining people of the highest calibre and creating a working environment where they feel inspired to drive our impact and growth.

**We are Brave  
& Ambitious**

We challenge the status quo to create understanding, opportunity and innovation

**We are Practical**

We deliver the day job, we keep it simple, we are honest and straightforward

**We are Focused**

We are clear on our vision and know what success looks like

**We are Collaborative**

None of us are as good as all of us

**We are Courteous  
& have Fun**

Our manners matter, our humour helps

**Readying the business for  
the next phase of growth**

Our rapid growth in recent years, including a number of acquisitions, called for a new organisational structure to promote delivery of synergies across the Group. A new matrix structure was put in place and our Operations Board was restructured. This has already resulted in improved communication and alignment across the Group and increased efficiency.

New additions to the Operations Board include two high calibre appointments:

Alex Raeber, who joined the Board as Chief Scientific Officer in October 2018. Alex has a strong track record in the animal health sector with more than 18 years' experience in global public companies as well as start-ups. Most recently he was the Director of Global R&D, AgriBusiness at Thermo Fisher Scientific, the American multinational biotechnology product development company, listed on the NYSE.

Doerte Laue joined Benchmark in September 2018 to take up the position of Group Marketing Director responsible for developing and implementing short, medium and long-term marketing strategies and plans to support Benchmark's growth.

Doerte has over 20 years' professional experience in leadership functions related to innovation management, product management, new business development and marketing and sales. She brings to Benchmark a wealth of experience having worked for leading multinational B2C and B2B players related to the LifeScience and Packaging industry; such as Mars, Boehringer, DSM and Amcor.

During the year, work to merge our Technical Publishing and Sustainability Science divisions was completed, forming our new Knowledge Services division, to provide professional education and data solutions for a sustainable food chain. Integration between the companies forming our Genetics division has been ongoing throughout the year and is already yielding greater collaboration and synergy.

Succession planning remains a focus at various levels across the organisation and we are evolving our Management Development Programme to develop emerging talent. Ongoing recruitment for highly skilled, highly specialised positions across the Group — particularly within the areas of health, nutrition and genetics — remained a challenge throughout 2018.

**Ensuring the health and  
safety of every employee**

Benchmark is committed to building a working environment where health and safety is paramount in everything we do. We provide a safe and healthy working environment, including any company-provided living quarters. This year's annual Global Safety Day, which was held post year end in October 2018, was accompanied by a compilation of videos that promoted the message that every employee has a responsibility to prioritise their own safety as well as that of their colleagues. They were translated into several languages and shared via our Group wide Intranet and shown on site where we have large numbers of employees without access to a computer.

**Our Commitment to Health and Safety**

- Nothing is more important than the health and safety of our people
- Nothing we do is worth being hurt for
- Nothing is so important we cannot take time to do it safely
- We will never witness an unsafe act or condition without taking action

The 'Health' element of 'Health and Safety' often gets overlooked in the workplace. To address this, we have been piloting a series of workshops that promote positive health at work. These workshops, held in the UK and Thailand to date, are complementary to our new 'Being Well' initiative (see Sustainability section for more information) which is seeking to foster an open and proactive culture across the Group around employee health, including mental health. Each workshop was tailored to the needs of the individual office or team and helps identify where stress can be removed or reduced, while equipping employees and managers with strategies and methods for dealing with stress and how to promote positivity and balance in the work place.

In the UK, this was supported by a new Employee Assistance Programme (EAP), which is an online and telephone service designed to help employees deal with personal and professional problems that could be affecting their home life or work life, health and general well-being. The EAP service provides a complete support network that offers expert advice and compassionate guidance 24 hours a day, seven days a week, covering a wide range of issues.



**Environment**

A new programme to improve environmental stewardship across the Group was launched this year. A network of Environmental Representatives has been established to ensure we have a dedicated employee at every Benchmark location to drive forward Group initiatives and measures intended to reduce our environmental impact. Representatives have taken on this role in addition to their existing roles to help gather data and drive forward the following initiatives:

- Comply with environmental regulations and other applicable environmental requirements
- Identify ways to protect our natural resources by implementing programmes and procedures to ensure minimal impact
- Identify and minimise environmental impacts at the earliest opportunity
- Re-use and recycle whenever possible

**Reducing our travel footprint**

The introduction of a new travel policy in March 2018 has resulted in some significant changes to our travel footprint. Benchmark has sites in 27 countries and serves customers in over 70 so there will always be a need to travel but it has been encouraging to see our people and partners making more use of video conferencing facilities, as well as train travel or car sharing, where possible.

**Equality, diversity and inclusion**

We believe in transparency and strive to attract a diverse workforce and provide equal opportunities throughout the business. The introduction of mandatory gender pay gap reporting in England, Scotland and Wales in 2018 is a positive step for diversity and gender equality and will likely lead to increased transparency. Whilst Benchmark is not obliged to report on this issue, as we do

not have 250+ people employed at any one site, we have done so voluntarily as we recognise the benefits this will give us.

Overall across the whole of Benchmark UK, the balance of men to women was 50:50 during the snapshot reporting period (April 2017). Our gender pay gap is strongly influenced by the gender make-up of our four pay quartiles (Figure 1). There are significantly more males than females in the two upper pay bands. As no one single entity has 250 employees, the figures presented are an amalgamation of information covering 10 different payrolls, and people working across a range of sectors from agriculture and publishing to pharmaceuticals. The pay gap and bonus differences are shown below. (Figure 2 and 3)

We are committed to boosting female representation at senior levels in the business to create a representative workforce and are implementing several measures to facilitate this.

**Closing the gap**

1. Challenging the recruitment process — to ensure that recruiters provide us with a diversified shortlist for all senior positions.
2. Training — Benchmark’s leadership and management team will receive unconscious bias training to help them to recognise their actions, both positive and negative.
3. Creating a diversity network — to provide encouragement and support to women throughout Benchmark to put themselves forward for more senior roles.
4. Mentoring — from other senior women to those putting themselves forward.

The overall exercise of analysing the pay and bonus of the company workforce has been an extremely useful one. We are voluntarily undertaking a full company-wide gender pay gap review across all of our international employees and our overseas companies.

**Keeping the line of communication open**

We are fully committed to effective, two-way communication with employees across the Group and are always looking for ways to build on this. During the year, engagement with our Group wide Intranet has increased 43 percent. This was in part due to an increase in employees, as a result of new positions and acquisitions, as well as new initiatives such as video blogs and messages from the senior team; Group wide social activities including our ‘100-day Step Challenge’ and ‘Great Benchmark Bake Off’ to raise money for a range of global charities; the launch of a network of ‘Intranet Champions’ which ensures a representative in every Benchmark location to provide regular news and updates thereby ensuring every area of our business is represented on the Intranet and in the weekly news roundups.



Image: Benchmark Genetics Chile.

We share information about business plans and progress throughout the year and, based on feedback from the focus groups held this year (see above), we plan to build on this by holding regular ‘Town Hall’ meetings where all employees will be able to connect with and put questions to the CEO and members of the leadership team at an allotted timeslot at regular periods throughout the year. A range of blogs from members of the management team will continue to be rolled out, providing all employees with insights and updates about relevant projects they are working on and their life outside work which will be shared via our Group Intranet. Our ‘Day in the Life’ feature, which shines a light on members of the Group — their role at Benchmark and what they enjoy outside of work — remains one of our most popular initiatives and will continue for the foreseeable future.

**Looking to the future**

Two new initiatives that will be rolled out in 2019 include ‘Benchmark Informs’, which will include updates from a range of employees about Benchmark’s

strategy, work and progress; and ‘Benchmark Insights’ which will tap in to the enormous wealth of expertise and experience we have throughout the group and share it company-wide — and externally where appropriate — via videos, presentations, articles and infographics.

Benchmark’s intrinsic value rests with its people — our industry is one based on knowledge and innovation and we depend entirely on our workforce to bring these things to the Group. Our most important job is to ensure that the skills and experience of our people runs through everything we do. To do this we must ensure everyone within the Benchmark team feels valued and fulfilled within their roles while understanding the important part they play in helping Benchmark achieve its vision. This is and will continue to be a priority for Benchmark.

Figure 1. Proportion of male and female UK employees according to quartile pay bands

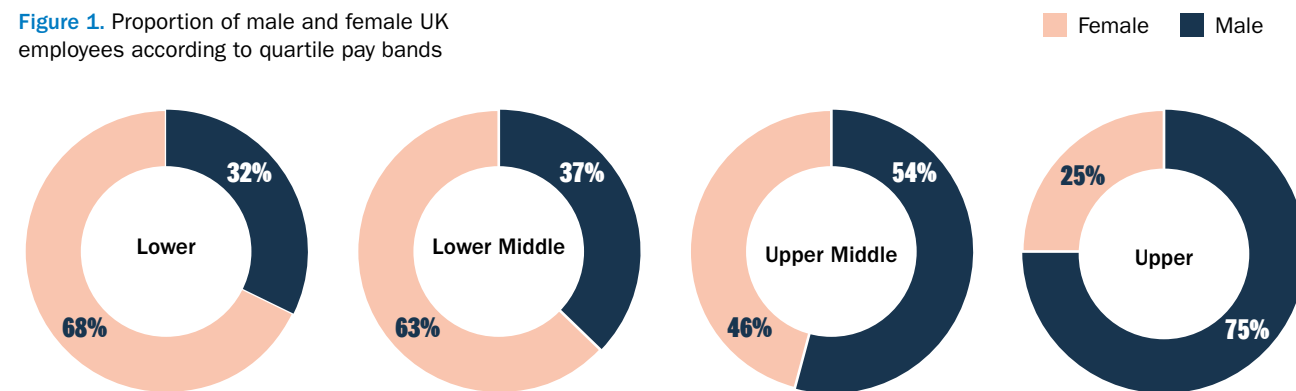


Figure 2. Pay gap and bonus difference between male and female UK employees

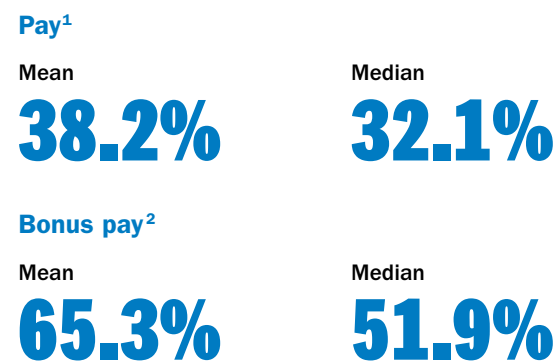
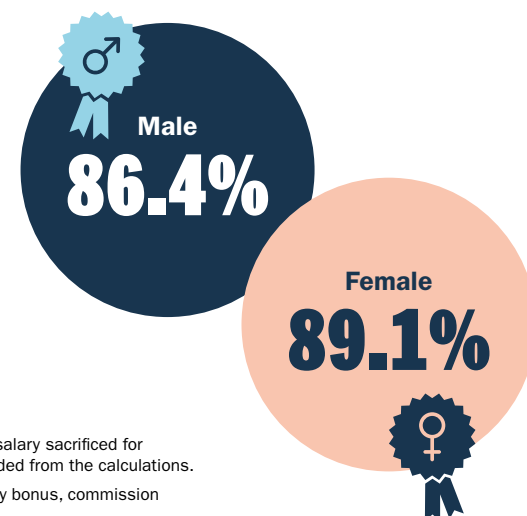


Figure 3. Proportion of male and female UK employees receiving bonus pay



<sup>1</sup> Pay calculations are based on FTE adjusted pay and include basic salary excluding salary sacrificed for pension contributions and childcare, plus allowances. Overtime payments are excluded from the calculations.

<sup>2</sup> Based on actual bonus paid in the 12 months prior to 5th April 2017. Total company bonus, commission and share payments are included in the calculations which are not adjusted for FTE.



AWARDS

# BENCHMARK SCOOPS 2018 CHARITABLE AWARD



Benchmark won the award after being nominated by FarmAbility – a charity helping people with learning disabilities and autism get into employment. Benchmark was one of dozens of Oxfordshire businesses and individuals nominated for the 2018 Local Business Charity Awards held on 5th June 2018.

Image: Benchmark's Øistein Thorsen (far left) was there to accept the award alongside Sarah Giles (2nd from right) from FarmAbility.

## National Excellence Award in Thailand



In September 2018, our Advanced Nutrition team in Thailand received national recognition for their work on Health, Safety, Environment and Corporate and Social Responsibility (CSR). Competing companies were not only required to have excellent performance, but to complete a rigorous 249-point audit covering: compliance with HSE laws, continuous improvement processes, leadership, employee involvement and CSR.

## 1000 Companies to Inspire Britain



Benchmark was included in the 5th edition of '1000 Companies to Inspire Britain', making us one of only five companies to make the list for five consecutive years. The report shines a light on some of the UK's most ambitious and fast-growing companies, covering over 100 sectors.

## INVE Awarded GLOBAL GAP Certification



In September, INVE Thailand, part of Benchmark Advanced Nutrition, became the only compound feed manufacturer in the country to hold GlobalGAP Compound Feed Manufacturing (CFM) certification.

## Bronze in national Thailand 5S Awards 2018



Benchmark Advanced Nutrition scooped bronze in the final round of the National level 5S competition. 5S is a systematic approach for the workplace to help create a better working environment and consistently high-quality processes throughout participating companies' operations.

## ECO Factory Award



During the year, our Advanced Nutrition factory in Picit, Thailand was awarded the 'ECO Factory Award'. The ECO Factory Project recognises sustainable businesses that have a strong focus on the environment, covering 14 key criteria including the use of raw materials, energy, safety and environment and sustainability of businesses in the community. The team accepted their award at the ECO Innovation Forum from Mr. Somchai Harnhirun, the Permanent Secretary of the Ministry of Industry.



## RISK MANAGEMENT

### Risk management framework

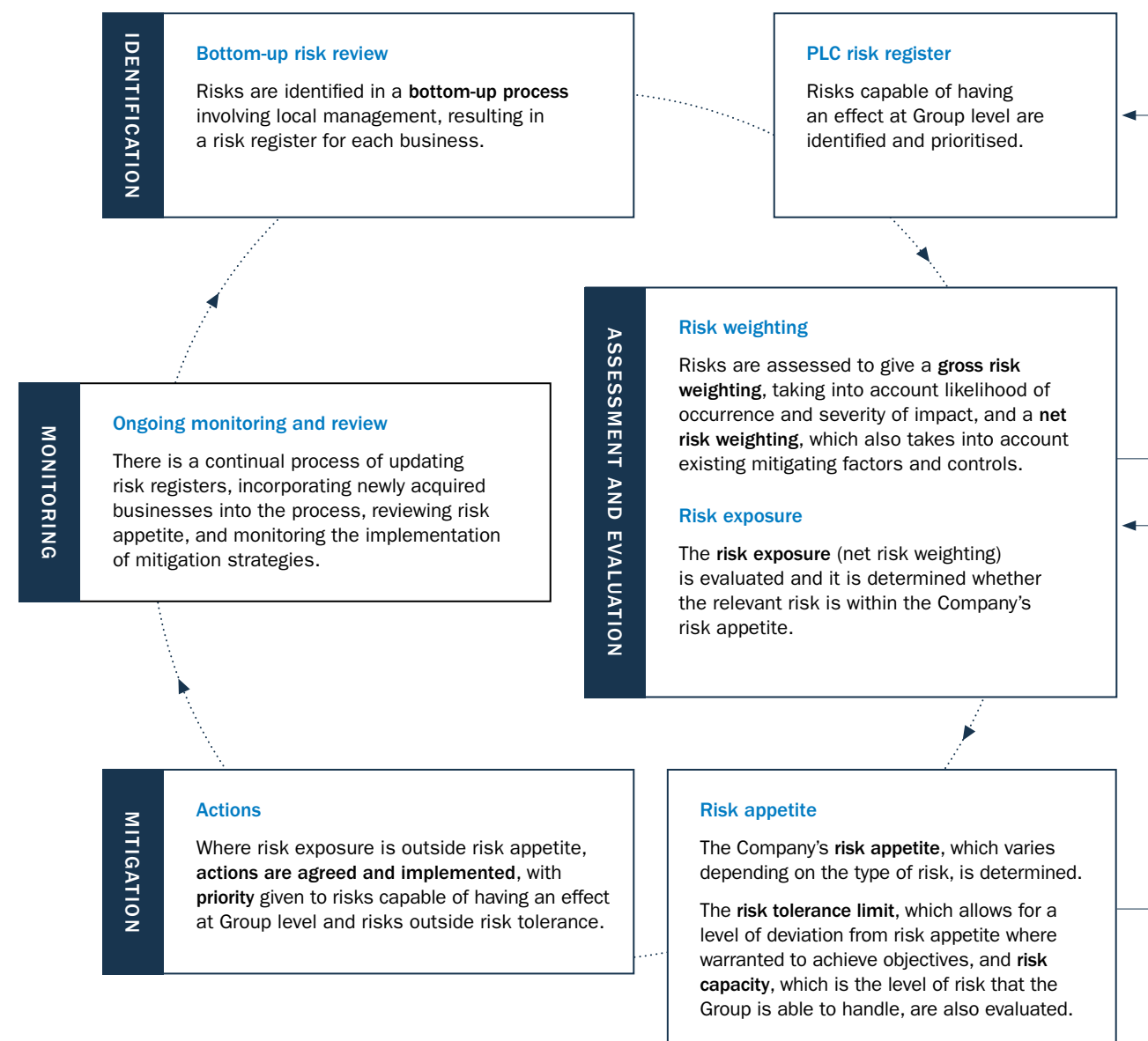
The Company's risk management framework and its implementation is led by the Chief Financial Officer, with the support of external consultants. The Board is ultimately responsible for oversight of the Company's risk management systems, with the Audit Committee acting as a reviewing committee. During the year, the Audit Committee received reports from the Chief Financial Officer regarding risk management, and from the Company's auditors regarding financial and management controls. No major issues were identified.

The Company operates its established risk management framework, which is illustrated in the diagram below.

The framework follows a bottom-up approach, through which local management lead the identification; assessment and evaluation; mitigation; and ongoing monitoring of risk. This process is followed in the context of guidelines regarding risk appetite in specified areas which are assessed and approved by the Board. The cycle of identification, assessment and evaluation, mitigation and ongoing monitoring is operated with a view to

completing a full risk management cycle in each part of the business at least once every 24 months. The framework is designed to make risk management an integrated part of the Group's day to day operations. Risks capable of having an effect at Group level are prioritised and reported on to the Board.

During FY18, the Group undertook a bottom-up review of its risk registers and is continuing to assess and evaluate the risks identified, as well as monitoring progress with mitigating actions and tracking progress with these.



### Risk appetite

During the year, the Board reviewed the areas against which the Company assesses its risk appetite in light of the evolution of the Group, and assessed and approved its risk appetite in those areas. The Company also reviewed its risk appetite statement, and made some amendments to better reflect the strategic context. The revised text is set out below:

Benchmark operates in a highly regulated sector involving significant interaction with living organisms and therefore has a very low tolerance to risks of breaching legal, regulatory or ethical standards or anything which could negatively impact on our reputation. The nature of our business means that we can be impacted by biological or climatic effects which are beyond our influence but where possible, we do take steps to mitigate these impacts on the business. We use our knowledge of fundamental biology to develop products that tackle unsolved problems often by applying new technology.

We are mindful of our stakeholder requirements and so will take measured risk with regards to the integrity of our product pipeline and intellectual assets. We recognise that our people are our greatest asset and the Group encourages their long-term commitment allowing them to progress and achieve success. The Group recognises the value that can be leveraged through collaboration and cooperation within and between divisions and understands that failure to do this effectively is a threat to such value. This is a risk that the Group strives to avoid, and our management structure will continue to promote a collaborative way of working. The Group has substantial opportunity for organic growth and recognises the importance of its supply chain to delivering this. It seeks to minimise the risk of customer dissatisfaction by delivering quality products and services in the right place and at the right time. The Group has a measured approach to projects and acquisitions and will take an appropriate level of risk commensurate with the potential returns and availability of capital.

### Key risks and uncertainties

The Company is increasingly seeking to distinguish between risks within its control, and risks outside its control, such as biological and climatic factors affecting the Group's and its customers' operations, which may require different strategies for mitigation.

#### Risks outside the Company's control

The nature of the Group's business and its customer base means that the Company is particularly vulnerable to biological and climatic factors. These include in particular:

- **Advanced Nutrition** — Market fluctuations in shrimp production volumes and pricing, often influenced by disease, drive customer demand for advanced nutrition products. The geographic diversity of the division's customer base offers some mitigation.
- **Genetics** — Disease within the Group's own operations and disease in the market resulting in border closures are the key risks affecting the division. The Group operates the highest levels of biosecurity; holds genetic stock at multiple sites; increasingly sources from its own land-based salmon breeding facilities; operates containment zones which mitigates the risk of border closures affecting its ability to import; and has placed increased focus on insuring its biological stock.

- **Animal Health** — Sales of the Group's sea lice medicines are affected by the degree of sea lice challenge in the environment, which is driven by sea temperatures and other biological factors. In addition, market and regulatory trends for tackling sea lice have an influence on customer demand for the Group's products.

The Group as a whole is also exposed to fluctuations in currency exchange rates. These impact sales volumes where products are priced by reference to US dollars but sold in local currencies; and impacts reported results when local results, assets and liabilities are converted to GBP for reporting purposes.

The Company has evaluated the potential impact of the UK's decision to leave the European Union and has identified a number of areas which could be affected. The scale of the impact depends on the nature of the exit process which is uncertain but is not expected to be material in any event. Our primary focus is on addressing Brexit risk in our Animal Health supply chain because our R&D and manufacturing operations are based in the UK and products are / will largely be sold outside the UK. Work includes transferring UK registered Marketing Authorisations for products that are sold in the EU to an EU entity and duplication of product release testing for products that are transferred between the UK and the EU. There may be potential tariffs on UK cross-border supply of products and ongoing changes to the regulatory framework.

The Group has undertaken hard Brexit mitigation planning which includes possible provision of an EU based laboratory testing facility and staff for batch testing if this is required and the transfer of product registrations to an EU domiciled legal entity within the Group. Other contingency planning includes arrangements for a possible requirement for stockpiling to avoid border delays.

Our current view on the potential changes that may result from Brexit is:

- The majority of the Group's operations are located outside of the UK and do not trade with the UK so will be unaffected;
- In terms of manufacturing and product registration, Benchmark Animal Health is accustomed to trading with multiple countries and different rules and legislation;
- Despite the possible additional administrative burden, our distribution and commercial model can adapt to changes in tariffs and duties;
- Our business is naturally hedged and diversified, which helps in a period of economic uncertainty and exchange rate volatility; and
- We will monitor the impact on workforce and global mobility to maintain an effective system for resource planning.

The Board views the potential impact of Brexit as an integral part of the review of the Principal Risks and will continue to assess the potential impacts of Brexit as the process evolves.



## PRINCIPAL RISKS AND UNCERTAINTIES

### Risks within the Company's control

In its Annual Report and Accounts 2017, the Company reported on the principal risks and uncertainties affecting the Group and actions taken to mitigate these risks. This report has been updated, with new risks included, together with an update on mitigating actions.

We have included a cross reference to our strategic objectives:

1. Grow in established markets from existing capacity;
2. Commercial delivery of Animal Health pipeline;
3. Focussed investment in markets that leverage group platform; and
4. Position Benchmark in areas of future growth. These are described in more detail on page 18.

### Strategic risks

Risk	Risk commentary	Risk mitigation and controls	Strategic objectives
<b>Competition and loss of competitive advantage</b>	<ul style="list-style-type: none"> <li>Falling behind competitors with the development and commercialisation of new, innovative products</li> <li>Threat to market share and revenues</li> </ul>	<ul style="list-style-type: none"> <li>Innovative development focus and strong pipeline of products</li> <li>IP protection including patents</li> <li>Strong customer relationships with key account structure</li> </ul>	1, 2, 3, 4
<b>Reliance on continued success of existing products</b>	<ul style="list-style-type: none"> <li>The Group is currently exposed to risk by limited diversity of revenue streams</li> <li>Risks associated with legal costs of protecting Group IP</li> <li>Group products require the holding of certain licences, accreditations or regulatory approvals that could be withdrawn</li> </ul>	<ul style="list-style-type: none"> <li>Increasing number of products launched from development pipeline is diversifying revenues</li> <li>Strong Group legal team with dedicated IP expertise</li> <li>Vigorous defence of own IP</li> <li>High levels of staff competency and stringent processes related to Regulatory Affairs</li> </ul>	1, 3, 4
<b>Delivery of cross group synergies</b>	<ul style="list-style-type: none"> <li>Risks associated with failure to fully realise operational synergies and cost benefits</li> <li>Lower profitability and cash generation, and slower returns than anticipated</li> </ul>	<ul style="list-style-type: none"> <li>Establishment of cross-divisional functions including Chief Scientific Officer, Marketing Director, Supply Chain initiative and Key Accounts Initiative to better facilitate cooperation and integration under guidance of Operations Board</li> <li>Strategy Execution team assists with planning and managing key projects</li> </ul>	1, 2, 3, 4
<b>New product commercialisation</b>	<ul style="list-style-type: none"> <li>Risk that pipeline products may be delayed or fail technically before launch</li> <li>The Group's strategy has a significant focus on new products and a material failure to deliver would be damaging</li> </ul>	<ul style="list-style-type: none"> <li>Experienced CSO manages R&amp;D teams across the Group</li> <li>Experienced Group regulatory affairs team</li> <li>Close dialogue with regulators</li> </ul>	2, 4

### Operational risks

Risk	Risk commentary	Risk mitigation and controls	Strategic objectives
<b>Threats to the supply chain</b>	<ul style="list-style-type: none"> <li>Benchmark is reliant on a small number of key raw materials for important products</li> <li>The Group has R&amp;D and production sites which are important to its current revenues and future success and which are leased</li> <li>Commissioning of new facilities could be delayed leading to late product deliveries</li> </ul>	<ul style="list-style-type: none"> <li>Dual supplies of raw materials where possible</li> <li>Supplies secured with contractual arrangements</li> <li>Seek long-term tenure of sites</li> </ul>	1, 2
<b>Health &amp; Well-being of Employees</b>	<ul style="list-style-type: none"> <li>Poor health or wellness impacts employees lives and reduces productivity</li> <li>Some aquaculture activities have inherent operational risks</li> </ul>	<ul style="list-style-type: none"> <li>Well-developed Health &amp; Safety management regime in place across the Group</li> <li>Senior level commitment to ESG programme Group wide</li> </ul>	-
<b>Recruitment and retention of high calibre people</b>	<ul style="list-style-type: none"> <li>To maintain market leadership it is essential that the Group has and keeps people with key skills</li> </ul>	<ul style="list-style-type: none"> <li>Centralised People Team delivering People strategy</li> <li>Formal succession planning process</li> <li>Remuneration policy designed to encourage retention</li> </ul>	2, 3
<b>Loss of key IT system</b>	<ul style="list-style-type: none"> <li>The Group IT systems facilitate daily work, collaboration and hold Group IP and trade secrets</li> <li>Multiple risks of systems failure or cyber attack</li> <li>Loss of access or key information would be disruptive to the Group</li> </ul>	<ul style="list-style-type: none"> <li>Internal experienced IT team</li> <li>Increasing integration of software platforms to improve security and reliability</li> </ul>	-
<b>Application of appropriate standards of governance</b>	<ul style="list-style-type: none"> <li>As an international business, the Group is required to comply with law and regulation in several jurisdictions</li> <li>There is risk of non-compliance leading to potential fines, penalties, loss of revenues and damage to reputation</li> </ul>	<ul style="list-style-type: none"> <li>Experienced Group legal, finance, people, regulatory affairs, investor relations, health &amp; safety and IT teams work closely with divisions</li> <li>Training programme, Whistleblowing policy, and informal routes by which concerns can be raised, are designed to identify and address potential non-compliance</li> </ul>	-

### Financial risks

Risk	Risk commentary	Risk mitigation and controls	Strategic objectives
<b>Maintain liquidity and manage leverage</b>	<ul style="list-style-type: none"> <li>Failure to identify and maintain sufficient liquidity headroom</li> <li>Risk to funding of key growth strategies</li> </ul>	<ul style="list-style-type: none"> <li>Close control of cash flows with regular update of short and long-term projections</li> <li>Strong relationships with Group's bankers</li> </ul>	-
<b>Growth in trading results in higher investment in working capital</b>	<ul style="list-style-type: none"> <li>Top line growth through new products and markets can drive changing patterns of working capital</li> <li>Growth in some markets presents increased risk of slow paying or bad debts</li> </ul>	<ul style="list-style-type: none"> <li>Divisional management of pricing and credit terms</li> <li>Close monitoring of investment in working capital by Operations and Plc boards</li> <li>KPIs include working capital measures</li> </ul>	-

The Strategic Report was approved by the Board on 24 January 2019 and signed on its behalf by

**Malcolm Pye**  
Chief Executive Officer



# 02 GOVERNANCE

- 66 Introduction to the Board
- 70 Leadership
- 73 Effectiveness
- 76 Accountability
- 79 Remuneration
- 84 Shareholders
- 85 Directors' Report
- 89 Directors' Responsibility Statement



## BOARD OF DIRECTORS

DIVERSE  
LEADERSHIP

The depth of knowledge, broad scientific skills and commercial experience of our directors ensure we recognise and extract the synergies we need to succeed.

During the year, the Company saw the retirement of Alex Hambro as Chairman, and his replacement with Peter George, and after the year end in October 2018, Alex Raeber was appointed as Chief Scientific Officer. Peter's appointment reflects a shift from the Company's post IPO phase of acquisition led growth, to a focus on integration, extraction of synergies and organic growth. This shift is reflected in the Group's results for FY18 which show 68% growth in adjusted EBITDA and 8% revenue growth (13% using FY17 forex rates).

The appointment of Alex Raeber as Chief Scientific Officer reflects the importance of the Group's product pipeline and its timely delivery, which is fundamental to maintaining the strong competitive position of the Advanced Nutrition and Genetics divisions in their respective markets, and to the growth in the Animal Health division which is anticipated over the coming years.

The Company also reported in its Annual Report 2017 on the appointment of Hugo Wahnish and Yngve Myhre to the Board, which took place early in FY18. Hugo Wahnish brings a strong track record in the commercialisation of international pharmaceuticals, and Yngve Myhre has extensive experience and expertise in aquaculture in Norway, Chile and the Mediterranean.

The Board has evolved to keep pace with the growth of the Company, and now comprises a strong and balanced executive team, complimented by an experienced and diverse group of non-executive Directors. Together they bring the depth of knowledge, scientific understanding, and commercial experience across the Group's global and sectoral footprints, to enable Benchmark to execute its strategy and deliver success to its shareholders.



**Malcolm Pye**  
Chief Executive Officer

**Appointed:** November 2000

**Independent:** No

**Skills, competence and experience:** Malcolm has over 30 years' experience in international Agribusiness through his roles within the Hillside Holdings/HMTF group, operating in animal breeding, poultry, feed milling and veterinary services. During this time, Malcolm gained extensive experience in breeding and genetics, sales and strategic M&A, and held board positions within the Group. Malcolm founded Benchmark in 2000 and has since led the Company's growth and diversification. Malcolm has a degree in Zoology/Applied Zoology from the University of Wales (Bangor).



**Mark Plampin**  
Chief Financial Officer

**Appointed:** March 2010

**Independent:** No

**Skills, competence and experience:** Mark is a qualified Chartered Certified Accountant with over 20 years' experience. Mark joined Benchmark in 2010 from PKF (UK) LLP (now BDO LLP), where he was a Partner and National Chairman of the Food Sector Group. Mark's experience at PKF was focussed on corporate finance, including leading on M&A and the strategic development of high-growth small and mid-market businesses.



**Alex Raeber**  
Chief Scientific Officer

*Sustainability Committee*

**Appointed:** October 2018

**Independent:** No

**Skills, competence and experience:** Alex has a strong track record in the animal health sector with more than 18 years' experience in global public companies as well as start-ups. He most recently was the Director of Global R&D, AgriBusiness at Thermo Fisher Scientific, the American multinational biotechnology product development company, listed on the NYSE. In this role he drove the agribusiness innovation and growth strategy, and was focussed on the execution of the agribusiness product commercialisation pipeline across a range of R&D and manufacturing sites globally. Prior to this, Alex led R&D divisions at biotechnology firms including Prionics AG and Cytos Proteome Therapeutics. Alex holds a PhD in Pharmacology from the University of Zurich and an MSc from the Swiss Federal Institute of Technology.





**Peter George**  
Non-Executive Chairman

*Nomination Committee (Chair)*  
— *Remuneration Committee*

**Appointed:** May 2018

**Independent:** Yes

**Skills, competence and experience:**

Peter has a strong track record in growing successful international pharmaceutical and healthcare businesses. He is most renowned for his achievements as CEO of Clinigen Group plc, the FTSE AIM global pharmaceutical and services company, which he founded in 2010 and grew into close to a £1bn market cap company having acquired several businesses and expanded its international footprint. Prior to Clinigen, Peter held a number of senior roles in the pharmaceutical and healthcare sectors including CEO of Penn Pharmaceutical Services. He co-created Unilabs Clinical Trials International in 1997, which was successfully sold to Icon plc in 2000.

**Other roles:** Peter serves as Chairman of Ergomed plc, the AIM-listed provider of clinical research, drug development and safety services internationally. He is also an Entrepreneur in Residence at Oxford Science Innovations.



**Susan Searle**  
Senior Independent Director

*Remuneration Committee (Chair)*  
— *Nomination Committee*  
— *Audit Committee*

**Appointed:** December 2013

**Independent:** Yes

**Skills, competence and experience:**

Susan has over 25 years' experience working with entrepreneurs and academic inventors in the commercialisation of university research. Susan co-founded Imperial Innovations Group plc (now owned by IP Group), one of the world's leading technology venture investment businesses, and was the group's Chief Executive Officer from 2002 to 2013. Previously, Susan held roles in sales, marketing, operations and manufacturing in various industries including chemicals, precious metals and retail. She has investment and M&A experience in healthcare and technology companies. Susan holds an MA in Chemistry from Exeter College, Oxford.

**Other roles:** Chair of Woodford Patient Capital PLC; Chair of Mercia Technologies PLC; Senior Independent Director and Non-executive Director of Horizon Discovery Group plc; Non-executive Director of QinetiQ Group plc.



**Kevin Quinn**  
Non-executive Director

*Audit Committee (Chair)* — *Remuneration Committee* — *Nomination Committee*  
— *Sustainability Committee (Chair)* — *Disclosure Committee*

**Appointed:** November 2016

**Independent:** Yes

**Skills, competence and experience:**

Kevin is a qualified Chartered Accountant with over 30 years of financial experience in international business and the biosciences industry, including with FTSE 100 companies. Kevin was Chief Financial Officer at Berendsen plc, the leading FTSE 250 European textile service business, until the takeover of Berendsen by Elis SA in September 2017 and is currently Chairman designate of Marlowe plc. Previously, Kevin held senior finance positions within biosciences group Amersham plc and before that was a partner with Pricewaterhouse Coopers (Prague). Kevin holds a BA in French from University College, Durham.



**Hugo Wahnish**  
Non-executive Director

*Audit Committee*

**Appointed:** November 2017

**Independent:** Yes

**Skills, competence and experience:**

Hugo has over 35 years' experience in the animal health and pharmaceuticals industry, firstly with GlaxoSmithKline, and more recently with Merck during a major growth period. Hugo was Chief Commercial Officer Animal Health at Merck, with responsibility for Merck's commercial operations worldwide. Hugo brings a wealth of international experience to the board of Benchmark, alongside his expertise in aggressively growing businesses and in the commercialisation of medicines and animal health products.

**Other roles:** Hugo has acted as an independent senior advisor with several multinational companies, private equity groups and consulting firms, primarily in the animal health sector.



**Yngve Myhre**  
Non-executive Director

**Appointed:** November 2017

**Independent:** Yes

**Skills, competence and experience:**

Yngve has more than 20 years' experience in the aquaculture sector as a senior executive, adviser and investor. Yngve was Chief Executive of leading Norwegian salmon producer Salmar, and of international white fish supplier Aker Seafood during periods of successful growth. Yngve has a very strong track record in Benchmark's focus area of aquaculture, both in the Norwegian and international markets.

**Other roles:** Yngve is Chairman of Chilean salmon producer Nova Austral, and sits on the board of Mediterranean fish producer, Andromeda. Yngve also acts as a strategic adviser to investors in the aquaculture sector.



**Athene Blakeman**  
Company Secretary and  
Group Legal Counsel

*Sustainability Committee*

**Appointed:** September 2014

**Independent:** No

**Skills, competence and experience:**

Athene is a qualified Solicitor with over 13 years' experience. Having previously worked in Slaughter and May and Travers Smith's corporate finance teams, Athene joined Benchmark in 2014. Athene is responsible for the Group's legal and intellectual property functions globally, including compliance, M&A and joint ventures, share schemes, commercial and other contracts, capture and utilisation of IP, disputes and management of legal risk. Athene holds an MA in Jurisprudence from St John's College, Oxford.

**Board Committees**

**Audit Committee**

Kevin Quinn (Chair)  
Susan Searle  
Hugo Wahnish

**Remuneration Committee**

Susan Searle (Chair)  
Peter George  
Kevin Quinn

**Nomination Committee**

Peter George (Chair)  
Susan Searle  
Kevin Quinn

**Sustainability Committee**

Kevin Quinn (Chair)  
Alex Raeber  
Ruth Layton, Sustainability Director  
Ivonne Cantu, Investor Relations Director  
Athene Blakeman, Group Legal Counsel  
and Company Secretary

**Disclosure Committee**

Mark Plampin (Chair)  
Malcolm Pye  
Kevin Quinn

In urgent situations, in the absence of the permanent members of the Disclosure Committee, any two Directors, one of which is Mark Plampin or Malcolm Pye, may exercise the powers of the Disclosure Committee.

The Company Secretary serves as secretary to all of the Board Committees.



## LEADERSHIP

### Governance framework

Benchmark's governance framework is outlined in the diagram below and described in this report.

The Company complies with the UK Corporate Governance Code (the Code). An overview of the Company's compliance with the Code, and an explanation of those Code provisions it has not implemented, is set out in the Directors' Report on pages 85 to 89.

Board of Directors of Benchmark Holdings plc	
Chair, Non-Executive Director	Peter George
Senior Independent Non-Executive Director	Susan Searle
Non-Executive Directors	Kevin Quinn Hugo Wahnish Yngve Myhre
Chief Executive Officer	Malcolm Pye
Chief Scientific Officer	Alex Raeber
Chief Financial Officer	Mark Plampin
Company Secretary	Athene Blakeman

Audit Committee	Nomination Committee	Remuneration Committee	Sustainability Committee	Disclosure Committee
Kevin Quinn (C) Susan Searle Hugo Wahnish	Peter George (C) Susan Searle Kevin Quinn	Susan Searle (C) Peter George Kevin Quinn	Kevin Quinn (C) Alex Raeber Ruth Layton Ivonne Cantu Athene Blakeman	Mark Plampin (C) Malcolm Pye Kevin Quinn

Operations Board	
Chief Executive Officer	Malcolm Pye
Chief Scientific Officer	Alex Raeber
Chief Financial Officer	Mark Plampin
Heads of Division	Philippe Leger Jan-Emil Johannessen John Marshall James Banfield
Heads of cross-Group functions	Doerte Laue Roland Bonney Athene Blakeman Ivonne Cantu Anna Winton

Advanced Nutrition Board	Genetics Board	Animal Health Board	Knowledge Services Board
Executive Directors	Executive Directors	Executive Directors	Executive Directors
Head of Division	Head of Division	Head of Division	Head of Division
Senior management of businesses in division	Senior management of businesses in division	Senior management of businesses in division	Senior management of businesses in division

During the year, the Group appointed a new Chief Scientific Officer, Alex Raeber, and a new Marketing Director, Doerte Laue. Alex Raeber sits on the Benchmark Holdings plc Board, the Operations Board, and divisional Boards. Doerte Laue sits on the Operations Board, and divisional Boards.

Alex's profile and experience is summarised on page 67 of this report. His appointment recognises the importance of the Group's product pipeline and its timely delivery, which is fundamental to maintaining the strong competitive position of the Advanced Nutrition and Genetics divisions in their respective markets, and to the growth in the Animal Health division which is anticipated over the coming years.

Doerte has over 20 years' professional experience in leadership functions related to innovation management, product management, new business development and marketing and sales. Doerte has built her professional profile with leading multinational B2C and B2B players in the life sciences and packaging industries, including Mars, Boehringer, DSM and Amcor. Doerte's appointment recognises the opportunity the Group has to leverage its existing strong market positions and brands; strengthen the Benchmark brand; utilise its wealth of market intelligence; and improve positioning of new products, in order to deliver its strategy of delivering sustainable solutions to the industries it serves.

#### Board of Directors of Benchmark Holdings plc

The Board is responsible for the long-term success of the Group, overseeing the development and delivery of strategy, financial performance, and conduct of the business, in order to generate sustainable value for shareholders.

The Executive Directors are responsible for the delivery of strategy, business operations, risk management, and ensuring that the right financial and people resources are in place to achieve the Company's aims.

The Non-Executive Directors are responsible for assisting in the development of and constructively challenging strategy, overseeing the performance of management, satisfying themselves that financial controls and risk management systems are robust, and safeguard the integrity of financial information, determining the Directors' remuneration, and succession planning for the Executive Directors and senior management.

A formal schedule of matters reserved for the Board is maintained and communicated throughout the Group with regular training, to ensure that decisions which are significant due to their strategic, financial or reputational implications are reserved for approval by the Board. The column to the right lists the key areas of decision-making reserved for the Board.

#### Operations Board

Responsible for developing and delivering cross-Group opportunities, revenue and costs synergies, advancing integration, and overseeing the financial and operational performance of the Group as a whole.

#### Divisional Boards — Advanced Nutrition; Genetics; Animal Health; Knowledge Services

Responsible for the development and delivery of the strategy of the relevant division and its businesses, its financial performance, and the implementation of cross-Group opportunities and synergies.

#### Matters reserved for the Board

##### Strategic decisions

- Review and approval of the long-term objectives and strategic direction of the Group
- Approval and monitoring of strategic and annual business plans and budget
- Approval of significant acquisitions, mergers, disposals and other transactions
- Approval of diversification into new business activities and new geographies

##### Reporting

- Approval of the Annual Report and Accounts and of the interim financial statements
- Oversight and approval of significant changes to reporting policies and practices

##### Regulatory matters

- Compliance with the AIM Rules for Companies, the UK Corporate Governance Code, procedures for regulating dealing in the Company's shares by its employees and Directors

##### Finance, governance and controls

- Review and approval of internal control and risk management systems
- Approval of significant projects, contracts and disputes
- Approval of financing policy, including the issue of shares and significant borrowings
- Appointment or removal of the auditors and determination of the audit fee
- Oversight and approval of Directors' conflicts of interests
- Approval of interim dividends and recommendation of final dividends

##### Succession planning and reward

- Ensuring adequate succession planning is in place
- Appointment and removal of Directors on the Board and its Committees, and of the Company Secretary
- Approving and recommending to shareholders the terms of employee share schemes, and approving significant changes to pension schemes
- Approval of remuneration of senior management



## Board attendance

During the year, the Board held 7 scheduled Board meetings, one scheduled strategy day and 11 special Board meetings. Individual attendance at the scheduled Board meetings is set out below.

A Board dinner is usually held around Board meetings to allow for more informal discussion, and for the Board to spend time with the Company's senior management team.

Attendance	Appointment	Number of scheduled Board meetings attended in FY18	Maximum possible scheduled meetings in FY18	% of scheduled meetings attended
Peter George <sup>1</sup> , Chair	May 2018	2	3	66%
Alex Hambro <sup>2</sup> , Chair	December 2013	4	4	100%
Susan Searle, Senior Independent Director	December 2013	8	8	100%
Kevin Quinn Non-Executive Director	November 2016	8	8	100%
Hugo Wahnish <sup>3</sup> Non-Executive Director	November 2017	7	7	100%
Yngve Myhre <sup>4</sup> Non-Executive Director	November 2017	6	7	86%
Malcolm Pye, Chief Executive Officer	December 2013	8	8	100%
Mark Plampin, Chief Financial Officer	December 2013	8	8	100%

<sup>1</sup> Peter George was appointed to the Board in May 2018.

<sup>2</sup> Alex Hambro stepped down from the Board in May 2018.

<sup>3,4</sup> Hugo Wahnish and Yngve Myhre were appointed to the Board in November 2018.

## Board activities in the year

At each scheduled Board meeting, the following standing items are considered:

### Standing agenda items

Notice, quorum, Directors' duties and any conflicts of interest arising.

Approval of minutes of and reviews action points from previous meetings.

Review of **Management Information Pack** which includes Group management accounts, outlook, cash flow forecast, financial covenant forecast, share price performance, shareholder and trading report and headcount report.

Receipt of **update from the CEO** regarding strategic matters and significant developments.

Review of **Capex Project Report**, tracking expenditure and progress with significant capital investments. In FY18 these reports included the SalmoBreed Salten land based salmon broodstock facility; fitting out of the Braintree Biotech vaccine manufacturing facility; Ardtoe aquaculture research facility; and the drilling of a new borehole at the land-based salmon broodstock facility in Iceland.

Review of **Deal Tracker**, updating on potential acquisitions, joint ventures and other exceptional transactions.

Consideration and approval of **Matters Reserved for the Board**.

Review of **Legal and Intellectual Property** report, regarding IP development and protection, transactions, key commercial arrangements and their terms, and disputes.

Review of **Compliance Report**, regarding compliance matters, training and initiatives.

Review of **People Report**, with an overview of headcount, vacancies, management appointments, and updating on other people matters arising.

Review of **Health and Safety Report**, with an overview of accident and near miss reporting, initiatives, risk assessments, and Health and Safety performance.

Review of **Investor Relations Report**, summarising announcements, media coverage and other shareholder events.

In addition to the standing items, an overview of the principal matters considered by the Board in the year is set out below:

### Strategy and operations

Received and discussed presentations from the **Heads of the Advanced Nutrition, Genetics, Animal Health and Knowledge Services** divisions, regarding their 5-year strategic plans, market trends and opportunities, key growth areas, and main risks.

Reviewed and approved the Group **budget** for FY18.

Received and discussed presentations from the Head of **Key Account Management** regarding key account initiatives and systems.

Received and discussed regular monthly updates from the **Chief Scientific Officer**, who is responsible for R&D functions across the Group, regarding the organisational structure, integration and alignment of R&D processes, optimisation of facilities utilisation, and intellectual property, for discussion.

Received and discussed presentations from the **Marketing Director**, regarding branding development and alignment, and capture and utilisation of marketing and competitor information.

Received and discussed presentations from the **Head of the Animal Health division** regarding the Animal Health product pipeline, including overview of the portfolio, key products, budgets, and prioritisation.

Received and discussed a presentation from the **Head of IP Commercialisation** regarding the Group's intellectual property strategy and discussed the capture and utilisation of IP within the business, key IP assets and risks.

Received and discussed updates from the **Head of People** regarding key initiatives including succession planning, talent management, and the ongoing professional development of our people.

Received regular updates on progress with the Group's **next generation sea lice treatment and CleanTreat® technology**, including the results of commercial field trials.

Received and discussed the entry by the Genetics division into the **joint venture with AquaChile** for aquaculture breeding in Chile, including business and investment plans, funding, and terms.

Received regular updates on the Group's progress with development of its **SPF/SPR shrimp breeding programme**, related investments, key target markets, and moves towards full commercialisation.

Received updates on and discussed the Group's strategy in relation to **China**, and related agreements.

Regularly reviewed **utilisation plans for Benchmark Vaccines' facilities**, including the new Braintree Biotechnology Building.

Received presentations on and discussed the Group's strategy in relation to its **aquaculture diagnostics business**, Fish Vet Group, and approved the closure of certain sites.

Approved the **grant of share options** to employees under the Group's share schemes, which sees 58 per cent. of employees holding shares or options in the Company.

## EFFECTIVENESS

### Nomination Committee Report

The Nomination Committee is responsible for safeguarding the effectiveness of the Board. It regularly reviews the composition of the Board and is responsible for leading a rigorous and transparent process for the identification and appointment of new Directors.

The current members of the Nomination Committee are:

- Peter George (Chair)
- Susan Searle
- Kevin Quinn

The composition of the Nomination Committee during the year was:

- Alex Hambro (stepped down as Chair on 26 January 2018)
- Susan Searle (member throughout the period, interim Chair from 26 January 2018 to 9 January 2019)
- Kevin Quinn (appointed 26 January 2018)

Only the members of the Nomination Committee have the right to attend meetings. The Head of People, Executive Directors, other Board members and advisers may be invited to contribute on specific agenda items. The Company Secretary acts as secretary to the Nomination Committee. The Nomination Committee updates the Board following its meetings, and invites contributions and views from the Board.

### Shareholders

Approved the **Annual Report and Accounts** and **Interim Results**.

Oversaw the planning and execution of the Company's **Capital Markets Day** for investors, and other engagement with institutional investors.

Received reports following **meetings with major shareholders** involving the Chairman of the Board, Senior Independent Director, and other Non-executive Directors, throughout the year.

### Governance and risk

Completed the appointment of **two new Non-Executive Directors** with international pharmaceutical and aquaculture expertise, Hugo Wahnish and Yngve Myhre, shortly after the year end. Approved the appointment of Peter George as **Chair of the Board**, and Alex Raeber as **Chief Scientific Officer**.

Received report from the Chair of the Audit Committee on the **FY17 audit process** and principal matters discussed with the auditors.

Reviewed the Group's **risk management framework and risk register** and received update on ongoing process for mitigation of key risks.

Received updates on **disputes and litigation**, including successful actions taken to protect the Group's intellectual property.

Received updates on **key regulatory developments**, including the new proposed Corporate Governance framework.

Attendance	Appointment	Number of scheduled Nomination Committee meetings attended in FY18	Maximum possible scheduled meetings in FY18	% of scheduled meetings attended
Susan Searle <sup>1</sup> , Chair	December 2013, appointed Chair of the Nomination Committee 26 January 2018	3	3	100%
Kevin Quinn <sup>2</sup>	26 January 2018	3	3	100%
Alex Hambro <sup>3</sup>	December 2013	0	0	N/A

<sup>1</sup> Susan Searle was appointed Chair of the Nomination Committee on 26 January 2018.

<sup>2</sup> Kevin Quinn was appointed to the Nomination Committee on 26 January 2018 following Alex Hambro's resignation from the Committee on the same date.

<sup>3</sup> Alex Hambro resigned from the Nomination Committee on 26 January 2018, at the time the decision was taken to seek a successor to his position as Chairman of the Board.



In addition to the formal Nomination Committee meetings, several informal meetings and calls were held in the year between members of the Nomination Committee, at times with contributions from other members of the Board, regarding the appointments of Peter George and Alex Raeber.

## Responsibilities

The main responsibilities of the Nomination Committee are:

- To review the composition of the Board, having regard to its size, balance of skills, knowledge, experience and diversity.
- To lead the process for Board appointments and recommend the appointment of new Directors.
- To review the re-appointment of Non-Executive Directors.
- To make recommendations on the composition of Board Committees.
- To consider succession for Board members and senior management.

The terms of reference for the Nomination Committee are regularly reviewed and are available on the Corporate Governance section of the Company's website at [benchmarkplc.com](http://benchmarkplc.com).

## Actions undertaken during the year

At the start of the year, the Board finalised the appointments of Hugo Wahnish and Yngve Myhre. Hugo Wahnish brings international animal health and pharmaceutical industry expertise and relationships to the Board. Yngve Myhre brings extensive expertise in the international aquaculture industry, across several species.

In January 2018, the Board determined, in light of discussions around the FY17 year end results with investors, that the Board would benefit from a new Chairperson with experience of running a larger listed trading business, to lead the Company through the next period of its development, with focus on strategic delivery, including organic growth and synergies. The Nomination Committee engaged Russell Reynolds (formerly Zygos Partnership) to assist with the recruitment. Russell Reynolds are signatories to the Voluntary Code of Conduct for Executive Search Firms in Board Appointments, which is designed to enhance gender and wider diversity on boards. The Company set requirements relating to diversity in relation to the shortlist of candidates, and consulted with the wider Board throughout the recruitment process. On 8 May 2018, the Board was pleased to appoint Peter George as the new Chairman of the Company.

The Nomination Committee and the Board also determined relatively early in the year that, in light of the importance of the Group's technological leadership in its industries and the timely commercial delivery of products in the pipeline, it would be beneficial to appoint a Chief Scientific Officer to the Board. The Nomination Committee was involved with the recruitment and selection of the Chief Scientific Officer. The appointment was delayed pending the introduction and involvement of Peter George, to ensure that it had full support from the new Chairman of the Board. The Board and the Nomination Committee were then very pleased to announce on 2 July 2018 that Alex Raeber would be joining the Board as Chief Scientific Officer from 1 October 2018. Alex brings to the Board significant expertise in the animal health sector across both start ups and global public companies, including the successful commercialisation of product pipelines.

Also during the year, the Nomination Committee and the Board received presentations from the Head of People and her team regarding the succession planning initiative being implemented throughout the Group, which focusses on ensuring that succession planning is in place for key roles, and that talent is identified and nurtured.

In addition, the Company saw changes in its management structure towards the end of FY17, some of which were completed in FY18, including the establishment of a smaller and more focused Operations Board, and the introduction of new cross-group functions, including Key Account Management, Supply Chain, Marketing, the appointment of the Chief Scientific Officer and the establishment of the Strategy Execution and Business Growth Team. The Board received reports and presentations from these new functions during FY18, and the Nomination Committee continues to monitor and evaluate the performance and diversity of the Group's senior management team.

## Actions for the coming year

Through FY19, the Nomination Committee will continue to monitor and receive reports on the implementation of the succession planning initiative within the Group. It will also continue to assess the size and composition of the Board to evaluate whether this is suitable for the Group's current stage of development, containing an appropriate balance of skills, knowledge, experience and skill sets.

## Board composition

The Board comprises 5 Independent Non-Executive Directors, including the Chairman, and three Executive Directors, the Chief Executive Officer, Chief Financial Officer and Chief Scientific Officer.

The Nomination Committee keeps the size and composition of the Board under review, to ensure that it is suitable for the Group and supports delivery of the strategy, containing an appropriate balance of skills, knowledge, experience and skill sets.

## Directors' roles and responsibilities

Biographical details for all members of the Board are found on pages 67 to 69 of this report.

There is a clear separation between the roles of the Chairman and the Chief Executive Officer:

Chairman	Chief Executive Officer
Lead the Board to ensure effective functioning in all aspects of its role	Lead the development and delivery of strategy and budget, to enable the Group to meet the requirements of its shareholders
Promote an open culture of debate	Oversee operation of the day-to-day business of the Group
Ensure that the membership of the Board is appropriate for the needs of the business	Lead and oversee the executive management of the Group
Oversee Board committees as they carry out their duties, including reporting to the Board	Establish an environment which allows the recruitment, engagement, retention and development of the people needed to deliver the Group's strategy
Set and manage the agenda for Board meetings	
Ensure the provision of information necessary for Directors to take a full and constructive part in Board discussions	
Develop and maintain effective communications with shareholders	
Establish appropriate personal objectives for the Chief Executive Officer and Executive Directors	
Ensure the Directors are up to date and receive suitable training and development	

The Senior Independent Director, Susan Searle, provides a sounding Board for the Chairman and serves as an intermediary for the other Directors when necessary. The Non-Executive Directors regularly meet, both formally and informally, without the Executive Directors present.

## Induction, business awareness and development

The Chairman is responsible for ensuring that new Directors receive a comprehensive induction which includes:

An overview of the Group, its operations and governance framework.

- Briefings on Directors' responsibilities and compliance.
- Site visits to key locations.
- Detailed reviews of strategic projects and initiatives being pursued.
- One-to-one meetings with senior management.

Each of the four new Directors appointed during the year have received a formal induction and exposure to senior management, including Strategy Days and informal dinners with the Operations Board. In keeping with costs savings initiatives across the Group, including reductions in travel expenditure, the Board travelled to fewer sites than usual in the year, with meetings held in London and, shortly after year end, at the Company's leading vaccine manufacturing facility in Braintree, Essex.

During the year, the Board held two Strategy Days with the Operations Board, and engaged with members of the Company's senior management team in scheduled board meetings, which included presentations from and meetings with:

- The Heads of the Advanced Nutrition, Genetics, Animal Health and Knowledge Services divisions, regarding their 5-year strategic plans, market trends and opportunities, key growth areas, and main risks.
- The Head of Key Account Management regarding key account initiatives and systems.
- The Chief Scientific Officer, who is responsible for R&D functions across the Group, regarding the organisational structure, integration and alignment of R&D processes, optimisation of facilities utilisation, and intellectual property.
- The Marketing Director, regarding brand development and alignment, and capture and utilisation of marketing and competitor information.
- The Head of the Animal Health division and Head of Intellectual Property Commercialisation regarding the Animal Health product pipeline and IP strategy across the group.
- The Head of People regarding key initiatives including succession planning, talent management, and the ongoing professional development of our people.

## Independence of Directors

The Board considered each Non-Executive Director's independence on appointment, and concluded that they were independent. The Board reviews independence on an annual basis and has concluded that the Non-Executive Directors all remain independent. Non-Executive Directors are appointed for specified terms, subject to re-election by shareholders, and terms beyond six years are subject to rigorous review. Accordingly, Non-Executive Directors are appointed for a maximum of two terms of three years, and thereafter may serve for an additional period only at the invitation of the Board following scrutiny of their continued independence.

The periods of service of our Non-Executive Directors are set out below.

Name	Date of appointment	Term
Peter George Chair	8 May 2018	8 months
Susan Searle Senior Independent Director	18 December 2013	5 years, 1 month
Kevin Quinn Non-executive Director	25 November 2016	2 years, 1 month
Hugo Wahnish Non-executive Director	6 November 2017	1 year, 2 months
Yngve Myhre Non-executive Director	6 November 2017	1 year, 2 months

## Conflicts of interest

Directors are obliged to seek authorisation from the Board before taking up any position which conflicts, or which may conflict, with the interests of the Company. The Board is empowered to authorise situations of potential conflict, where it sees fit, in order that a Director is not in breach of his/her duties. The interested Director is excluded from voting on the resolution to authorise the conflict. The Directors may resolve that any such transaction or arrangement be subject to such terms as they may determine.

All existing external appointments and other such situational conflicts of Directors have been considered and authorised by the Board, including in relation to the newly appointed Non-Executive Directors.



## ACCOUNTABILITY

### Audit Committee Report

#### Key objective

The Audit Committee acts on behalf of the Board and the shareholders to ensure the integrity of the Group's financial reporting, evaluate its systems of risk management and internal control and oversee the relationship and performance of the external auditors.

#### Membership, meetings and attendance

The composition of the Audit Committee during the year was:

- Kevin Quinn (Chair)
- Alex Hambro (resigned 4 May 2018)
- Susan Searle (appointed 4 May 2018)
- Hugo Wahnish (appointed 4 May 2018)

All Committee members are independent Non-Executive Directors.

In addition to the Committee members, there are a number of regular attendees at each meeting. The Chief Financial Officer (CFO) and external Group Audit Partner normally attend all scheduled Audit Committee meetings. The Audit Committee members regularly take time before or after a meeting, without any Executive Directors or senior management present, to raise any questions and discuss issues with the external auditor. The Chairman of the Audit Committee meets the CFO and the external auditor separately to review current issues and developments prior to each meeting of the Audit Committee, such meetings often taking place by telephone.

The Audit Committee met four times during the year with all members of the Committee in attendance at each.

#### Responsibilities

The main responsibilities of the Committee are:

- To review accounting policies and the integrity and content of the financial statements;
- To monitor disclosure controls and procedures and the Group's internal controls;
- To monitor the integrity of the financial statements of the Group, and to assist the Board in ensuring that the Annual Report and Accounts 2017/18, when taken as a whole, are fair, balanced and understandable;
- To consider the adequacy and scope of external audits;
- To monitor the objectivity, independence and effectiveness of the external auditor, including the scope and expenditure on non-audit work;
- To review and approve the statements to be included in the Annual Report on internal control and risk management;
- To review and report on the significant issues considered in relation to the financial statements and how they are addressed.

The Committee's terms of reference are reviewed annually and a summary of these are available on the Governance section of our website at [benchmarkplc.com](http://benchmarkplc.com)

#### Actions undertaken during the year

The key activities for the Committee for the period under review are set out below.

#### Presentation of results

At the request of the Board, the Committee reviewed the presentation of the Group's unaudited results for the six months to 31 March 2018 and the audited results for the year to 30 September 2018 to ensure they were fair, balanced and understandable and provide sufficient information necessary for shareholders and other users of the accounts to assess the Group's position and performance, business model and strategy. In conducting this review, focus was given to the disclosure included in the basis of preparation in Note 1 to the financial statements in relation to the Group's funding position and the suitability of the going concern assumption. Attention continues to be paid to the presentation of the results in the income statement which uses alternative profit measures as indicators of performance. The Board considers current treatment which retains reference to "Adjusted EBITDA" and "EBITDA" to remain appropriate. "EBITDA" is "earnings before interest, tax, depreciation and amortisation, and "Adjusted EBITDA" is "EBITDA before exceptional items and acquisition related expenditure". Reference has also been made in the Annual Report to a further alternative profit measure "Adjusted EBITA", which adjusts Adjusted EBITDA to include depreciation and amortisation of capitalised development costs to reflect their part in the underlying performance of the Group. No amortisation of capitalised development costs has yet been incurred as those products to which the assets relate have not yet been commercially launched. The Board regards these measures as an appropriate way to present the underlying performance and development of the business as it reflects the continuing investment being made by the Group, particularly in relation to recent and future acquisition activity, and this is how the board monitors progress of the existing group businesses.

#### Management override of internal controls

The Committee considered the inherent risk of management override of internal controls as defined by auditing standards. In doing so the Committee continue to review the overall robustness of the control environment, including consideration of the Group's whistleblowing arrangements and the review by the external auditor.

#### Revenue recognition

The Committee considered the inherent risk of fraud in revenue recognition as defined by auditing standards and was satisfied that there were no issues arising, and is reviewing the work being undertaken on the likely impact of the new accounting standard IFRS 15 'Revenue from Contracts with Customers', which will be effective for the Annual Report for the year ended 30 September 2019. The detailed work is ongoing but the impact on the Group's financial statements is not expected to be material.

#### Valuation of goodwill and intangible assets

The Committee considered the carrying value of the Group's businesses, including goodwill and intangible assets. Management performed an annual impairment review on goodwill and other intangible assets held within the Group. The Committee reviewed management's recommendations, which were also reviewed by the external auditor, including an evaluation of the appropriateness of the identification of cash generating units and the assumptions applied in determining asset carrying values. The Committee was satisfied with the assumptions and judgements applied by management and concluded that no impairment of carrying values was required.

#### Going Concern

The Committee was presented by management with an assessment of the Group's future cash forecasts and profit projections, available facilities, facility headroom, banking covenants and the results of a sensitivity analysis. Detailed discussions were held with management concerning the matters outlined in the basis of preparation in Note 1 to the financial statements, together with the availability of the additional funding agreed subsequent to the year end.

The Committee discussed the assessment with management and was satisfied that the going concern basis of preparation continues to be appropriate for the Group and advised the Board accordingly.

#### Valuation of biological assets

The Group holds significant biological assets on the balance sheet at fair value less costs to sell, with the valuation dependent on a number of subjective assumptions, including some which relate to future egg sales prices and volumes and seasonal variations. The Committee considered the accounting policy employed by the Group for biological assets, the assumptions used in the valuation calculations and the disclosures provided in the financial statements. The Committee was satisfied with the accounting policy in force and with the estimates and judgements applied by management in employing this policy.

#### Risk management

Effective risk management and control is key to the delivery of the Group's business strategy and objectives. Risk management and control processes are designed to identify, assess, mitigate and monitor significant risks, and can only provide reasonable and not absolute assurance that the group will be successful in delivering its objectives. The Board is responsible for the oversight of how the Group's strategic, operational, financial, human, legal and regulatory risks are managed and for assessing the effectiveness of the risk management and internal control framework.

Further detailed risk assessment work has been conducted during the year to maintain and update the Group's risk register to ensure that all risks are appropriately prioritised and addressed.

A description of the Group's risk management procedures and the work completed in the year is provided in the Principal Risks and Uncertainties section on page 62.

#### Internal audit

As the Group evolves and grows, the Committee continues to monitor whether an internal audit function would add significant value as a part of the integrated control environment currently operating. Further consideration has been given to this during the year, and although a decision is yet to be made to proceed with internal audit, possible options on the form and structure of such a function have been explored. The completion of the update to the Group's risk register will further inform the decision on whether to proceed to create an in-house internal audit function or to outsource individual reviews to third parties.

#### Safeguards and effectiveness of the external auditor

The Committee recognises the importance of safeguarding auditor objectivity. The following safeguards are in place to ensure that auditor independence is not compromised.

- The Audit Committee carries out an annual review of the external auditor as to its independence from the Group in all material respects and that it is adequately resourced and technically capable to deliver an objective audit to shareholders. Based on this review the Audit Committee recommends to the Board the continuation, or removal and replacement, of the external auditor;
- A tax adviser separate from the external auditor is engaged to provide tax related services;
- The external auditor may provide audit-related services such as regulatory and statutory reporting as well as formalities relating to shareholder and other circulars;
- Non-audit services carried out by the external auditor are generally limited to work that is closely related to the annual audit or where the work is of such a nature that a detailed understanding of the business is beneficial;
- The external auditor may undertake due diligence reviews and provide assistance on tax matters given its knowledge of the Group's business. Such provision is assessed on a case-by-case basis so that the best adviser is retained. The Audit Committee monitors the application of policy in this regard and keeps the policy under review;
- The Audit Committee reviews all fees paid for audit and consultancy services on a regular basis to assess the reasonableness of fees, value of delivery and any independence issues that may have arisen or may potentially arise in the future;
- The external auditor reports to the Directors and the Audit Committee regarding their independence in accordance with Auditing Standards. KPMG's policy, in line with best practice, is that audit partners are required to be rotated every fifth year;
- Different teams are used on all other assignments undertaken by the auditor;
- The Audit Committee monitors these costs in absolute terms and in the context of the audit fee for the year, to ensure that the potential to affect auditor independence and objectivity does not arise. The Committee does not adopt a formulaic approach to this assessment. The split between audit and non-audit fees for 2018 and information on the nature of the non-audit fees incurred is detailed in Note 6 accompanying the consolidated financial statements.



The Audit Committee monitors the effectiveness of the external audit. To comply with this requirement, the Committee reviews and comments on the external audit plans before it approves them. It then considers progress during the year by assessing the major findings of their work, the perceptiveness of observations, the implementation of recommendations and management feedback. At the request of the Board, the Committee also monitors the integrity of all financial statements in the Annual Report and half year results statements, and the significant financial reporting judgements contained in them. Further details of the Committee's procedures to review the effectiveness of the Group's systems of internal control during the year can be found in the section on effective risk management and internal control below.

The Committee recognises that all financial statements include estimates and judgements by management. The key audit areas are agreed with management and the external auditors as part of the year-end audit planning process. This includes an assessment by management both at business unit and at Group level of the significant areas requiring management judgement. These areas are reviewed with the auditors to ensure that appropriate levels of audit work are completed and the results of this work are reviewed by the Committee.

### Effective risk management and internal control

One of the Board's key responsibilities is to ensure that management maintains a system of internal control which provides assurance of effective and efficient operations, internal financial controls and compliance with law and regulation. The Group's systems are designed to identify key financial and other risks to the Group's business and reputation, and to ensure that appropriate controls are in place. Consideration is given to the relative costs and benefits of implementing specific controls.

### Assurance

On behalf of the Board, the Audit Committee examines the effectiveness of:

- The systems of internal control, primarily through reviews of the financial controls for financial reporting of the annual, preliminary and half yearly financial statements and a review of the nature, scope and reports of external audit;
- The management of risk by reviewing evidence of risk assessment and management; and
- Any action taken to manage critical risks or to remedy any control failings or weaknesses identified, ensuring these are managed through to closure.

Where appropriate, the Audit Committee ensures that necessary actions have been, or are being taken, to remedy or mitigate significant failings or weaknesses identified during the year either from internal review or from recommendations raised by the external auditor. The Group's internal controls over the financial reporting and consolidation processes are designed under the supervision of the CFO to provide reasonable assurance regarding the reliability of financial reporting and the preparation and fair presentation of the Group's published financial statements for external reporting purposes in accordance with IFRS.

Because of its inherent limitations, internal control over financial reporting cannot provide absolute assurance and may not prevent or detect all misstatements whether caused by error or fraud. The Group's internal controls over financial reporting and the preparation of consolidated financial information include policies and procedures that provide reasonable assurance that transactions have been recorded and presented accurately.

Management regularly conducts reviews of the internal controls in place in respect of the processes of preparing consolidated financial information and financial reporting. During the year there were no changes to the internal controls over these processes that have or are reasonably likely to materially affect the level of assurance provided over the reliability of the financial statements.

### Risk management and internal control system features

#### Risk management control system

As well as the risks that management identify through the ongoing processes of reporting and performance analysis, the Audit Committee has additional risk identification processes, which include:

- Risk and control process for identifying, evaluating and managing major business risks. A risk register is maintained defining each business risk identified and quantifying its likely impact to ensure adequate priority is given to each in turn;
- External audit reports, which comment on controls to manage identified risks and identify new ones; and
- A confidential whistle-blowing helpline and an email address available for employees to contact the Non-executive Directors in confidence.

#### Internal control system

The internal controls which provide assurance to the Committee of effective and efficient operations, internal financial controls and compliance with law and regulation include:

- A formal authorisation process for investments;
- An organisational structure where authorities and responsibilities for financial management and maintenance of financial controls are clearly defined;
- Anti-bribery and corruption policies and procedures and a dedicated email hotline, designed to address the specific areas of risk of corruption faced by the Group;
- A comprehensive financial review cycle where annual budgets and subsequent reforecasts are formally approved by the Board and monthly variances are reviewed against detailed financial and operating plans.

## REMUNERATION

### REMUNERATION REPORT FOR YEAR ENDED 30 SEPTEMBER 2018

#### Statement from Susan Searle, Chairman of the Remuneration Committee

##### Introduction

The business has been through a number of acquisitions but is now settled in terms of scope and organisational structure with the task ahead being financial delivery from this platform.

The work of the Remuneration Committee this year has been focussed on the broader organisation and the operational board. Alex Raeber joined the executive directors as Chief Scientific Officer and we were pleased to have attracted such a high calibre individual into the team following an extensive search and review process which included the new non-executive chairman, Peter George.

The operational board comprises 12 people, a mixture of divisional and functional heads and it is this team that takes responsibility for Group performance and strategy; driving efficiencies, market leadership, key account management and synergies. Following the appointment of our new remuneration committee advisors, FIT, the Committee commissioned a review of the remuneration policy and structures across the business. As part of the review, the committee has benchmarked the operational board against relevant comparators. This highlighted areas in terms of bonus levels and share ownership that will need to be addressed in future years.

##### Performance outcomes

During the year recruitment of the operations board was completed and, with the new chairman instigating several strategy sessions, the Board saw the strength of the new operations team in action. There has been good progress on the Animal Health pipeline with new sea lice treatment and CleanTreat® achieving 14 trials despite unusually cold sea water temperature and scheduling challenges. The product has been successful in field trials with the three major global salmon farmers, with strong interest from others. The development of new aqua vaccines and products has progressed, but the launches planned for 2018 did not occur due to delays in scaling production which have now been overcome. The team also achieved the objective of establishing a leadership position in Chile through its joint venture with AquaChile. A key target for this year was the review of non-core business and extraction of synergies.

Several businesses have been closed and discussions with partners for the companion animal vaccines programme is well underway.

Overall, this year has seen the Benchmark executive team deliver in line with expectations in most areas of operational performance and ahead of expectations in Adjusted EBITDA, one of the key financial metrics for the business. The share price went from 38p to 61p in the period but has yet to recover to reach the levels the board expects are achievable with consistent performance.

In light of the operational, strategic and financial performance during the year, the committee determined that bonuses of 64.5% of salary would be payable to the executive directors.

##### Implementation for 2018/19 and beyond

We have decided that for 2018/19 we will award market value share options to the operational board (including the executive directors) and to managers in the business. These are one off awards ahead of a new scheme which we will implement from 2020 following further review. These awards will be made in January 2019 at levels comparable to our benchmarking peers; their purpose is retention and focus on increasing shareholder value (alignment). Awards will not vest for three years.

A new five year strategic plan has been signed off by the Board and it is against this plan that we will judge bonuses for the senior team in the future. The Board has been through an extensive review of key performance indicators and, as a result, is moving to a 60/40 split in terms of financial/non-financial metrics for bonuses with these metrics clearly tied closely to the plan.

Finally, the Remuneration Committee agreed a revised remuneration framework for the future which will apply to executive directors and the wider management team. Work is ongoing in this area to ensure that we can continue to attract and retain high quality talent as the business grows.

**Susan Searle**  
Chairman of the  
Remuneration Committee  
24 January 2019

### ANNUAL REPORT ON REMUNERATION FOR 2018

#### An overview of the Remuneration Committee

The composition of the Remuneration Committee during the year was:

- Susan Searle (Chair)
- Kevin Quinn
- Peter George (from appointment on 8 May 2018)

The Committee is made up of three independent Non-Executive directors with the Company Secretary acting as secretary and the Head of People attending committee meetings to provide advice on policies and practices. At appropriate times, the Committee invites the views of the Chief Executive, and seeks advice from independent remuneration consultants. No Director or employee is present when his or her own remuneration or fees are discussed. During the year, the committee appointed FIT Remuneration Consultants LLP as their advisors.

**Key objectives:** The key objectives of the Remuneration Committee are to develop the Company's policy on executive remuneration and to fix the remuneration of the Executive Directors, Chairman of the Board and senior managers.

**Responsibilities:** The main responsibilities of the Committee are:

- To monitor and develop the Company's remuneration policy
- To determine the remuneration of the Executive Directors
- To approve the service agreements of the Executive Directors
- To approve the remuneration of senior managers
- To determine the fees of the Chairman
- To review the Company's annual bonus proposals and to approve bonuses for the Executive Directors and senior managers
- To approve the design of and oversee all awards under the Company's share incentive plans
- To consider risks to the Group in light of its remuneration policies

An overview of the Remuneration Committee's terms of reference is available on the Governance section of our website at [benchmarkplc.com](http://benchmarkplc.com).



**Actions undertaken during the year:** During the year, the committee appointed FIT Remuneration Consultants LLP as its advisors and is working with them to develop a remuneration strategy that supports the growth of the group and ensures a fair and consistent approach to remuneration globally across the teams. This work has included salary benchmarking for the senior management and other areas across the group. Having established a policy of paying the living wage as described by the Living Wage foundation to all employees in the UK we continue to work to ensure that similar base levels of pay are implemented in other jurisdictions. The Group reported voluntarily on its gender pay gap (see page 56 for further details) and has been working to reduce the gap over the last year by encouraging and recruiting more women into senior roles. The management team has been reorganised during the year and our operations board comprised of the Executive Directors, Heads of Division and key support functions is now made up of 25% women. FIT were appointed because the Remuneration Committee believed that they were independent and objective.

Following the reorganisation of the management team, the committee has continued to work on succession planning across the Group to ensure that we have the skills required to drive success in all our markets.

### Voting history

The Directors' Remuneration Report for the year ended 30 September 2017 was subject to an advisory vote at the Annual General Meeting held on 6 March 2018. The report was approved by 98.4% of shareholders.

### Single total figure of remuneration for the financial year ended 30 September 2018

The remuneration in respect of qualifying services of the directors who served during the financial year ended 30 September 2018 is as set out below.

#### Executive Directors

	Salary	Bonus (a)	Taxable benefits (b)	Long-term incentive	Pension	Total	
						2018	2017(c)
Mark Plampin	253,881	164,588	1,863	-	25,388	445,720	248,609
Malcolm Pye	314,812	204,089	4,070	-	31,481	554,452	317,260

(a) The balance of the cash bonuses will be paid in January 2019 and is based on the salary at the 30 September 2018.

(b) Benefits provided for all Executive Directors are medical insurance coverage for the Directors and their families, and death in service benefits. Also includes any taxable mileage reimbursed above the HMRC rate.

(c) In 2017 the Executive Directors received market value share options in lieu of cash bonuses.

#### The Chairman and the Non-Executive Directors

	Fees (£)	
	2018	2017
Alex Hambro	27,115	45,000
Susan Searle	45,000	45,000
Kevin Quinn	45,000	38,365
Yngve Myhre	40,687	-
Hugo Wahnish	40,687	-
Peter George	48,307	-

The Chairman, Alex Hambro stepped down in May 2018. Peter George was subsequently appointed as Chairman on 8 May 2018.

### Executive Directors' bonuses for the financial year ended 30 September 2018

As described in the Chairman's statement, the Remuneration Committee considered the performance of the Executive Directors against the delivery of long-term sustainable growth and their performance against KPIs set out below:

50% of the bonus was awarded against financial metrics:

1. EBITDA<sup>1</sup> 25% potential
2. Revenue 25% potential

50% of the bonus was awarded against qualitative metrics:

1. Establishment of the leadership team — recruitment of a Chief Scientific Officer and Group Marketing Director — 12.5% potential
2. Progress with and development of the pipeline — launch and development of products/vaccines — 12.5% potential
3. Development and extraction of key synergies and processes — 12.5% potential
4. Progress on the Industry leadership positioning development of market opportunities — 12.5% potential

<sup>1</sup> EBITDA is earnings before interest, tax, depreciation and amortisation and impairment — see income statement.

The Remuneration Committee exercises judgment in assessing performance against these metrics. For financial metrics, actual performance against a target range is considered. For non-financial measures, performance is assessed on a qualitative basis, involving the evaluation of relevant data.

Accordingly, the Executive Directors received bonuses in respect of the financial year ended 30 September 2018 of 64.5% of salary each. This will be paid in cash in January 2019.

### Defined contribution pension scheme

The Executive Directors all participate in defined contribution pension schemes. Malcolm Pye participates in the Benchmark Holdings Executive Pension Scheme and Mark Plampin participates in a self-invested personal pension (SIPP).

In accordance with the policy set out on page 83, the Company contributes 10% of salary for each Executive Director.

### LTIP awards

No awards under the Company's share plans were made to Executive Directors in the financial year ended 30 September 2018, although the share plans were used to issue market value share options in lieu of cash bonuses for 2016/17. The market value of the share options on the date of grant was 69.5p. Malcolm Pye was granted 500,000 options and Mark Plampin received 400,000 options.

### Executive Directors' external appointments

None of the executive directors held non-executive directorships or external appointments with organisations other than the Company in the financial year ended 30 September 2018.

### The fees of the Chairman and the Non-Executive Directors for the financial year ended 30 September 2018

Yngve Mahyre and Hugo Wahnish were appointed as new non-executive directors on 6 November 2017 and Peter George was appointed Chairman on 8 May 2018. No changes were made to fees in the financial year ended 30 September 2018.

## STATEMENT OF IMPLEMENTATION OF REMUNERATION POLICY IN 2019

### Executive Directors' salaries

From 1 January 2019, the Executive Directors' base pay was increased as set out below. This is in line with the average base pay increases for all employees awarded across the Group.

	Salary (£)		% increase in salary 2018 to 2019 (b)
	2019 (a)	2018	
Mark Plampin	261,835	255,175	2.6
Malcolm Pye	324,676	316,417	2.6

(a) Dr. Alex Raeber joined the group on 1st October 2018. As such, no salary increment has been applied for 2019.

(b) In 2018, the average salary increase across the group including senior management was 5%.

### Bonus

The 2019 bonus will be implemented in line with the future policy described in the following section, with a maximum of 100% of salary. As noted in the Chairman's statement there will be a rebalancing of the performance measures, with an increased focus on financial performance.

### LTIP

Shortly after the publication of the annual results for 2018, Alex Raeber, the incoming Chief Scientific Officer, will be granted 400,000 market value share options in part as consideration for what he has forgone from his previous employer. As noted previously, in January 2019 we will be making an award of market value share options to the other members of the management team, including the other executive directors, which will vest after three years.

The committee is of the view that market value share options provide genuine alignment between the participants and shareholders. Value is only attributable to these awards to the extent that the Company's share price increases and the participant remains employed until the end of the vesting period. They are also simple to administer and communicate to employees which is an important consideration in the context of our global business.

### The fees of the Non-Executive Directors

The fees of Non-executive directors will be reviewed during the course of the current financial year and will be adjusted for 2019 as is considered necessary. Decisions on fee levels will be made by the Company Chairman and the Executive Directors (and not by the Remuneration Committee).

The Chairman's fee was set by the Committee on appointment at £120,000 per year based on increased engagement in the now enlarged business and remains unchanged for 2019.



## ADDITIONAL INFORMATION ON DIRECTORS' INTERESTS

### Directors' interests under the Company's employee share plans

Details of the Executive Directors' interests in outstanding share awards under the employee share plans during the financial year ended 30 September 2018 are set out below.

	Share option scheme	Options held at 30 September 2017	Options exercised in year	Options granted in year	At 30 September 2017	Exercise price	Grant date	Date from which exercisable
Mark Plampin	CSOP II	124,585			124,585	0.1p	10 March 2015 and 6 March 2017	10 March 2018 and 6 March 2020
Mark Plampin	CSOP II		-	356,835	356,835	69.5p	24 January 2018	24 January 2021
Mark Plampin	CSOP I		-	43,165	43,165	69.5p	24 January 2018	24 January 2021
Malcolm Pye	CSOP II			456,835	456,835	69.5p	24 January 2018	24 January 2021
Malcolm Pye	CSOP I			43,165	43,165	69.5p	24 January 2018	24 January 2021

### Director's interests in ordinary shares

At 30 September 2018, the interests of the Directors and their connected persons in ordinary shares was as follows.

	Interests in ordinary shares at 30 September 2018	% of Company's issued share capital at 30 September 2018	Interests in ordinary shares at 30 September 2017
Alex Hambro	100,000 (a)	0.02%	100,000
Malcolm Pye	15,145,686	2.72%	15,145,686
Mark Plampin	536,686 (b)	0.10%	536,686
Susan Searle	98,125 (a)	0.02%	98,125
Kevin Quinn	60,929	0.01%	25,000
Hugo Wahnish	275,000	0.05%	0

(a) Held through self-invested personal pension (SIPP). Alex Hambro stepped down as Chairman in May 2018.

(b) Comprising 265,000 ordinary shares registered in own name, 267,000 ordinary shares held through self-invested personal pension (SIPP) and 4,686 ordinary shares held through the Benchmark employee share incentive plan.

## DIRECTORS' REMUNERATION POLICY

The Group's policy is broadly unchanged and seeks to balance three key objectives:

- To pay competitively in the relevant talent markets to sustain motivation and commitment, recognising that Benchmark has a unique culture.
- To remunerate in a way that makes economic sense for the Company, ensuring there is a fair balance of return to the executive team, management, staff and shareholders for their contributions to the Company's success.
- To encourage the cooperative behaviours which promote business priorities and lead to high performance.

The Company's remuneration policy supports a climate of team involvement and generates a shared enthusiasm for the growth and success of the Group as a whole. Our aim is to encourage cooperation, sharing of ideas and mutual support between people in different business units. The policy reflects and supports the sense that the Group is involved in creating and delivering services which benefit mankind and the natural environment. We recognise that the non-monetary rewards of team membership, intellectual stimulation, freedom, creativity and producing something worthwhile have equal or higher place in maintaining personal commitment and in attracting and retaining the best people. However, this year we have reviewed our remuneration policy to ensure that we are paying our teams competitively and will be implementing a new bonus structure and annual LTIP in the next few years to coincide with the next phase of our growth.

### Remuneration policy

The executive directors' remuneration comprises fixed elements in the form of a base salary, benefits and pension contributions, and a variable discretionary element in the form of a bonus, which may be satisfied in cash, deferred shares (or share options) or a combination of both.

### Fixed elements of remuneration

The fixed elements of the Executive Directors' remuneration are designed to attract and retain directors of the appropriate calibre, with the requisite knowledge, skills and experience, and to sustain motivation and commitment.

The Executive Directors all participate in defined contribution pension schemes with the Company contributing 10% of the executive's salary. The Executive Directors also receive private medical insurance for themselves and their families and death in service benefits.

### Variable elements of remuneration

Executive Directors are eligible for an annual performance bonus, part or all of which may be deferred for three years and paid in shares or share options. The maximum award, including any deferred element, is 100% of salary. The bonus is designed to reward and incentivise success leading to sustainable long-term growth and to recognise the directors' commitment to the business.

### Statement of consideration of employment conditions elsewhere in the Group

Historically, the salaries across the group have been increased annually by reference to the consumer price index (CPI). In 2018, the average salary increase across the group including senior management was 5 per cent. This percentage rise included adjustments made for additional responsibilities taken on by staff and promotions as the Group's activities expanded. Bonuses for all employees are determined on a discretionary basis, by reference to a combination of Group and individual performance. Senior managers' bonuses for 2018 will be paid in cash.

The Company aims to encourage everyone in the team to have an interest in the Company's shares in order to foster a culture of cooperation and shared participation in the Group's achievements. The remuneration policy supports this by issuing share options to employees at a level that reflects the strategic contribution of their role. In 2018, the company issued 10,711,581 market value share options to 377 employees across the Group in lieu of 2016/17 cash bonuses. Where we are unable to grant options a cash mirror scheme is operated to ensure consistent treatment of the teams globally.

### Executive Directors' service contracts and remuneration on termination

The contracts of the two Executive Directors in post during the year each commenced on 18 December 2013 and are terminable by either party on 12 months' notice at any time, and by the Company at any time and without compensation in case of serious misconduct, breach of duty or in similar circumstances. In the event of termination by the Company without cause, the Executive Director is entitled to receive payment of salary for any unexpired notice period and any accrued holiday entitlement. In the event of termination for cause, the Director is not entitled to compensation in respect of salary.

The Executive Directors' bonuses are fully discretionary. In the event of termination during a bonus period, the Committee will consider payment of a bonus on a pro rata basis for the relevant portion of the year worked, having regard to the circumstances. Deferred bonuses which have been satisfied in share options remain exercisable where the Executive Director is a good leaver, including in case of death, incapacity, redundancy, retirement, and where the Remuneration Committee so determines. In all other

circumstances, deferred bonuses satisfied in share options cease to be exercisable on termination of employment and lapse.

During the year the Company recruited a new Executive Director, Dr. Alex Raeber, who took up the post of Chief Scientific Officer on 1st October 2018. His contract is on the same terms as for existing directors.

### The terms of appointment of the Chairman and the Non-executive directors

The Chairman and the Non-Executive Directors hold office under letters of appointment. Each appointment is for a term of 3 years but with an additional period of 3 years anticipated. All directors are required to stand for re-election at least every three years.

Hugo Wahnish and Yngve Myhre were appointed as new non-executive directors on 6 November 2017 and both stood for election at the AGM held on 8 March 2018.

Either the Company or the Non-Executive Director may terminate the appointment on 3 months' notice, and the appointments are subject to the Company's articles of association and to the Director being re-elected by shareholders upon retirement by rotation. On termination as a result of the non-executive director not being re-elected by shareholders or under the articles of association for reasons connected with outside interests or independence, the appointment terminates immediately and the non-executive director is not entitled to compensation. On termination in other circumstances, including on 3 months' notice, a non-executive director is entitled to accrued but unpaid directors' fees to the date of termination but no other compensation.

The dates of appointment of and length of service for each non-executive director are shown in the table below.

Name	Date of appointment	Length of service as at 2019 AGM
Peter George	8 May 2018	10 months
Susan Searle	18 December 2013	5 years, 3 months
Kevin Quinn	25 November 2016	2 years, 4 months
Hugo Wahnish	6 November 2017	1 year, 4 months
Yngve Myhne	6 November 2017	1 year, 4 months

### Share dilution

The total number of ordinary shares issued and issuable in respect of options granted in any ten year period under the Company's discretionary share option schemes (excluding pre-IPO options under the Enterprise Management Incentive (EMI) scheme) is restricted to 10% of the Company's issued ordinary shares from time to time.

In the financial year ended 30 September 2018 the Company allocated 10,771,581 market value share options (2.06% of issued share capital as at the date of grant) to staff including senior management and Executive Directors as mentioned on page 83.

**Susan Searle**  
Chairman of the  
Remuneration Committee  
24 January 2019



## SHAREHOLDERS

### Share capital and substantial shareholdings

The Company's issued share capital, together with details of movements during the year, are shown in Note 25 accompanying the financial statements. The Company has one class of ordinary share which carries no right to fixed income. Each ordinary share carries the right to one vote at general meetings of the Company.

As at 23 January 2019 the Company has been notified of the following substantial shareholdings under Rule 5 of the UKLA's Disclosure and Transparency Rules:

	% of issued share capital
FERD AS	26.00
Invesco Limited	16.17
Woodford Investment Management Limited	12.45
Lansdowne Partners International Limited, Lansdowne Partners Limited and Lansdowne Partners (UK) LLP	9.88
The Royal Bank of Scotland Group plc (Herge Holding B.V.)	6.84
Harwood Capital LLP (as investment adviser/manager), Oryx International Growth Fund Limited, North Atlantic Smaller Companies Investment Trust PLC, and Harwood Capital LLP for private clients	4.15

### Engagement with shareholders

The Board recognises that it is vital for the Company's success that the shareholders understand the strategy and the means by which it will be delivered. All Directors welcome regular and open engagement with shareholders.

A focus of the Company during the year was strengthening its engagement and communication with shareholders. The Company's new Chairman, Peter George, commenced his tenure by commissioning a review of the Group's 5-year strategy, which was undertaken by the Operations Board and the Company's Board over several dates during the year.

The outcome of this review is now being communicated both internally and externally to the Company's shareholders. In addition, the Company engaged an Investor Relations Director, Ivonne Cantu, to improve its communications with shareholders and ensure that they are clear and understandable.

Regular meetings were held during the year with the Company's institutional shareholders, involving both Executive and Non-Executive shareholders (together and independently). The Company held a capital markets day for institutional shareholders in the spring, which included information regarding the macro-environment and aquaculture industries in which the Group operates; Benchmark's position in those industries; the strategies, capabilities and growth plans of the core Nutrition, Genetics and Animal Health divisions; and the Company's capital model and financial structure. Institutional shareholders had the opportunity to meet with members of the Company's Board and Operations Board, including Divisional Heads.

The Directors also attend the Annual General Meeting, at which formal discussion is welcomed, and are available for informal discussion with shareholders after the meeting.

The Chairman has primary responsibility for ensuring that major shareholders are able to engage with the Company and Board. The Chairman is also responsible for ensuring that the Board is aware of feedback from its shareholders and that these views are taken into account. The focuses of shareholders were a feature of the Company's 5-year strategy review, and the Board regularly discusses feedback from meetings and correspondence with major shareholders. The Senior Independent Director is also available to shareholders, particularly where they have concerns which have not been resolved through other channels, or for which other channels are inappropriate. Accordingly, shareholders are welcomed to contact the Chairman or Senior Independent Director.

## DIRECTORS' REPORT

The Directors present their Annual Report and audited financial statements of the Company and of the Group for the year ended 30 September 2018.

Benchmark Holdings plc is a public limited company, incorporated and domiciled in England and Wales. Its shares are admitted to trading on AIM, London Stock Exchange's international market for smaller growing companies.

The disclosure requirements of the Companies Act 2006, and where the Directors have deemed it appropriate, the UK Disclosure and Transparency Rules, have been met by the contents of this Directors' Report, along with the Strategic Report, Corporate Governance Report, Nomination Committee Report, Audit Report and Remuneration Report, which should be read in conjunction with this report.

### UK Corporate Governance Code

The Company assesses its corporate governance arrangements and practice against the UK Corporate Governance Code 2016. A copy of the Code is available from the website of the Financial Reporting Council (FRC) at [frc.org.uk](http://frc.org.uk). In accordance with the AIM Rules, we produce a statement setting out how Benchmark complies with the principles of the UK Corporate Governance Code, which is available on our website at [benchmarkplc.com](http://benchmarkplc.com). The statements and table below set out how Benchmark complies with the Code, and where it elects to deviate from the Code.

The governance environment is evolving, including by means of the issue of a new UK Corporate Governance Code 2018, which applies to financial years commencing on or after 1 January 2019. We are monitoring changes to the governance

environment, including the new edition of the Code, to ensure that the Company continues to comply with the laws, regulations and rules applicable to it, and to operate structures and practices which deliver good corporate governance.

The Nomination Committee evaluates the performance of the Board as a whole and in doing so evaluates the performance of each of the Directors; however, a formal evaluation of the performance of individual Directors was not undertaken this year which, in part, was due to the changes to the board which are described below. During the year, the evaluation of the Board resulted in a number of changes. The Nomination Committee and Board determined, having regard to the expertise of the then current Directors, that the Board would benefit from Animal Health and Aquaculture expertise, which resulted in the appointment of Hugo Wahnish and Yngve Myhre respectively to the Board shortly after the start of the year. During the year, the Board determined that in light of the Company's shift from a post IPO phase of acquisition led growth to a focus on integration, extraction of synergies and organic growth, a change of Chairman was appropriate, which resulted in the appointment of Peter George. During the year, the Board also determined that in light of the importance of the Company's pipeline of products, a dedicated Chief Scientific Officer should be appointed to the Board, resulting in the appointment of Alex Raeber shortly after year end. In addition, the re-appointment of Non-executive Directors at the end of their term is dependent on their suitability to continue, including performance, which is reviewed by the Nomination Committee and the Board, and in the case of the Chairman by the Senior Independent Director and the Board.



## Overview of compliance with principles of UK Corporate Governance Code

<b>A. Leadership</b>	
<b>A.1 Role of Board</b>	The Board is collectively responsible for the long-term success of the Group, and oversees the development and delivery of strategy and operations. It does this by exercising oversight and control over the performance of the Company through review of management financial information; agreeing budgetary targets; approving investment programmes and monitoring their execution against budget and returns on investment. (See page 71)
<b>A.2 Clear division of responsibilities</b>	There is a clear division of responsibilities between Chairman and Chief Executive Officer which is described in this report. (See page 74)
<b>A.3 Role of Chairman</b>	The Chairman leads the Board, setting and managing the agenda, and promoting open and constructive discussion and challenge. (See page 74)
<b>A.4 Role of Non-Executive Directors</b>	The Board has a culture of transparency and open debate, and the Non-Executive Directors constructively challenge the Executive Directors regarding the strategy and its implementation. (See page 71)
<b>B. Effectiveness</b>	
<b>B.1 Composition of the Board</b>	During the year we completed the appointment of two additional Non-executive Directors, Hugo Wahnish and Yngve Myhre, to strengthen the expertise of the Board in the areas of pharmaceuticals and aquaculture. We appointed a new Chairman, Peter George, with a history of delivering growth and shareholder value, to lead the Company through its next phase of development. Lastly, we appointed a new Chief Scientific Officer to the Board, Alex Raeber, who has a strong scientific background and extensive expertise in the animal health sector. The Board and the Nomination Committee is of the view that the Board contains an appropriate breadth and balance of skills, knowledge, experience and independence.
<b>B.2 Board appointments</b>	The Nomination Committee leads the process for the appointment of new Directors, and follows a formal and rigorous process, with the assistance of independent external recruiters, and taking into account the Group's policies regarding diversity. This process was followed in respect of the four appointments made to the Board in the year.
<b>B.3 Time commitments</b>	Non-Executive Directors are notified of and agree to the required time commitments prior to appointment, and external directorships which may impact existing time commitments must be agreed with the Chairman. (See pages 73 to 75)
<b>B.4 Training and development</b>	New Directors receive a comprehensive and formal induction programme which is tailored to their role and needs, and the Board receives updates regarding the business and regulatory developments. (See page 75)
<b>B.5 Provision of information and support</b>	The Chairman, supported by the Company Secretary, ensures that Board members receive accurate and timely information and other support requested, including access to external legal advice. (See page 74)
<b>B.6 Board and Committee performance evaluations</b>	The Nomination Committee reviews the skills, experience, independence and knowledge of the Directors as a whole to ensure the composition of the Board is suitable for the Company as it grows and diversifies. A total of four new appointments were made to the Board in FY18 to strengthen and broaden the range of skills, knowledge and experience represented. The Nomination Committee and the Board actively considers and discusses Board diversity, which remains a focus. As mentioned above, the Company does not undertake a formal review of Board and individual Director performance on an annual basis.
<b>B.7 Re-election of Directors</b>	The Articles of Association require Directors to retire by rotation at the third Annual General Meeting after the Annual General Meeting at which they were elected. (See page 88)
<b>C. Accountability</b>	
<b>C.1 Financial and business reporting</b>	The Board has reviewed this Annual Report and the results for the year to 30 September 2018 to ensure that the Annual Report and Accounts, taken as a whole, are fair, balanced and understandable. (See pages 76 and 89)
<b>C.2 Risk management and internal control systems</b>	The Board is responsible for ensuring that the Company has in place effective procedures for the management of risk, and that the principal risks faced by the Group are identified, assessed, appropriately mitigated and monitored. This report sets out the Company's risk framework and risk management activity. (See pages 60 to 63)
<b>C.3 Role and responsibilities of the Audit Committee</b>	Responsibility for oversight of the Group's financial reporting procedures, internal controls and audit process is delegated to the Audit Committee, which also oversees the Group's risk management framework. (See pages 76 to 78)
<b>D. Remuneration</b>	
<b>D.1 Executive Directors' remuneration</b>	The policy for determining the remuneration of Executive Directors is set out in the Remuneration Report. No Director is involved in setting his / her own remuneration. (See pages 79 to 81)
<b>D.2 Remuneration policy</b>	The Company's remuneration policy is set out in the Remuneration Report. (See pages 79 to 83)
<b>E. Relations with Shareholders</b>	
<b>E.1 Shareholder engagement</b>	The Board engages actively and regularly with its shareholders. The Chairman and Senior Independent Director are available for discussions with major shareholders, and the Board is kept apprised of their views and feedback. (See page 84)
<b>E.2 Use of general meetings</b>	The Directors are always available at the AGM to meet with shareholders, who are invited to raise questions and also to meet with the Board following the formal business of the meeting. (See page 87)

## Viability statement

The Board assesses the Group's going concern and viability based on its cash flows and business plans, combined with downside scenarios of the principal risks described on pages 62 to 63 and other financial and performance factors that could threaten the Group's plans, performance and financial position including the nature of the business and its investment and planning periods. The outcome of this analysis and the appropriateness of the period over which the Board decided to provide its viability statement are described below.

### Assessing our prospects

In order to reach a conclusion on both the appropriateness of adopting the going concern basis of accounting in preparing the Annual Report and on our viability, the Board 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 key factors affecting the Group's prospects are set out in the strategy on page 18 being the ability to continue to grow in established markets from existing capacity and through partnerships, commercial delivery of pipeline products, focussed investment in markets that leverage the Group platform and positioning the Group in areas of future growth.

This assessment considered:

- Benchmark's current strategic plan, financial position and the financing facilities available to the Group together with forecast compliance with the related covenants. As outlined in the Basis of Preparation in Note 1 to the financial statements, a limit within the borrowing facility in relation to the amount of development funding provided to certain subsidiary companies has been exceeded. A waiver from this leakage condition was received from the bank on 7 January 2019 subject to the position being remedied by 31 March 2019. The process agreed with the lenders to reduce total intercompany debt with non-obligor companies is underway and the board considered the reasons for the limit being exceeded and was satisfied that measures have been put in place to ensure this is continually monitored more closely in the future. Also on 7 January 2019, the accordion facility within the Company's existing bank facility was activated raising the total facility from USD70m to USD90m (c£69m) and certain covenants were revised accordingly. As at 30 September 2018 the Group had net assets of £381.8m (2017: £358.6m), including cash of £24.1m (2017: £18.8m). The Group made a loss for the year of £6.3m (2017: £7.1m).
- A number of assumptions in relation to trading performance across the group including availability and timing of licences associated with sea lice treatment and other vaccine field trials and related marketing authorisations once these trials are completed, supply and pricing of key raw materials and the out-licensing of certain products in development. The Directors have considered reasonably possible downside sensitivity scenarios, including mitigating actions within their control should these occur around deferring and reducing non-essential capital and revenue expenditure, redeployment or curtailment of research and development spend in the relevant areas and working capital management. These forecast cash flows, considering the ability and intention of the directors to implement mitigating actions should they need to, provide sufficient headroom in the forecast period.

- The potential impact of Brexit on the Group. The scale of the impact depends on the nature of the exit process which is uncertain but is not expected to be material to the Group in any event. The Board views the potential impact of Brexit as an integral part of the review of the Principal Risks and the Group has undertaken hard Brexit mitigation planning. The Board continues to assess the potential impacts of Brexit as the process evolves.

### Assessment period

In their assessment of the Group's viability, the Directors have determined that a three-year time horizon, to September 2021, is an appropriate period to adopt. This is the period focussed on by the Board during its strategic planning process and is aligned with the Group's goodwill and other intangible impairment testing. The Group's main funding facility expires in December 2020 but is fully expected to be renewed beyond that date in due course based on the recent activation of the accordion facility, the recent covenant reset and ultimately the Group's strong relationship with the banks. While the formal assessment period extends to September 2021, the Board considers that the Group's longer-term prospects are likely to be positive beyond this time horizon as a result of market growth, increasing market demand for its products and its strong competitive position derived from its technology platform and pipeline of products.

### Going concern and Viability Statement

The Directors have considered all of the factors noted above and confirm that the Group has adequate resources to continue to meet all liabilities as and when they fall due for the foreseeable future and at least for the period of 12 months from the date of signing these financial statements. Accordingly, the financial statements have been prepared on a going concern basis. Also, based on this assessment, the Directors 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 to September 2021.

### Annual General Meeting

The next Annual General Meeting will be held at 12.00 p.m. on 14 March 2019 at Travers Smith LLP, 10 Snow Hill, London, EC1A 2AL. Details of the AGM are set out in the Notice of AGM which is being made available to shareholders with this report.

The Directors will be available at the AGM to answer questions and for discussion with shareholders following conclusion of the formal business of the meeting.

### Directors

The Directors who held office during the year were as follows:

- Alex Hambro (stepped down 8 May 2018)
- Alex Raeber (appointed 1 October 2018)
- Hugo Wahnish (appointed 6 November 2017)
- Kevin Quinn
- Malcolm Pye
- Mark Plampin
- Peter George (appointed 8 May 2018)
- Susan Searle
- Yngve Myhre (appointed 6 November 2017)

The Directors benefited from qualifying third party indemnity provisions during the financial year and continue to do so at the date of this report.



## Re-election of Directors

At the Annual General Meeting held in March 2018, the appointments of Hugo Wahnish and Yngve Myhre as Directors of the Company were approved.

The Articles of Association require Directors to retire by rotation at the third Annual General Meeting after the Annual General Meeting at which they were last elected. The Articles also provide that the Board has the power to appoint any person to be a Director, and that any Director appointed by the Board shall hold office only until the next following Annual General Meeting.

Peter George and Alex Raeber were appointed as Directors of the Company by the Board on 8 May 2018 and 1 October 2018 respectively. Mark Plampin was last elected as a Director at the Company's 2016 Annual General Meeting.

Accordingly, at the Annual General Meeting to be held on 14 March 2019, Peter George and Alex Raeber are standing for election, and Mark Plampin is standing for re-election.

## Power to allot shares

Each year at the Annual General Meeting, the Directors seek authority to allot shares for the following year. At the last AGM held on 8 March 2018, shareholders authorised the Directors to allot relevant securities up to an aggregate nominal value of £174,123, representing one third of the issued share capital, and to further allot equity securities up to an additional aggregate nominal value of £174,122 in connection with a fully pre-emptive rights issue, in accordance with ABI guidance. Directors were authorised to allot for cash equity securities having a nominal value not exceeding in aggregate £26,118 (being 5 per cent. of issued share capital), and to further allot for cash equity securities having a nominal value not exceeding in aggregate £26,118 for the purpose of financing acquisitions and capital investments. The authorities expire at the conclusion of the next AGM.

At the forthcoming AGM, authorities will be sought from shareholders similar to those sought at the 2018 AGM.

## Authority for the Company to purchase its own shares

At the Company's 2018 Annual General Meeting, shareholders renewed the Company's authorities to make market purchases of up to 52,236,817 ordinary shares, representing 10 per cent. of the Company's issued share capital. These authorities were not used in the year. At the 2019 Annual General Meeting, shareholders will be asked to renew these authorities for another year, and the resolution will once again propose a maximum aggregate number of ordinary shares which the Company can purchase equal to 10 per cent. of the Company's issued ordinary share capital. Details are set out in the Notice of Annual General Meeting.

The Company held no treasury shares during the year, or at the date of this report.

## Length of notice of general meetings

The Company has taken authority under the Companies Act 2006 to call general meetings of the Company, other than AGMs, on 14 days notice. The 14 day notice period will only be used where the flexibility is merited by the business

of the meeting, and is thought to be in the best interests of shareholders as a whole. The Company offers the facility for shareholders to vote by electronic means. This facility is open to all shareholders and would be available if the Company were to call a meeting on 14 clear days' notice.

## Employee involvement

As the Group has grown, organically and through acquisition, with increasing geographical spread in order to access its markets, employee engagement has become more important and necessarily more structured.

The Company has commenced a series of focus groups, which are being held at sites globally. The aim of the focus groups is to establish how informed people are about our strategy and developments at Benchmark; assess staff buy-in to our philosophy and values; understand the extent to which employees feel informed and motivated by communications from different sources; capture ideas around new initiatives; identify training needs; give employees an opportunity to speak up and be heard; and promote employee engagement and collaboration. The outcomes of the initial round of focus Groups, including recommended initiatives, are being presented to the Operations Board for discussion in early 2019.

Following the work undertaken to review and define the Group's 5-year strategy, the outcome of that review is being communicated throughout the organisation in interactive forums, both through cascade, and presentations given by the leadership team on visits to Group sites.

The Group has a policy of encouraging share ownership and 58 per cent. of the Group's employees hold shares or options in the Company.

## Political contributions

Neither the Company nor any of its subsidiaries made any political donations or incurred any political expenditure during the year.

## Disclosure of information to auditor

The Directors who held office at the date of approval of this Directors' report confirm that, so far as they are each aware, there is no relevant audit information of which the Company's auditor is unaware; and each Director has taken all the steps that he/she ought to have taken as a director to make himself/herself aware of any relevant audit information and to establish that the Company's auditor is aware of that information.

## Auditor

In accordance with Section 489 of the Companies Act 2006, a resolution for the re-appointment of KPMG LLP as auditor of the Company is to be proposed at the forthcoming Annual General Meeting.

## Branches outside the UK

The Company has a branch in Switzerland for the purposes of engaging employees who are resident in Switzerland.

## Information elsewhere in the report

The information set out below is contained in other areas of this report.

		Page(s) of this report
Financial instruments	Details of the Group's financial risk management objectives and policies including the Group's policy for hedging, and the exposure of the Company and its subsidiaries to price risk, credit risk, liquidity risk and cash flow risk.	113 to 116
Important events	Particulars of important events affecting the Company or its subsidiaries.	5, 18, 23 to 25
Post balance sheet events	Description of post balance sheet events.	None
Future developments	Likely future developments in the business of the Company or its subsidiaries.	18, 19, 23 to 25
Research and development	Details of research and development activities of the Company and its subsidiaries.	28 to 33, 36 to 39
Risk management	Details of the Company's risk management framework, activities in the year and principal risks and uncertainties.	60 to 63
Directors' remuneration and interests	Details of Directors' remuneration, interests in shares of the Company, share options and pension arrangements.	79 to 83
Principal activities and business review	Business review, details of 2018 results, key performance indicators, outlook for future years.	4 to 5, 8 to 45
Financial risk management	Objectives and policies for management of financial risk.	76 to 78
Share capital	Details of the issued share capital and movements during the year.	146

This report was approved by the Board on 24 January 2019 and signed on its behalf.

**Athene Blakeman**  
Company Secretary  
24 January 2019

## DIRECTORS' RESPONSIBILITIES

### Statement of directors' responsibilities in respect of the Annual Report and the financial statements

The directors are responsible for preparing the Annual Report and the Group and parent Company financial statements in accordance with applicable law and regulations.

Company law requires the directors to prepare Group and parent Company financial statements for each financial year. Under the AIM Rules of the London Stock Exchange they are required to prepare the Group financial statements in accordance with International Financial Reporting Standards as adopted by the European Union (IFRSs as adopted by the EU) and applicable law and they have elected to prepare the parent Company financial statements on the same basis.

Under company law the directors must not approve the financial statements unless they are satisfied that they give a true and fair view of the state of affairs of the Group and parent Company and of their profit or loss for that period. In preparing each of the Group and parent Company financial statements, the directors are required to:

- Select suitable accounting policies and then apply them consistently;
- Make judgements and estimates that are reasonable, relevant and reliable;
- State whether they have been prepared in accordance with IFRSs as adopted by the EU;
- Assess the Group and parent Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern; and
- Use the going concern basis of accounting unless they either intend to liquidate the Group or the parent Company or to cease operations, or have no realistic alternative but to do so.

The directors are responsible for keeping adequate accounting records that are sufficient to show and explain the parent Company's transactions and disclose with reasonable accuracy

at any time the financial position of the parent Company and enable them to ensure that its financial statements comply with the Companies Act 2006. They are responsible for such internal control as they determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error, and have general responsibility for taking such steps as are reasonably open to them to safeguard the assets of the Group and to prevent and detect fraud and other irregularities.

The directors have decided to prepare voluntarily a Directors' Remuneration Report in accordance with Schedule 8 to The Large and Medium-sized Companies and Groups (Accounts and Reports) Regulations 2008 made under the Companies Act 2006, as if those requirements applied to the company. The directors have also decided to prepare voluntarily a Corporate Governance Statement as if the company were required to comply with the Listing Rules and the Disclosure Guidance and Transparency Rules of the Financial Conduct Authority in relation to those matters.

Under applicable law and regulations, the directors are also responsible for preparing a Strategic Report and a Directors' Report that complies with that law and those regulations.

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

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

Signed on behalf of the Board

**Malcolm Pye**  
Chief Executive Officer  
24 January 2019



# 03 FINANCIAL STATEMENTS

- 92 Independent Auditor's Report
- 98 Consolidated Income Statement
- 99 Consolidated Statement of Comprehensive Income
- 100 Consolidated Balance Sheet
- 101 Company Balance Sheet
- 102 Consolidated Statement of Changes in Equity
- 103 Company Statement of Changes in Equity
- 104 Consolidated Statement of Cash Flows
- 105 Company Statement of Cash Flows
- 106 Notes Forming Part of the Financial Statements

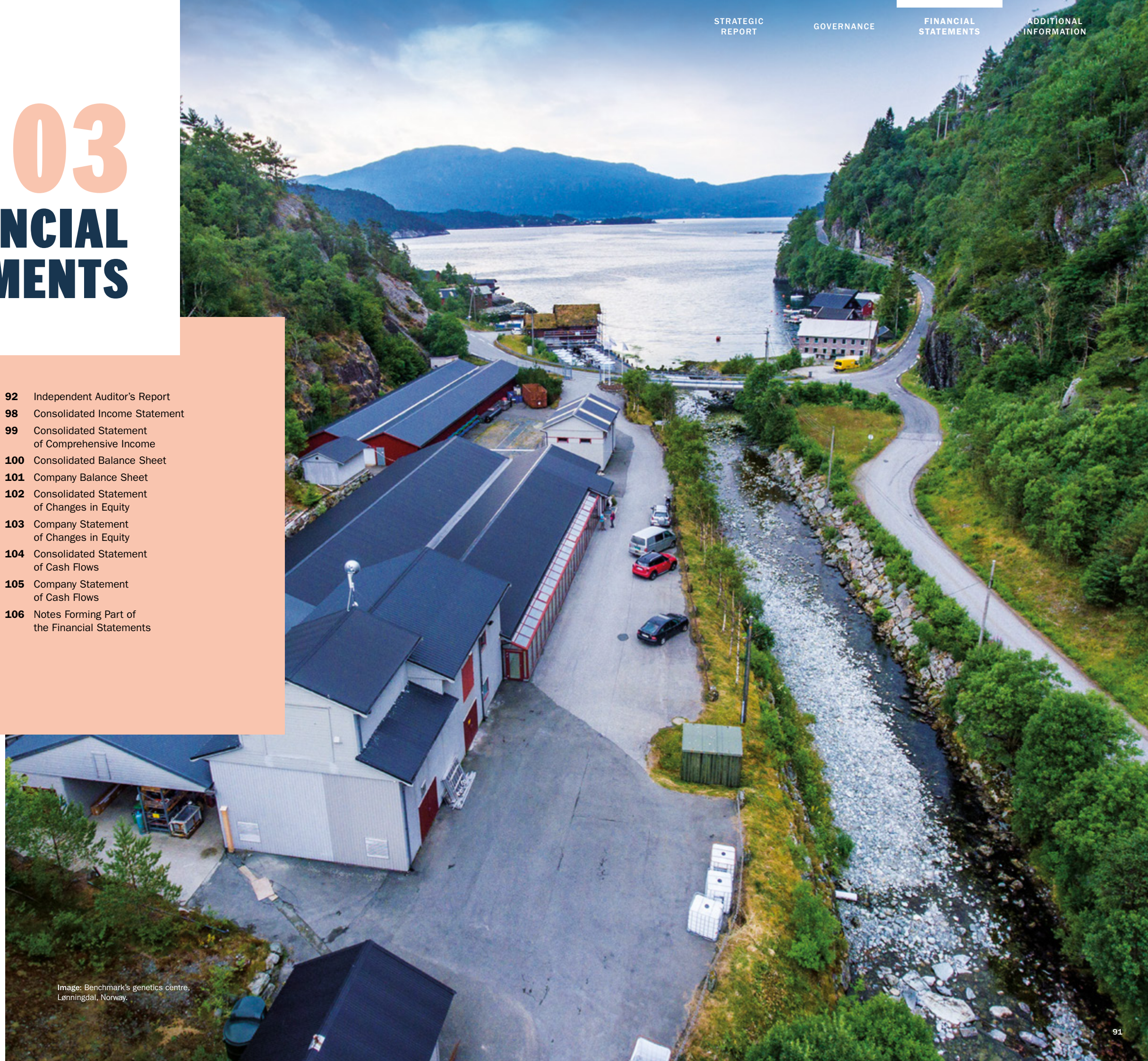


Image: Benchmark's genetics centre, Lønningdal, Norway.



# INDEPENDENT AUDITOR'S REPORT

TO THE MEMBERS OF BENCHMARK HOLDINGS PLC

## 1. Our opinion is unmodified

We have audited the financial statements of Benchmark Holdings plc ("the Company") for the year ended 30 September 2018 which comprise the Consolidated Income Statement, the Consolidated and Company Balance Sheets, the Consolidated Statement of Comprehensive Income, the Consolidated and Company Statement of Changes in Equity, the Consolidated and Company Statement of Cash Flows, and the related notes, including the accounting policies in Note 1.

### In our opinion:

- The financial statements give a true and fair view of the state of the Group's and of the parent Company's affairs as at 30 September 2018 and of the Group's loss for the year then ended;
- The group financial statements have been properly prepared in accordance with International Financial Reporting Standards as adopted by the European Union (IFRSs as adopted by the EU);
- The parent Company financial statements have been properly prepared in accordance with IFRSs as adopted by the EU and as applied in accordance with the provisions of the Companies Act 2006; and
- The financial statements have been prepared in accordance with the requirements of the Companies Act 2006.

### Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) ("ISAs (UK)") and applicable law. Our responsibilities are described below. We have fulfilled our ethical responsibilities under, and are independent of the Group in accordance with, UK ethical requirements including the FRC Ethical Standard as applied to listed entities. We believe that the audit evidence we have obtained is a sufficient and appropriate basis for our opinion.

Overview		
<b>Materiality:</b>	£1,100,000 (2017: £1,000,000)	
Group financial statements as a whole	0.7% (2017: 0.7%) of revenue	
<b>Coverage</b>	80% (2017: 86%) of group revenue	
<b>Key audit matters</b>		<b>vs 2017</b>
<b>Recurring risks</b>	New: uncertainties due to the UK exiting the European Union	▲
	New: going concern	▲
	Valuation of group goodwill, acquired intangibles and recoverability of parent company's investment in subsidiaries and group debtor balances	◀▶
	Valuation of biological assets	◀▶

## 2. Key audit matters: our assessment of risks of material misstatement

Key audit matters are those matters that, in our professional judgment, were of most significance in the audit of the financial statements and include the most significant assessed risks of material misstatement (whether or not due to fraud) identified by us, including those which had the greatest effect on: the overall audit

strategy; the allocation of resources in the audit; and directing the efforts of the engagement team. These matters 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 arriving at our audit opinion above, the key audit matters were as follows:

The risk	Our response
<p><b>The impact of uncertainties due to the UK exiting the European Union on our audit</b></p> <p>Refer to page 60 (principle risks) and page 87 (viability statement)</p>	<p><b>Unprecedented levels of uncertainty:</b></p> <p>All audits assess and challenge the reasonableness of estimates, in particular as described in valuation of goodwill, acquired intangibles and recoverability of parent company's investment in subsidiaries and group debtor balances below, related disclosures and the appropriateness of the going concern basis of preparation of the financial statements (see below). All of these depend on assessments of the future economic environment and the Group and Company's future prospects and performance.</p> <p>In addition, we are required to consider the other information presented in the Annual Report including the principle risks disclosure and the viability statement and to consider the directors' statement that the annual report and financial statements taken as a whole are fair, balanced and understandable and provides the information necessary for shareholders to assess the Group's position and performance, business model and strategy.</p> <p>Brexit is one of the most significant economic events for the UK and at the date of this report its effects are subject to unprecedented levels of uncertainty of outcomes, with the full range of possible effects unknown.</p>
<p><b>Going concern</b></p> <p>Refer to page 76 (Audit Committee Report), page 106 (accounting policy)</p>	<p><b>Our procedures included:</b></p> <ul style="list-style-type: none"> <li><b>Funding assessment:</b> Assessing the committed level of financing available to the Group, including the ability of the Group to meet certain conditions of the facility waiver in place to 31 March 2019. Also considering the recent increase in facility made available to the Group and its ability to meet covenants in place.</li> <li><b>Historical comparison:</b> Considering the Group's historical budgeting accuracy, by assessing actual performance against budget, including current trading;</li> <li><b>Sensitivity analysis:</b> Performing analysis of changes in key assumptions such as supply and pricing of key raw materials, removing income from sea lice treatment field trials which are dependent on receiving certain licences and removing the impact of outlicensing of certain products in development to understand the sensitivity of the cash flow forecasts;</li> <li><b>Benchmarking assumptions:</b> Comparing the Group's assumptions in relation to market growth to externally derived data;</li> <li><b>Evaluating directors' intent:</b> Evaluating the intent of the directors and the achievability of the actions they would take to improve the position should certain risks materialise including looking at the history of similar actions being taken; and</li> <li><b>Assessing transparency:</b> Assessing the completeness and accuracy of the matters covered in the going concern disclosure by comparing this to the key assumptions, key sensitivities and mitigating actions considered by management.</li> </ul>
<p><b>Disclosure quality:</b></p> <p>The financial statements explain how the Board has formed a judgement that it is appropriate to adopt the going concern basis of preparation for the Group and Parent company.</p> <p>That judgement is based on an evaluation of the inherent risks to the Group's and Company's business model and how those risks might affect the Group's and Company's financial resources or ability to continue operations over a period of at least a year from the date of approval of the financial statements.</p> <p>The risks most likely to adversely affect the Group and Company's available financial resources over this period were:</p> <ul style="list-style-type: none"> <li>The ability of the Group to meet conditions attached to the facility waiver in place to 31 March 2019.</li> <li>Meeting management forecasts particularly in relation to availability and timing of licences associated with sea lice treatment field trials, supply and pricing of key raw materials and potential outlicensing of certain products in development.</li> <li>The achievability of mitigating actions the Directors would take to improve the position should these or other risks materialise.</li> </ul> <p>There are also less predictable but realistic second order impacts, such as the erosion of customer or supplier confidence, which could result in a rapid reduction of available financial resources.</p> <p>The risk for our audit was whether or not those risks were such that they amounted to a material uncertainty that may have cast significant doubt about the ability to continue as a going concern. Had they been such, then that fact would have been required to have been disclosed.</p>	<p>We developed a standardised firm-wide approach to the consideration of the uncertainties arising from Brexit in planning and performing our audits. Our procedures included:</p> <ul style="list-style-type: none"> <li><b>Our Brexit knowledge:</b> We considered the directors' assessment of Brexit-related sources of risk for the Group and Company's business and financial resources compared with our own understanding of the risks. We considered the directors' plans to take action to mitigate the risks.</li> <li><b>Sensitivity analysis:</b> When addressing going concern, valuation of goodwill, acquired intangibles and recoverability of parent company's investment in subsidiaries and group debtors and other areas that depend on forecasts, we compared the directors' sensitivity analysis to our assessment of the worst reasonably possible, known adverse scenario resulting from Brexit uncertainty and, where forecast cash flows are required to be discounted, considered adjustments to discount rates for the level of remaining uncertainty.</li> <li><b>Assessing transparency:</b> As well as assessing individual disclosures as a part of our procedures on going concern, valuation of goodwill, acquired intangibles and recoverability of parent company's investment in subsidiaries and group debtors, we considered all of the Brexit related disclosures together, including those in the strategic report, comparing the overall picture against our understanding of the risks.</li> </ul> <p>However, no audit should be expected to predict the unknowable factors or all possible future implications for a company and this is particularly the case in relation to Brexit.</p>



**2. Key audit matters: our assessment of risks of material misstatement (continued)**

The risk	Our response
<p><b>Valuation of group goodwill, acquired intangibles and of parent's investment in subsidiaries /debt due from group entities</b></p> <p>Goodwill: £152,439,000 (2017: 149,665,000)</p> <p>Intangibles: £162,381,000 (2017: £175,695,000)</p> <p>Investments (parent company): £264,472,000 (2017: £263,841,000)</p> <p>Debt due from group entities (parent company): £165,446,000 (2017: £126,348,000)</p> <p>Refer to page 76 (Audit Committee Report), pages 110 and 112 (accounting policies) and pages 127, 135 and 138 (financial disclosures)</p>	<p><b>Forecast-based valuation:</b></p> <p>The carrying value of goodwill, acquired intangibles, investments and debt due from group entities depends on assumptions of future financial performance which inherently contain an element of judgement and uncertainty. In addition, certain cash generating units of the group are at risk of impairment as they contain immature products or markets, or are not trading in line with initial expectations.</p> <p>Significant areas of judgement include sales growth rates, operating margins and the discount rate applied to future cash flows.</p> <p><b>Our procedures included:</b></p> <ul style="list-style-type: none"> <li><b>Data comparisons:</b> Assessing the Group's impairment model for mathematical accuracy as well as internal consistency with board approved budgets and forecast.</li> <li><b>Benchmarking assumptions:</b> We compared the Group's assumptions in relation to key inputs such as projected growth and discount rates to externally derived data. We used our valuation specialists to assist with our work on the discount rate;</li> <li><b>Sensitivity analysis:</b> Performing analysis of changes in key assumptions such as projected growth and discount rates to understand the sensitivity of the valuation;</li> <li><b>Historical comparison:</b> Considering the Group's historical budgeting accuracy, by assessing actual performance against budget;</li> <li><b>Comparing valuations:</b> Comparing the sum of the discounted cash flows to the group's market capitalisation to assess the reasonableness of those cash flows; and</li> <li><b>Assessing transparency:</b> We also assessed whether the Group's disclosures about the sensitivity of the outcome of the impairment assessment to changes in key assumptions reflected the risks inherent in the valuation of goodwill, intangibles and investments.</li> </ul>
<p><b>Valuation of biological assets, Salmon broodstock</b></p> <p>Salmon broodstock: £11,723,000 (2017: £9,273,000)</p> <p>Refer to page 76 (Audit Committee Report), page 111 (accounting policy) and page 136 (financial disclosures)</p>	<p><b>Subjective valuation:</b></p> <p>The group hold significant biological assets at StofnFiskur in Iceland. Under IFRS these are required to be held at fair value less cost to sell. The calculations of fair value include a number of assumptions relating to the future (e.g. egg sales prices, sales volumes), and are subject to seasonal variations which can lead to income statement fluctuations.</p> <p><b>Our procedures included:</b></p> <ul style="list-style-type: none"> <li><b>Data comparisons:</b> Assessing the Group's valuation model for mathematical accuracy and internal consistency with board approved budgets and forecast.</li> <li><b>Benchmarking assumptions:</b> We compared the Group's assumptions in relation to key inputs such as selling price to externally derived data;</li> <li><b>Sensitivity analysis:</b> Performing analysis of changes in key assumptions such as egg sales prices to understand the sensitivity of the valuation;</li> <li><b>Assessing transparency:</b> We considered the adequacy of the Group's disclosures in respect of the valuation of biological assets; and</li> <li><b>Alternative methods:</b> We considered an alternative valuation basis to that used by management to corroborate the reasonableness of management's approach.</li> </ul>

**3. Our application of materiality and an overview of the scope of our audit**

Materiality for the Group financial statements as a whole was set at £1,100,000 (2017: £1,000,000), determined with reference to a benchmark of Group revenue, of which it represents 0.7% (2017: 0.7% of group revenue). We consider revenue to be the most appropriate benchmark as it provides a more stable measure year on year than group loss before tax.

Materiality for the parent company financial statements as a whole was set at £800,000 (2017: £750,000), determined with reference to a benchmark of company total assets, of which it represents 0.2% (2017: 0.2%).

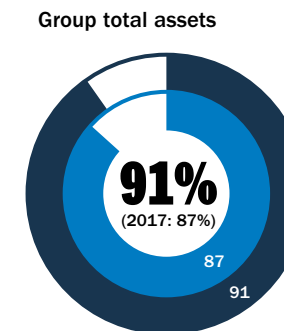
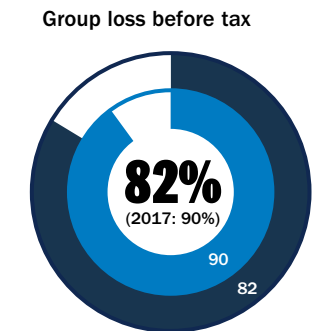
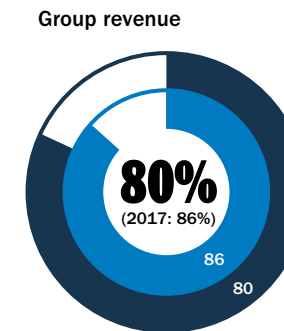
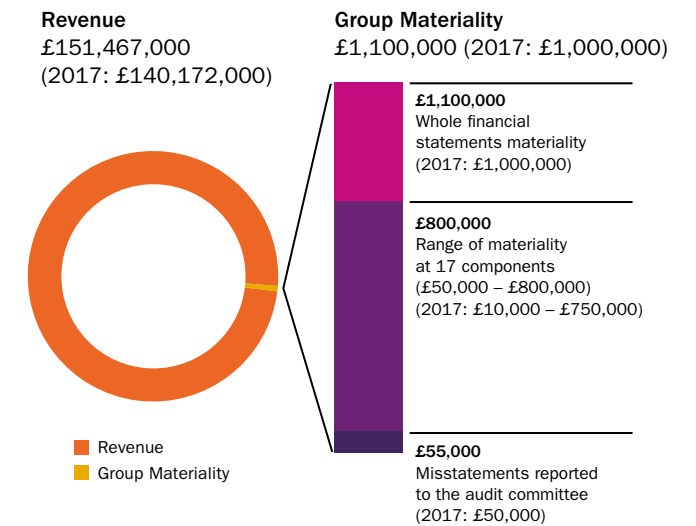
We agreed to report to the audit committee any corrected or uncorrected identified misstatements exceeding £55,000 (2017: £50,000), in addition to other identified misstatements that warranted reporting on qualitative grounds.

Of the Group's 71 (2017: 69) reporting components, we subjected 16 (2017: 19) to full scope audits for Group purposes and 1 (2017: 1) was subject to specified risk-focused audit procedures over cost of sales and trade payables. The latter was not individually financially significant to require an audit for group reporting purposes but did present specific individual risks that need to be addressed. For the residual components, we performed analysis at an aggregated group level to re-examine our assessment that there were no significant risks of material misstatement within these.

The Group audit team instructed component auditors as to the significant areas to be covered, including the relevant risks detailed above and the information to be reported back. The Group audit team also approved the component materialities ranging from £50,000 — £800,000 (2017: £10,000 – £750,000) having regard to the mix of size and risk profile of the Group across the components. The work on 8 of the 17 (2017: 10 of the 20) components was performed by component auditors and the rest, including the audit of the parent company, by the Group team.

The Group team held calls with all full scope component auditors to assess the audit risk and strategy as part of the planning process. During these, the audit approach to key risk areas were discussed.

The Group team visited three component locations in Iceland, Norway, and Belgium to attend clearance meetings and held calls with all other full scope component auditors. During these, the findings reported to the Group team were discussed in more detail, and any further work required by the Group team was then performed by the component auditor. The Group team reviewed the audit work papers of all full scope component auditors.



■ Full scope for group audit purposes 2018  
■ Specified risk-focused audit procedures 2018  
■ Full scope for group audit purposes 2017  
■ Specified risk-focused audit procedures 2017  
■ Residual components



#### 4. We have nothing to report on going concern

The Directors have prepared the financial statements on the going concern basis as they do not intend to liquidate the Company or the Group or to cease their operations, and as they have concluded that the Company's and the Group's financial position means that this is realistic. They have also concluded that there are no material uncertainties that could have cast significant doubt over their ability to continue as a going concern for at least a year from the date of approval of the financial statements ("the going concern period").

Our responsibility is to conclude on the appropriateness of the Directors' conclusions and, had there been a material uncertainty related to going concern, to make reference to that in this audit report. However, as we cannot predict all future events or conditions and as subsequent events may result in outcomes that are inconsistent with judgements that were reasonable at the time they were made, the absence of reference to a material uncertainty in this auditor's report is not a guarantee that the group or the company will continue in operation.

We identified going concern as a key audit matter (see section 2 of this report). Based on the work described in our response to that key audit matter, we are required to report to you if:

- We have anything material to add or draw attention to in relation to the directors' statement in Note 1 to the financial statements on the use of the going concern basis of accounting with no material uncertainties that may cast significant doubt over the Group and Company's use of that basis for a period of at least twelve months from the date of approval of the financial statements.

We have nothing to report in these respects.

#### 5. We have nothing to report on the other information in the Annual Report

The Directors are responsible for the other information presented in the Annual Report together with the financial statements. Our opinion on the financial statements does not cover the other information and, accordingly, we do not express an audit opinion or, except as explicitly stated below, any form of assurance conclusion thereon.

Our responsibility is to read the other information and, in doing so, consider whether, based on our financial statements audit work, the information therein is materially misstated or inconsistent with the financial statements or our audit knowledge. Based solely on that work we have not identified material misstatements in the other information.

#### Strategic report and directors' report

Based solely on our work on the other information:

- We have not identified material misstatements in the strategic report and the directors' report;
- In our opinion the information given in those reports for the financial year is consistent with the financial statements; and
- In our opinion those reports have been prepared in accordance with the Companies Act 2006.

#### Disclosures of principal risks and longer-term viability

Based on the knowledge we acquired during our financial statements audit, we have nothing material to add or draw attention to in relation to:

- The directors' confirmation within page 62 that they have carried out a robust assessment of the principal risks facing the Group, including those that would threaten its business model, future performance, solvency and liquidity;
- The directors' explanation in the viability statement of how they have assessed the prospects of the Group, over what period they have done so and why they considered that period to be appropriate, and their statement as to whether they have a reasonable expectation that the Group will be able to continue in operation and meet its liabilities as they fall due over the period of their assessment, including any related disclosures drawing attention to any necessary qualifications or assumptions.

Our work is limited to assessing these matters in the context of only the knowledge acquired during our financial statements audit. As we cannot predict all future events or conditions and as subsequent events may result in outcomes that are inconsistent with judgments that were reasonable at the time they were made, the absence of anything to report on these statements is not a guarantee as to the Group's and Company's longer-term viability.

#### Corporate governance disclosures

We are required to report to you if:

- We have identified material inconsistencies between the knowledge we acquired during our financial statements audit and the directors' statement that they consider that the annual report and financial statements taken as a whole is fair, balanced and understandable and provides the information necessary for shareholders to assess the Group's position and performance, business model and strategy; or
- The section of the annual report describing the work of the Audit Committee does not appropriately address matters communicated by us to the Audit Committee.

We have nothing to report in these respects.

#### 6. We have nothing to report on the other matters on which we are required to report by exception

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

- Adequate accounting records have not been kept by the parent Company, or returns adequate for our audit have not been received from branches not visited by us; or
- The parent Company financial statements are not in agreement with the accounting records and returns; or
- Certain disclosures of directors' remuneration specified by law are not made; or
- We have not received all the information and explanations we require for our audit.

We have nothing to report in these respects.

#### 7. Respective responsibilities

##### Directors' responsibilities

As explained more fully in their statement set out on page 89, the directors are responsible for: the preparation of the financial statements including being satisfied that they give a true and fair view; such internal control as they determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error; assessing the Group and parent Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern; and using the going concern basis of accounting unless they either intend to liquidate the Group or the parent Company or to cease operations, or have no realistic alternative but to do so.

##### Auditor's responsibilities

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

A fuller description of our responsibilities is provided on the FRC's website at [frc.org.uk/auditorsresponsibilities](http://frc.org.uk/auditorsresponsibilities).

#### 8. The purpose of our audit work and to whom we owe our responsibilities

This report is made solely to the Company's members, as a body, in accordance with Chapter 3 of Part 16 of the Companies Act 2006 and the terms of our engagement by the company. Our audit work has been undertaken so that we might state to the Company's members those matters we are required to state to them in an auditor's report and the further matters we are required to state to them in accordance with the terms agreed with the company, and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Company and the Company's members, as a body, for our audit work, for this report, or for the opinions we have formed.

**Frances Simpson**  
(Senior Statutory Auditor)

for and on behalf of KPMG LLP, Statutory Auditor

Chartered Accountants  
1 Sovereign Square Sovereign Street  
Leeds  
LS1 4DA

24 January 2019



**CONSOLIDATED INCOME STATEMENT**

for the year ended 30 September 2018

	Notes	2018 £000	2017 £000
<b>Revenue</b>	4	151,467	140,172
Cost of sales		(77,447)	(77,781)
<b>Gross profit</b>		74,020	62,391
Research and development costs		(12,040)	(13,055)
Other operating costs		(44,600)	(39,297)
Share of profit of equity-accounted investees, net of tax		(362)	27
<b>Adjusted EBITDA<sup>2</sup></b>		17,018	10,066
Exceptional including acquisition related items	10	(1,239)	5,649
<b>EBITDA<sup>1</sup></b>		15,779	15,715
Depreciation	13	(6,841)	(4,877)
Amortisation and impairment	14	(18,002)	(18,473)
<b>Operating loss</b>		(9,064)	(7,635)
Finance cost	9	(4,927)	(1,960)
Finance income	9	332	1,495
<b>Loss before taxation</b>		(13,659)	(8,100)
Tax on loss	11	9,270	980
<b>Loss for the year</b>		(4,389)	(7,120)
<b>Loss for the year attributable to:</b>			
– Owners of the parent		(5,009)	(7,440)
– Non-controlling interest		620	320
		(4,389)	(7,120)
<b>Basic loss per share (pence)</b>	12	(0.94)	(1.43)
<b>Diluted loss per share (pence)</b>	12	(0.94)	(1.43)

<sup>1</sup> EBITDA – Earnings before interest, tax, depreciation, amortisation and impairment<sup>2</sup> Adjusted EBITDA – EBITDA before exceptional and acquisition related items

EBITDA and Adjusted EBITDA have been amended to include Share of profit of equity-accounted investees which in the prior year was included after Operating loss as this is how the Directors now monitor the progress of the Group.

The accompanying notes form part of the financial statements.

**CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME**

for the year ended 30 September 2018

	2018 £000	2017 £000
<b>Loss for the year</b>	(4,389)	(7,120)
<b>Other comprehensive income</b>		
<b>Items that are or may be reclassified subsequently to profit or loss</b>		
Movement on foreign exchange reserve	7,624	(7,128)
<b>Total comprehensive income for the year</b>	3,235	(14,248)
<b>Total comprehensive income for the year attributable to:</b>		
– Owners of the parent	2,546	(14,407)
– Non-controlling interest	689	159
	3,235	(14,248)

The accompanying notes form part of the financial statements.



**CONSOLIDATED BALANCE SHEET**

as at 30 September 2018

	Notes	2018 £000	2017 £000
<b>Assets</b>			
<b>Non-current assets</b>			
Property, plant and equipment	13	99,527	80,845
Intangible assets	14	325,386	329,137
Equity-accounted investees	16	17,457	2,512
Other investments		29	237
Biological and agricultural assets	19	8,502	5,745
Trade and other receivables	20	4,145	-
<b>Total non-current assets</b>		<b>455,046</b>	<b>418,476</b>
<b>Current assets</b>			
Inventories	18	20,483	20,053
Biological and agricultural assets	19	11,892	10,798
Trade and other receivables	20	41,337	38,530
Cash and cash equivalents	34	24,090	18,779
<b>Total current assets</b>		<b>97,802</b>	<b>88,160</b>
<b>Total assets</b>		<b>552,848</b>	<b>506,636</b>
<b>Liabilities</b>			
<b>Current liabilities</b>			
Trade and other payables	21	(45,680)	(44,498)
Loans and borrowings	22	(898)	(6,234)
Corporation tax liability		(2,629)	(2,844)
Provisions	23	(70)	(450)
<b>Total current liabilities</b>		<b>(49,277)</b>	<b>(54,026)</b>
<b>Non-current liabilities</b>			
Loans and borrowings	22	(78,868)	(36,453)
Other payables	21	(1,219)	(1,213)
Deferred tax	24	(41,637)	(56,359)
<b>Total non-current liabilities</b>		<b>(121,724)</b>	<b>(94,025)</b>
<b>Total liabilities</b>		<b>(171,001)</b>	<b>(148,051)</b>
<b>Net assets</b>		<b>381,847</b>	<b>358,585</b>
<b>Issued capital and reserves attributable to owners of the parent</b>			
Share capital	25	557	522
Additional paid-in share capital*	25	357,894	339,431
Capital redemption reserve	26	5	5
Retained earnings	26	(28,240)	(24,742)
Foreign exchange reserve	26	45,953	38,398
<b>Equity attributable to owners of the parent</b>		<b>376,169</b>	<b>353,614</b>
Non-controlling interest		5,678	4,971
<b>Total equity and reserves</b>		<b>381,847</b>	<b>358,585</b>

\* See note 26

The financial statements on pages 98 to 153 were approved and authorised for issue by the Board of Directors on 24 January 2019 and were signed on its behalf by:

**M J Plampin**  
Chief Financial Officer

The accompanying notes form part of the financial statements.

**COMPANY BALANCE SHEET**

as at 30 September 2018

	Notes	2018 £000	2017 £000
<b>Assets</b>			
<b>Non-current assets</b>			
Property, plant and equipment	13	225	287
Investments	17	264,472	263,841
<b>Total non-current assets</b>		<b>264,697</b>	<b>264,128</b>
<b>Current assets</b>			
Trade and other receivables	20	166,273	126,843
Cash and cash equivalents	34	2,309	1,776
<b>Total current assets</b>		<b>168,582</b>	<b>128,619</b>
<b>Total assets</b>		<b>433,279</b>	<b>392,747</b>
<b>Liabilities</b>			
<b>Current liabilities</b>			
Trade and other payables	21	(39,522)	(26,195)
<b>Total current liabilities</b>		<b>(39,522)</b>	<b>(26,195)</b>
<b>Non-current liabilities</b>			
Loans and borrowings	22	(52,291)	(36,451)
<b>Total non-current liabilities</b>		<b>(52,291)</b>	<b>(36,451)</b>
<b>Total liabilities</b>		<b>(91,813)</b>	<b>(62,646)</b>
<b>Net assets</b>		<b>341,466</b>	<b>330,101</b>
<b>Issued capital and reserves attributable to owners of the parent</b>			
Share capital	25	557	522
Additional paid-in capital*	25	357,894	339,431
Capital redemption reserve	26	5	5
Retained earnings	26	(16,990)	(9,857)
<b>Total equity and reserves</b>		<b>341,466</b>	<b>330,101</b>

\* See note 26

The financial statements on pages 98 to 153 were approved and authorised for issue by the Board of Directors on 24 January 2019 and were signed on its behalf by:

**M J Plampin**  
Chief Financial Officer

The accompanying notes form part of the financial statements.



**CONSOLIDATED STATEMENT OF CHANGES IN EQUITY**

for the year ended 30 September 2018

	Share capital £000	Additional paid-in share capital* £000	Other reserves £000	Retained earnings £000	Total attributable to equity holders of parent £000	Non-controlling interest £000	Total equity £000
<b>As at 1 October 2016</b>	521	339,431	45,370	(18,904)	366,418	1,281	367,699
<b>Comprehensive income for the period</b>							
(Loss) for the period	-	-	-	(7,440)	(7,440)	320	(7,120)
Other comprehensive income	-	-	(6,967)	-	(6,967)	(161)	(7,128)
<b>Total comprehensive income for the period</b>	-	-	(6,967)	(7,440)	(14,407)	159	(14,248)
<b>Contributions by and distributions to owners</b>							
Share issue	1	-	-	-	1	-	1
Share based payment	-	-	-	1,602	1,602	-	1,602
<b>Total contributions by and distributions to owners</b>	1	-	-	1,602	1,603	-	1,603
<b>Changes in ownership</b>							
Investment in subsidiary by NCI	-	-	-	-	-	3,531	3,531
<b>Total changes in ownership interests</b>	-	-	-	-	-	3,531	3,531
<b>Total transactions with owners of the Company</b>	1	-	-	1,602	1,603	3,531	5,134
<b>As at 30 September 2017</b>	522	339,431	38,403	(24,742)	353,614	4,971	358,585
<b>Comprehensive income for the period</b>							
(Loss) for the period	-	-	-	(5,009)	(5,009)	620	(4,389)
Other comprehensive income	-	-	7,555	-	7,555	69	7,624
<b>Total comprehensive income for the period</b>	-	-	7,555	(5,009)	2,546	689	3,235
<b>Contributions by and distributions to owners</b>							
Share issue	35	18,463	-	-	18,498	-	18,498
Share based payment	-	-	-	1,511	1,511	-	1,511
<b>Total contributions by and distributions to owners</b>	35	18,463	-	1,511	20,009	-	20,009
<b>Changes in ownership</b>							
Acquisition of NCI without a change in control	-	-	-	-	-	18	18
<b>Total changes in ownership interests</b>	-	-	-	-	-	18	18
<b>Total transactions with owners of the Company</b>	35	18,463	-	1,511	20,009	18	20,027
<b>As at 30 September 2018</b>	557	357,894	45,958	(28,240)	376,169	5,678	381,847

\* See note 26.

The accompanying notes form part of the financial statements.

**COMPANY STATEMENT OF CHANGES IN EQUITY**

for the year ended 30 September 2018

	Share capital £000	Share premium reserve £000	Capital redemption reserve £000	Retained earnings* £000	Total attributable to equity holders £000
<b>As at 1 October 2016</b>	521	339,431	5	(12,141)	327,816
<b>Comprehensive income for the year</b>					
Loss for the year	-	-	-	682	682
<b>Total comprehensive income for the year</b>	-	-	-	682	682
<b>Contributions by and distributions to owners</b>					
Share based payment	-	-	-	1,602	1,602
Share issue	1	-	-	-	1
<b>Total contributions by and distributions to owners</b>	1	-	-	1,602	1,603
<b>As at 30 September 2017</b>	522	339,431	5	(9,857)	330,101
<b>Comprehensive income for the year</b>					
Loss for the year	-	-	-	(8,644)	(8,644)
<b>Total comprehensive income for the year</b>	-	-	-	(8,644)	(8,644)
<b>Contributions by and distributions to owners</b>					
Share based payment	-	-	-	1,511	1,511
Share issue	35	18,463	-	-	18,498
<b>Total contributions by and distributions to owners</b>	35	18,463	-	1,511	20,009
<b>As at 30 September 2018</b>	557	357,894	5	(16,990)	341,466

\* See note 26.

The accompanying notes form part of the financial statements.



**CONSOLIDATED STATEMENT OF CASH FLOWS**

for the year ended 30 September 2018

	Notes	2018 £000	2017 £000
<b>Cash flows from operating activities</b>			
<b>Loss for the year</b>		<b>(4,389)</b>	<b>(7,120)</b>
<b>Adjustments for:</b>			
Depreciation of property, plant and equipment	13	6,841	4,877
Amortisation and impairment of intangible fixed assets	14	18,002	18,473
Loss on sale of property, plant and equipment		8	19
Finance income	9	(332)	(1,495)
Finance costs	9	2,432	1,960
Other adjustments for non-cash items	16	(1,931)	-
Share of profit of equity-accounted investees, net of tax		362	(27)
Foreign exchange losses/(gains)		2,609	(1,434)
Share based payment expense	31	1,511	1,602
Tax credit	11	(9,270)	(980)
		<b>15,843</b>	<b>15,875</b>
Increase in trade and other receivables		(4,355)	(1,250)
(Increase)/decrease in inventories		(815)	3,247
Increase in biological and agricultural assets		(4,102)	(4,500)
(Decrease)/increase in trade and other payables		(4,026)	3,665
Decrease in provisions		(388)	(643)
		<b>2,157</b>	<b>16,394</b>
Income taxes paid		(5,898)	(3,015)
<b>Net cash flows used in operating activities</b>		<b>(3,741)</b>	<b>13,379</b>
<b>Investing activities</b>			
Proceeds from investment by NCI		-	188
Purchase of investments		(6,356)	(2,032)
Purchase of property, plant and equipment		(25,072)	(32,740)
Purchase of intangibles		(7,581)	(2,423)
Proceeds from sale of fixed assets		233	245
Interest received		261	270
<b>Net cash flows used in investing activities</b>		<b>(38,515)</b>	<b>(36,492)</b>
<b>Financing activities</b>			
Proceeds of share issues		18,498	1
Proceeds from bank or other borrowings		41,206	5,921
Acquisition of NCI		(33)	-
Repayment of bank or other borrowings		(5,815)	-
Cash advances and loans made to other parties		(4,076)	-
Interest and finance charges paid		(2,442)	(1,869)
Payments to finance lease creditors		(218)	(301)
<b>Net cash inflow from financing activities</b>		<b>47,120</b>	<b>3,752</b>
<b>Net decrease/(increase) in cash and cash equivalents</b>		<b>4,864</b>	<b>(19,361)</b>
Cash and cash equivalents at beginning of year		18,779	38,140
Effect of movements in exchange rate		447	-
<b>Cash and cash equivalents at end of year</b>	34	<b>24,090</b>	<b>18,779</b>

The accompanying notes form part of the financial statements.

**COMPANY STATEMENT OF CASH FLOWS**

for the year ended 30 September 2018

	Notes	2018 £000	2017 £000
<b>Cash flows from operating activities</b>			
<b>(Loss)/Profit for the year</b>		<b>(8,644)</b>	<b>682</b>
<b>Adjustments for:</b>			
Depreciation of property, plant and equipment	13	130	90
Finance income		(570)	(1,567)
Finance expense		3,892	2,232
Foreign exchange gains		1,714	(587)
Share based payment expense	31	208	369
Tax (credit)/expense		(325)	325
		<b>(3,595)</b>	<b>1,544</b>
Decrease/(increase) in trade and other receivables		6,583	(24,462)
Increase in trade and other payables		(675)	(576)
<b>Net cash flows from operating activities</b>		<b>2,313</b>	<b>(23,494)</b>
<b>Investing activities</b>			
Proceeds of transfer of investment in subsidiary	17	706	-
Loans to subsidiary undertakings		(33,595)	(800)
Investment in subsidiary undertakings		(33)	-
Purchases of property, plant and equipment		(68)	(137)
Interest received		12	30
<b>Net cash used in investing activities</b>		<b>(32,978)</b>	<b>(907)</b>
<b>Financing activities</b>			
Proceeds of share issue		18,498	1
Proceeds from bank borrowings		14,500	-
Interest paid		(1,800)	(1,304)
<b>Net cash from/(used in) financing activities</b>		<b>31,198</b>	<b>(1,303)</b>
<b>Net increase/(decrease) in cash and cash equivalents</b>		<b>533</b>	<b>(25,704)</b>
<b>Cash and cash equivalents at beginning of period</b>		<b>1,776</b>	<b>27,480</b>
<b>Cash and cash equivalents at end of period</b>	34	<b>2,309</b>	<b>1,776</b>

The accompanying notes form part of the financial statements.



## NOTES FORMING PART OF THE FINANCIAL STATEMENTS

for the year ended 30 September 2018

## 1 Accounting policies

## Corporate information

Benchmark Holdings plc (the Company) is a public limited company, which is listed on the Alternative Investment Market (AIM), a sub-market of the London Stock Exchange. The Company is incorporated and domiciled in England and Wales. The registered office is at Benchmark House, 8 Smithy Wood Drive, Sheffield, S35 1QN.

The Group is principally engaged in the provision of technical services, products and specialist knowledge that support the global development of sustainable food and farming industries.

## Basis of preparation

The principal accounting policies adopted in the preparation of the financial statements are set out below. The policies have been consistently applied to all the years presented, unless otherwise stated. The Group's business activities, together with the factors likely to affect its future development, performance and position are set out in the Chairman's Statement, the Strategic Report, the FY18 Financial Review and the Audit Committee report.

As at 30 September 2018 the Group had net assets of £381.8m (2017: £358.6m), including cash of £24.1m (2017: £18.8m) as set out in the consolidated balance sheet on page 100. The Group made a loss for the year of £4.4m (2017: £7.1m). As at 30 September 2018 the Company had net assets of £341.5m (2017: £330.1m), including cash of £2.3m (2017: £1.8m) as set out on the Company balance sheet on page 101. The Company made a loss for the year of £8.6m (2017: profit £0.7m). The Group has started the current financial year trading ahead of the same period last year.

The company funds the development of its subsidiaries by way of intercompany loans, drawn on the revolving credit facility. The loan documentation includes limits on the level of this intercompany funding to subsidiaries that are not obligors under the facility ('leakage restriction'). In December 2018 the Group identified that this limit had been exceeded both historically and at the year end, which could have caused the outstanding loan of £52.3m (2017: £36.4m) to become repayable on demand by the lenders. The facility agreement allows the company 15 business days in which to rectify the position from the point of identification to prevent the loan becoming due on demand. The directors have concluded that as the Company always had the intention and ability to rectify the position within the 15 business day period it remains appropriate to classify the loan as non-current at the reporting date. On 7 January 2019, the Directors of the Company received a waiver from its lenders in relation to the leakage condition not being met and consequently the lenders cannot demand repayment of the loan.

This waiver is subject to a condition that the Company must rectify the position by 31 March 2019. The process agreed with the lenders to reduce total inter-company debt with non-obligor companies is underway. The required execution documents are in preparation for approval by certain directors within the Group. All of these directors have signed statements to confirm agreement to the

process. At the date of approval of these financial statements, the directors have therefore concluded that rectification is under their control as this is a procedural matter with no approvals required from any third parties, and they have taken legal advice to confirm that there are no reasons why the position will not be rectified in the required timeframe.

Details of bank borrowings are disclosed in note 22. On 7 January 2019, the accordion facility within the Company's existing bank facility has been activated raising the total facility from USD70m to USD90m (c£69m) and certain covenants have been revised appropriately. As at 24 January 2019 drawings against the facility were USD75.2m (c£58m) and the most recent month end cash reserves at 31 December 2018 were £14.5m.

The Directors have prepared trading and cash flow forecasts for the Group covering the period to September 2020, including forecast compliance with the revised covenants and other undertakings relating to the external financing facilities. These forecasts include a number of assumptions in relation to trading performance across the Group including availability and timing of licences associated with sea lice treatment field trials, supply and pricing of key raw materials and the out-licensing of certain products in development. The Directors have considered reasonably possible downside sensitivity scenarios, including mitigating actions within their control should these occur around deferring and reducing non-essential capital and revenue expenditure and working capital management. These forecast cashflows, considering the ability and intention of the directors to implement mitigating actions should they need to, provide sufficient headroom in the forecast period.

The Directors have considered all of the factors noted above and confirm that the Group and Company have adequate resources to continue to meet all liabilities as and when they fall due for the foreseeable future and at least for the period of 12 months from the date of signing these financial statements. Accordingly, the financial statements have been prepared on a going concern basis.

These financial statements have been prepared in accordance with International Financial Reporting Standards, International Accounting Standards and Interpretations (collectively IFRSs) issued by the International Accounting Standards Board (IASB) as adopted by the European Union ("adopted IFRSs") and those parts of the Companies Act 2006 that are applicable to companies that prepare financial statements in accordance with IFRS. The Group reports earnings before interest, depreciation and amortisation ("EBITDA") and EBITDA before exceptional and acquisition related items ("Adjusted EBITDA") to enable a better understanding of the investment being made in the Group's future growth and provide a better measure of our underlying performance. During the current year these measures have been amended to include Share of profit of equity-accounted investees which had previously been shown after Operating loss. This is how the Directors now monitor

## NOTES FORMING PART OF THE FINANCIAL STATEMENTS (continued)

for the year ended 30 September 2018

## 1 Accounting policies (continued)

the progress of the Group. The activities of the Group's equity accounted investees are closely aligned with the Group's principal activities and are an integral part of the Group's operations and strategy, as these arrangements were set up to exploit opportunities from the intellectual property held within the Group. As a result, it is more meaningful to include the Group's share of the results of these entities within Adjusted EBITDA.

The preparation of financial statements in compliance with adopted IFRS requires the use of certain critical accounting estimates. It also requires Group management to exercise judgement in applying the Group's accounting policies. The areas where significant judgements and estimates have been made in preparing the financial statements and their effect are disclosed in note 2.

## Basis of consolidation

The consolidated financial statements comprise the financial statements of the Group and its subsidiaries at 30 September 2018. Subsidiaries are consolidated from the date of acquisition, being the date on which the Group obtained control, and continue to be consolidated until the date when such control ceases.

Where the Company has power, either directly or indirectly, over another entity or business and the ability to use this power to affect the amount of returns, as well as exposure or rights to variable returns from its involvement with the investee, it is classified as a subsidiary. The consolidated financial statements present the results of the Company and its subsidiaries ("the Group") as if they formed a single entity. Intercompany transactions, balances, unrealised gains and losses resulting from intra- Group transactions and dividends are eliminated in full.

The consolidated financial statements incorporate the results of business combinations using the acquisition method. In the consolidated balance sheet, the acquiree's identifiable assets, liabilities and contingent liabilities are initially recognised at their fair values at the acquisition date.

Non-controlling interests, presented as part of equity, represent a proportion of a subsidiary's profit or loss and net assets that is not held by the Group. The total comprehensive income or loss of non-wholly owned subsidiaries is attributed to owners of the parent and to the non-controlling interests in proportion to their respective ownership interests.

A separate income statement for the Company is not presented, in accordance with Section 408 of the Companies Act 2006. The loss for the year for the Company was £8,644,000 (2017: profit £682,000).

## Standards issued but not effective

A number of new standards, amendments to standards and interpretations are not yet effective, and have not been applied in preparing these consolidated financial statements. Those which may be relevant to the Group are set out below.

**IFRS 9 Financial Instruments: Classification and Measurement** has been issued but is not yet effective. The standard has been developed in several phases and replaces IAS 39 Financial Instruments: Recognition and Measurement in its entirety. The effective date of the fully completed version of IFRS 9 is for periods beginning on or after 1 January 2018 with retrospective application. The Group expects no material impact to profit as a result. The Group has not yet quantified the full impact of all phases of the final standard. The Group will adopt IFRS 9 in its next financial statements.

**IFRS 15 Revenue from Contracts with Customers**, which is effective for periods beginning on or after 1 January 2018. IFRS 15 supersedes IAS 11 Construction Contracts, IAS 18 Revenue, IFRIC 13 Customer Loyalty Programmes, IFRIC 15 Agreements for the Construction of Real Estate, IFRIC 18 Transfers of Assets from Customers and SIC 31 Revenue — Barter Transactions Involving Advertising Services. The Group expects no material impact to either revenue recognised or profit as a result, however a detailed review is still ongoing. The Group will adopt IFRS 15 in its next financial statements.

**IFRS 16 Leases** introduces a single, on-balance sheet accounting model for lessees which is effective for period beginning on or after 1 January 2019. The Group has not yet quantified the potential impact of this standard. The Group will adopt IFRS 16 on 1 October 2019.

## New standards and interpretations applied for the first time

The following standards which are effective for periods beginning on or after 1 January 2017 have been adopted without any significant impact on the amounts reported in these financial statements:

- Disclosure Initiatives (Amendments to IAS 7)
- Recognition of Deferred Tax Assets for Unrealised Losses (Amendments to IAS 12)
- Annual Improvements to IFRSs 2014-2016 Cycle (Amendments to IFRS 12 Disclosure of Interest in Other Entities)

## Revenue

Revenue is recognised to the extent that it is probable that the economic benefits will flow to the Group and the revenue can be reliably measured, regardless of when the payment is being made. Revenue is measured at the fair value of consideration received or receivable, taking into account contractually defined terms of payment and excluding taxes or duty. The Group assesses its revenue arrangements against specific criteria in order to determine if it is acting as a principal or agent. The Group has concluded that it is acting as a principal in all of its revenue arrangements. The following specific criteria must also be met before revenue is recognised:

**NOTES FORMING PART OF THE FINANCIAL STATEMENTS (continued)**

for the year ended 30 September 2018

**1 Accounting policies (continued)***Sale of goods*

Within Benchmark Animal Health, revenue from the sale of licenced veterinary vaccines and vaccine components is recognised when the Group has transferred the significant risks and rewards of ownership to the buyer, usually on despatch. Where the buyer has a right of return, revenue and cost of sales are adjusted for the value of the expected returns based on historical results, taking into consideration the specifics of each arrangement.

Within Benchmark Genetics, revenue from the sale of eggs is recognised upon despatch, which is when the risks and rewards of ownership are considered to have passed to the customer.

Within Benchmark Advanced Animal Nutrition, revenue of advanced nutrition and health products is recognised when the Group has transferred the significant risks and rewards of ownership to the buyer, usually on despatch.

Within Benchmark Knowledge Services, revenue from the sale of agricultural produce is recognised when the Group has transferred the significant risks and rewards of ownership to the buyer, usually on delivery. Where the buyer has a right of return, revenue and cost of sales are adjusted for the value of the expected returns based on historical results, taking into consideration the specifics of each arrangement. Revenue from the sales of books and publications is recognised when the Group has transferred the significant risks and rewards of ownership to the buyer, usually on despatch.

*Rendering of services*

Services including sustainable food production consultancy, technical consultancy and assurance services are provided by Benchmark Knowledge Services, Benchmark Animal Health, Benchmark Genetics and Benchmark Advanced Animal Nutrition. Online news, marketing and technical publications, book publishing, online shops, online distance learning programs and other training courses are provided by Benchmark Knowledge Services.

Provided the amount of revenue can be measured reliably and it is probable that the Group will receive any consideration, revenue for these services is recognised in the period in which they are rendered.

**Business combinations**

Business combinations are accounted for using the acquisition method. The consideration transferred for the acquisition of a subsidiary is the fair values of the assets transferred, the liabilities incurred to the former owners of the acquiree and the equity interests issued by the Group. The consideration transferred includes the fair value of asset or liability resulting from a contingent consideration arrangement. Identifiable assets acquired and liabilities and contingent liabilities assumed in a business combination are measured initially at their fair values at the acquisition date. The Group recognises any

non-controlling interest in the acquiree on an acquisition by acquisition basis, either at fair value or at the non-controlling interest's proportionate share of the recognised amounts of acquiree's identifiable net assets.

Transaction costs, other than share and debt issue costs, are expensed as incurred. In accordance with IFRS 3 — Business Combinations, the Group has a twelve-month period in which to finalise the fair values allocated to assets and liabilities determined provisionally on acquisition.

Contingent consideration is measured at fair value based on an estimate of the expected future payments. Deferred consideration is measured at the present value of the obligation.

If the business combination is achieved in stages, the previously held equity interest is remeasured at its acquisition date fair value and any resulting gain or loss is recognised in the consolidated income statement.

**Foreign currency**

The Group's consolidated financial statements are presented in UK pounds sterling, which is also the parent Company's functional currency. The Group determines the functional currency of each of its subsidiaries and items included in the financial statements of each of those entities are measured using that functional currency.

Transactions entered into by Group entities in a currency other than the currency of the primary economic environment in which they operate (their "functional currency") are recorded at the rates ruling when the transactions occur. Foreign currency monetary assets and liabilities are translated at the rates ruling at the reporting date. Exchange differences arising on the retranslation of unsettled monetary assets and liabilities are recognised immediately in the consolidated income statement.

On consolidation, the results of overseas operations are translated into sterling at rates approximating to those ruling when the transactions took place. All assets and liabilities of overseas operations, including goodwill arising on the acquisition of those operations, are translated at the rate ruling at the reporting date. Exchange differences arising on translating the opening net assets at opening rate and the results of overseas operations at actual rate are recognised in other comprehensive income and accumulated in the foreign exchange reserve.

Exchange differences recognised in the income statement in the Group entities' separate financial statements on the translation of long-term monetary items forming part of the Group's net investment in the overseas operation concerned are reclassified to other comprehensive income and accumulated in the foreign exchange reserve on consolidation.

On disposal of a foreign operation, the cumulative exchange differences recognised in the foreign exchange reserve relating to that operation up to the date of disposal are transferred to the consolidated income statement as part of the profit or loss on disposal.

**NOTES FORMING PART OF THE FINANCIAL STATEMENTS (continued)**

for the year ended 30 September 2018

**1 Accounting policies (continued)****Financial assets**

The Group classifies all of its financial assets as loans and receivables and has not classified any of its financial assets as held to maturity.

Loans and receivable assets are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. They arise principally through the provision of goods and services to customers (e.g. trade receivables), but also incorporate other types of contractual monetary asset. They are initially recognised at fair value plus transaction costs that are directly attributable to their acquisition or issue, and are subsequently carried at amortised cost using the effective interest rate method, less provision for impairment.

Impairment provisions are recognised when there is objective evidence (such as significant financial difficulties on the part of the counterparty or default or significant delay in payment) that the Group will be unable to collect all of the amounts due under the terms of the receivable, the amount of such a provision being the difference between the net carrying amount and the present value of the future expected cash flows associated with the impaired receivable. For trade receivables, which are reported net, such provisions are recorded in a separate allowance account with the loss being recognised within operating costs in the consolidated income statement. On confirmation that the trade receivable will not be collectable, the gross carrying value of the asset is written off against the associated provision.

The Group's loans and receivables comprise trade and other receivables and cash and cash equivalents in the consolidated balance sheet.

Cash and cash equivalents includes cash in hand, deposits held at call with banks, other short term highly liquid investments with original maturities of three months or less from inception, and for the purpose of the statements of cash flows, bank overdrafts. Bank overdrafts are shown within loans and borrowings in current liabilities on the consolidated balance sheet.

**Financial liabilities**

The Group classifies its financial liabilities as other financial liabilities which include the following items:

- Bank borrowings which are initially recognised at fair value net of any transaction costs directly attributable to the issue of the instrument. Such interest bearing liabilities are subsequently measured at amortised cost using the effective interest rate method, which ensures that any interest expense over the period to repayment is at a constant rate on the balance of the liability carried in the consolidated balance sheet.
- Trade payables and other short-term monetary liabilities, which are initially recognised at fair value and subsequently carried at amortised cost using the effective interest method.

**Financial liabilities fair value through profit and loss**

Contingent consideration is recognised at fair value with movements recognised in the consolidated income statement.

**Share capital**

The Group's ordinary shares are classified as equity instruments.

**Retirement benefits: Defined contribution schemes**

Contributions to defined contribution pension schemes are charged to the income statement in the year to which they relate.

**Share-based payments**

Where equity settled share options are awarded to employees, the fair value of the options at the date of grant is charged to the consolidated income statement over the vesting period. Non-market vesting conditions are taken into account by adjusting the number of equity instruments expected to vest at each reporting date so that, ultimately, the cumulative amount recognised over the vesting period is based on the number of options that eventually vest. Non-vesting conditions and market vesting conditions are factored into the fair value of the options granted. As long as all other vesting conditions are satisfied, a charge is made irrespective of whether the market vesting conditions are satisfied. The cumulative expense is not adjusted for failure to achieve a market vesting condition or where a non-vesting condition is not satisfied.

Where the terms and conditions of options are modified before they vest, the increase in the fair value of the options, measured immediately before and after the modification, is also charged to the consolidated income statement over the remaining vesting period.

**Leased assets**

Where substantially all of the risks and rewards incidental to ownership of a leased asset have been transferred to the Group (a "finance lease"), the asset is treated as if it had been purchased outright. The amount initially recognised as an asset is the lower of the fair value of the leased property and the present value of the minimum lease payments payable over the term of the lease. The corresponding lease commitment is shown as a liability. Lease payments are analysed between capital and interest. The interest element is charged to the consolidated income statement over the period of the lease and is calculated so that it represents a constant proportion of the lease liability. The capital element reduces the balance owed to the lessor.

Where substantially all of the risks and rewards incidental to ownership are not transferred to the Group (an "operating lease"), the total rentals payable under the lease are charged to the consolidated income statement on a straight-line basis over the lease term. The aggregate benefit of lease incentives is recognised as a reduction of the rental expense over the lease term on a straight-line basis.



**NOTES FORMING PART OF THE FINANCIAL STATEMENTS (continued)**

for the year ended 30 September 2018

**1 Accounting policies (continued)****Goodwill**

Goodwill is initially measured at cost, being the excess of the cost of a business combination over the total acquisition date fair value of the identifiable assets, liabilities and contingent liabilities acquired. Goodwill is capitalised as an intangible asset with any impairment in carrying value being charged to the consolidated income statement. Where the fair value of identifiable assets, liabilities and contingent liabilities exceed the fair value of consideration paid, the excess is credited in full to the consolidated income statement on the acquisition date.

**Externally acquired intangible assets**

Externally acquired intangible assets are initially recognised at cost and subsequently amortised over their useful economic lives as outlined below, on a straight-line basis from the time they are available for use.

Intangible assets are recognised on business combinations if they are separable from the acquired entity or give rise to other contractual/legal rights. The amounts ascribed to such intangibles are arrived at by using appropriate valuation techniques (see section related to critical estimates and judgements below).

In-process research and development programmes acquired in such combinations are recognised as an asset, even if subsequent expenditure is written off because it does not meet the criteria specified in the policy for development costs below.

The significant intangibles recognised by the Group, their useful economic lives and the methods used to determine the cost of intangibles acquired in a business combination are as follows:

Intangible asset	Useful economic life	Valuation method
Websites	5 years	Assessment of estimated revenues and profits
Patents	2-5 years	Cost to acquire
Trademarks	2-5 years	Cost to acquire
Contracts	3-20 years	Assessment of estimated revenues and profits
Licences	3-20 years	Cost to acquire, or if not separately identifiable, assessment of estimated revenues and profits
Intellectual property	Up to 20 years	Cost to acquire, or if not separately identifiable, assessment of estimated revenues and profits
Customer lists	Up to 26 years	Assessment of estimated revenues and profits
Genetic material and breeding nuclei	10-40 years	Cost to acquire, or if not separately identifiable, assessment of estimated revenues and profits
Development costs	Up to 10 years	Cost to acquire

**Impairment of non-financial assets (excluding inventories)**

The carrying values of all non-current assets are reviewed for impairment, either on a stand-alone basis or as part of a larger cash generating unit, when there is an indication that the assets might be impaired. Additionally, goodwill, intangible assets with indefinite useful lives and intangible assets which are not yet available for use are tested for impairment annually. Where the carrying value of an asset exceeds its recoverable amount (i.e. the higher of value in use and fair value less costs to sell), the asset is written down accordingly.

Where it is not possible to estimate the recoverable amount of an individual asset, the impairment test is carried out on the smallest group of assets to which it belongs for which there are separately identifiable cash flows; its cash generating units ('CGUs'). Goodwill is allocated on initial recognition to each of the Group's CGUs that are expected to benefit from the synergies of the combination giving rise to the goodwill.

Impairment charges are included in the consolidated income statement, except to the extent they reverse gains previously recognised in other comprehensive income. An impairment loss recognised for goodwill is not reversed.

**Internally generated intangible assets (development costs)**

Expenditure on internally developed products is capitalised if it can be demonstrated that:

- It is technically feasible to develop the product for it to be sold;
- Adequate resources are available to complete the development;
- There is an intention to complete and sell the product;
- The Group is able to sell the product;
- Sale of the product will generate future economic benefits; and
- Expenditure on the project can be measured reliably.

Capitalised development costs are amortised over the periods the Group expects to benefit from selling the products developed. The amortisation expense is included within the cost of sales line in the consolidated income statement.

Development expenditure not satisfying the above criteria and expenditure on the research phase of internal projects are recognised in the consolidated income statement as incurred.

**Deferred taxation**

Deferred tax assets and liabilities are recognised where the carrying amount of an asset or liability in the balance sheet differs from its tax base, except for differences arising on:

- The initial recognition of goodwill;
- The initial recognition of an asset or liability in a transaction which is not a business combination and at the time of the transaction affects neither accounting or taxable profit; and

**NOTES FORMING PART OF THE FINANCIAL STATEMENTS (continued)**

for the year ended 30 September 2018

**1 Accounting policies (continued)**

- Investments in subsidiaries and jointly controlled entities where the Group is able to control the timing of the reversal of the difference and it is probable that the difference will not reverse in the foreseeable future.

Recognition of deferred tax assets is restricted to those instances where it is probable that taxable profit will be available against which the difference can be utilised. The carrying amount of deferred tax asset is reviewed at each balance sheet date and reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow all or part of the asset to be recovered.

The amount of the asset or liability is determined using tax rates that have been enacted or substantively enacted by the reporting date and are expected to apply when the deferred tax liabilities/assets are settled/recovered.

Deferred tax assets and liabilities are offset when the Group has a legally enforceable right to offset current tax assets and liabilities and the deferred tax assets and liabilities relate to taxes levied by the same tax authority on either:

- The same taxable Group company; or
- Different Group entities which intend either to settle current tax assets and liabilities on a net basis, or to realise the assets and settle the liabilities simultaneously, in each future period in which significant amounts of deferred tax assets or liabilities are expected to be settled or recovered.

**Property, plant and equipment**

Items of property, plant and equipment are initially recognised at cost. As well as the purchase price, cost includes directly attributable costs and the estimated present value of any future unavoidable costs of dismantling and removing items. The corresponding liability is recognised within provisions.

Freehold land is not depreciated. Assets in the course of construction which have not yet been brought into use are not depreciated until fully commissioned and available for use. Depreciation is provided on all other items of property, plant and equipment so as to write off their carrying value over their expected useful economic lives. It is provided at the following rates:

Freehold property	– 2% per annum straight line
Long term leasehold property improvements	– 2% - 10% per annum straight line
Plant and machinery	– 15% per annum reducing balance
Motor vehicles	– 25% per annum reducing balance
E commerce infrastructure	– 10% per annum straight line
Other fixed assets	– 15% - 33% per annum straight line

**Inventories**

Inventories are initially recognised at cost, and subsequently at the lower of cost and net realisable value. Cost comprises all costs of purchase, costs of conversion and other costs incurred in bringing the inventories to their present location and condition.

**Biological assets**

Biological assets comprise two asset types: livestock, and fish, fish eggs and frozen milt.

Livestock is measured at fair value less costs to sell. The fair value of livestock is based on quoted prices of livestock and adjusted for age, breed, and genetic merit in the principal (or most advantageous) market for the livestock, and therefore is categorised within level 2 of the fair value hierarchy set out in IFRS 13.

Fish, fish eggs and frozen milt are, in accordance with IAS 41 'Agriculture', measured at fair value, unless the fair value cannot be measured reliably. These are categorised within level 3 of the fair value hierarchy set out in IFRS 13. The principal components of fish, fish eggs and frozen milt within the business are:

- Salmon broodstock
- Salmon fingerlings
- Salmon eggs
- Lumpfish eggs and fingerlings
- Tilapia broodstock and fingerlings
- Frozen milt

Non-current biological assets are those biological assets which will not produce saleable progeny within twelve months of the balance sheet date. Further details of the valuation of fish, fish eggs and frozen milt are given in note 19.

**Government grants**

Government grants received on capital expenditure are included in the balance sheet as deferred income and released to the income statement over the life of the asset. Grants for revenue expenditure are netted against the cost incurred by the Group. Where retention of a government grant is dependent on the Group satisfying certain criteria, it is initially recognised as deferred income. When the criteria for retention have been satisfied, the deferred income balance is released to the consolidated income statement or netted against the asset purchased.

**Provisions**

The Group has recognised provisions for liabilities of uncertain timing or amount including those for leasehold dilapidations, sale or return obligations and legal disputes. The provision is measured at the best estimate of the expenditure required to settle the obligation at the reporting date, discounted at a pre-tax rate reflecting current market assessments of the time value of money and risks specific to the liability. In the case of leasehold dilapidations, the provision takes into account the potential that the properties in question may be sublet for some or all of the remaining lease term.

**NOTES FORMING PART OF THE FINANCIAL STATEMENTS (continued)**

for the year ended 30 September 2018

**1 Accounting policies (continued)****Investments in subsidiary undertakings**

Investments in subsidiaries are stated at cost less provision for impairment.

**Investments in equity-accounted investees**

A joint venture is an entity over which the Group has joint control, under a contractual agreement. An associate is an entity over which the Group has significant influence and that is neither a subsidiary nor an interest in a joint venture. Significant influence is the power to participate in the financial and operating policy decisions of the investee but is not control or joint control over those policies.

The results and assets and liabilities of joint ventures and associates are incorporated in the consolidated financial statements using the equity method of accounting. Under the equity method, investments in joint ventures and associates are carried in the consolidated balance sheet at cost as adjusted for post-acquisition changes in the Group's share of the net assets of the joint venture or associate, less any impairment in the value of the investment. Losses of a joint venture or associate in excess of the Group's interest in that entity are not recognised. Additional losses are provided for, and a liability is recognised, only to the extent that the Group has incurred legal or constructive obligations or made payments on behalf of the joint venture or associate.

Any excess of the cost of acquisition over the Group's share of the net fair value of the identifiable assets, liabilities and contingent liabilities of the joint venture or associate recognised at the date of acquisition is recognised as goodwill. The goodwill is included within the carrying amount of the investment.

**Cash and cash equivalents**

Cash and cash equivalents comprise cash balances and call deposits with an original maturity of three months or less. Bank overdrafts that are repayable on demand and form an integral part of the Group's cash management are included as a component of cash and cash equivalents for the purpose of the statements of cash flows.

**Dividends**

Dividends are recognised when they become legally payable. In the case of interim dividends to equity shareholders, this is when declared by the Directors. In the case of final dividends, this is when approved by the shareholders at the AGM.

**2 Critical accounting estimates and judgements**

The Group makes certain estimates and assumptions regarding the future. Estimates and judgements are continually evaluated based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. In the future, actual experience may differ from these estimates and assumptions. The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are discussed below.

*Estimates***(a) Fair value measurement**

A number of assets and liabilities included in the Group's financial statements require measurement at, and/or disclosure of, fair value.

The fair value measurement of the Group's financial and non-financial assets and liabilities utilises market observable inputs and data as far as possible. Inputs used in determining fair value measurements are categorised into different levels based on how observable the inputs used in the valuation technique utilised are (the 'fair value hierarchy'):

Level 1: Quoted prices in active markets for identical items (unadjusted)

Level 2: Observable direct or indirect inputs other than Level 1 inputs

Level 3: Unobservable inputs (i.e. not derived from market data).

The classification of an item into the above levels is based on the lowest level of the inputs used that has a significant effect on the fair value measurement of the item. Transfers of items between levels are recognised in the period they occur.

The Group measures the following items at fair value.

Biological assets. The largest estimation relates to Salmon Broodstock valued at £11,724,000 (note 19).

Contingent consideration outstanding from past acquisitions valued at £1,498,000 (note 21).

For more detailed information in relation to the fair value measurement of the items above, please refer to the applicable notes.

**(b) Impairment of goodwill**

The Group is required to test, on an annual basis, whether goodwill has suffered any impairment. The recoverable amount is determined based on value in use calculations. The use of this method requires the estimation of future cash flows and the choice of a discount rate in order to calculate the present value of the cash flows. More information including carrying values is included in note 15.

**NOTES FORMING PART OF THE FINANCIAL STATEMENTS (continued)**

for the year ended 30 September 2018

**2 Critical accounting estimates and judgements (continued)****(c) Valuation of intangible assets**

Where the cost of intangible assets acquired as part of business combinations is not separately identifiable or does not represent the fair value, the valuation is calculated based upon value in use which requires the use of a discount rate in order to calculate the present value of cash flows. These intangibles are reviewed annually for impairment. The recoverable amount is determined based on value in use calculations. The use of this method requires the estimation of future cash flows and the choice of a discount rate in order to calculate the present value of the cash flows. The assumptions used in the assessment of the recoverable amount are consistent with those used in the impairment review for goodwill as outlined in note 15.

*Judgements***(a) Capitalisation of development costs**

Costs incurred on internally developed products are capitalised in line with the Group's accounting policy, and significant judgement is required in determining at which point the appropriate criteria for capitalisation have been met. This involves determination of factors such as the point when the technical feasibility has been established and the likelihood of commercialisation of the product.

**(b) Recognition of deferred tax**

Deferred tax is provided in full on temporary differences under the liability method using substantively enacted rates to the extent that they are expected to reverse. Provision is made in full where the temporary differences result in liabilities, but deferred tax assets are only recognised where the directors believe it is probable that the assets will be recovered. Judgement is required to determine the likelihood of reversal of the temporary differences in establishing whether an asset should be recognised.

**3 Financial instruments — Risk Management**

The Group is exposed through its operations to the following financial risks:

- Credit risk
- Fair value or cash flow interest rate risk
- Foreign exchange risk
- Liquidity risk

In common with all other businesses, the Group is exposed to risks that arise from its use of financial instruments. This note describes the Group's objectives, policies and processes for managing those risks and the methods used to measure them. Further quantitative information in respect of these risks is presented throughout these financial statements. There have been no substantive changes in the Group's exposure to financial instrument risks, its objectives, policies and processes for managing those risks or the methods used to measure them from previous periods unless otherwise stated in this note.

*Principal financial instruments*

The principal financial instruments used by the Group, from which financial instrument risk arises, are as follows:

- Trade and other receivables
- Cash and cash equivalents
- Trade and other payables
- Bank overdrafts
- Floating-rate bank loans
- Contingent consideration

The contingent consideration held within other payables is classified as financial liabilities at fair value through profit and loss. In accordance with IFRS 13 'Fair Value Measurement', the measurement of the fair value of contingent consideration is categorised into Level 3 in the fair value hierarchy, as the inputs are primarily unobservable. The amounts payable for all of the outstanding amounts depend on sales volumes or sales revenue targets. Management uses the actual performance against these targets together with relevant budgets and forecasts to derive the fair value of the contingent consideration. Where the level of contingent consideration payable is known with a reasonable level of certainty, as the underlying performance against target levels is well established, the contingent consideration is adjusted accordingly. This has resulted in an income statement credit in the period as shown in note 10. The contingent consideration for Akvaforsk Genetic Center Inc is dependent on a longer-term target and is recorded in these financial statements at management's best estimate. An increased level of performance for Akvaforsk Genetic Center Inc would increase the amount payable. A reduction in the level of performance would significantly reduce the amounts payable.



**NOTES FORMING PART OF THE FINANCIAL STATEMENTS (continued)**

for the year ended 30 September 2018

**3 Financial instruments — Risk Management (continued)**

A summary of the financial instruments held by category is provided below:

**Group****Financial assets**

	2018 £000	2017 £000
<b>Financial assets not measured at fair value</b>		
Cash and cash equivalents (note 34)	24,090	18,779
Trade and other receivables (note 20)	30,944	30,074
<b>Total financial assets</b>	<b>55,034</b>	<b>48,853</b>

**Financial liabilities**

	2018 £000	2017 £000
<b>Financial liabilities measured at amortised cost</b>		
Trade and other payables (note 21)	38,819	37,850
Loans and borrowings (note 22)	79,766	42,687
	<b>118,585</b>	<b>80,537</b>
<b>Financial liabilities at fair value through profit and loss</b>		
Other payables — contingent consideration (note 21)	1,498	1,222
<b>Total financial liabilities</b>	<b>120,083</b>	<b>81,759</b>

**Company**

	2018 £000	2017 £000
<b>Financial assets not measured at fair value</b>		
Cash and cash equivalents (note 34)	2,309	1,776
Trade and other receivables (note 20)	166,273	126,843
<b>Total financial assets</b>	<b>168,582</b>	<b>128,619</b>

**Financial liabilities**

	2018 £000	2017 £000
<b>Financial liabilities at amortised cost</b>		
Trade and other payables (note 21)	39,285	25,772
Loans and borrowings (note 22)	52,291	36,451
	<b>91,576</b>	<b>62,223</b>
<b>Financial liabilities at fair value through profit and loss</b>		
Other payables — contingent consideration (note 21)	85	84
<b>Total financial liabilities</b>	<b>91,661</b>	<b>62,307</b>

There were no financial instruments classified as available for sale.

**General objectives, policies and processes**

The Board has overall responsibility for the determination of the Group's risk management objectives and policies and, whilst retaining ultimate responsibility for them, it has delegated the authority for designing and operating processes that ensure the effective implementation of the objectives and policies to the Group's finance function.

The Board receives monthly reports from the Group Chief Financial Officer through which it reviews the effectiveness of the processes put in place and the appropriateness of the objectives and policies it sets.

**NOTES FORMING PART OF THE FINANCIAL STATEMENTS (continued)**

for the year ended 30 September 2018

**3 Financial instruments — Risk Management (continued)**

The overall objective of the Board is to set policies that seek to reduce risk as far as possible without unduly affecting the Group's competitiveness and flexibility. Further details regarding these policies are set out below:

*Credit risk*

Credit risk is the risk of financial loss to the Group if a customer or counterparty to a financial instrument fails to meet its contractual obligations. The Group is mainly exposed to credit risk from credit sales. It is Group policy, implemented locally, to assess the credit risk of new customers before entering contracts.

Credit risk also arises from cash and cash equivalents and deposits with banks and financial institutions. For banks and financial institutions, only independently rated parties with minimum rating "A" are accepted.

Further disclosures regarding trade and other receivables are provided in note 20.

*Fair value and cash flow interest rate risk*

During the year the Group had borrowings denominated in Sterling, US Dollars and Norwegian Krone, if interest rates on Pound Sterling, US Dollar and Norwegian Krone denominated borrowings had been 100 basis points higher/lower with all other variables held constant, loss after tax for the year ended 30 September 2018 would be £687,000 higher/lower (2017: £454,000 higher/lower). The Directors consider that 100 basis points is the maximum likely change in the relevant interest rates over the next year, being the period up to the next point at which the Group expects to make these disclosures.

*Foreign exchange risk*

Foreign exchange risk arises when individual Group entities enter into transactions denominated in a currency other than their functional currency (principally Sterling, Norwegian Krone, Icelandic Krona, Euro, US Dollars and Danish Krone). The Group's policy is, where possible, to allow Group entities to settle liabilities denominated in their functional currency with the cash generated from their own operations in that currency. Where Group entities have liabilities denominated in a currency other than their functional currency (and have insufficient reserves of that currency to settle them), cash already denominated in that currency will, where possible, be transferred from elsewhere within the Group.

The table below shows the impact of a 10 per cent increase and reduction in Sterling against the relevant foreign currencies, with all other variables held constant, on the Group's profit before tax and equity. A greater or smaller change would have a pro-rata effect. The movements in profit arise from retranslation of foreign currency denominated monetary items held at the year end, including the foreign currency revolving credit facility, foreign currency bank accounts, trade receivables, trade and other payables. The movements in equity arise from the retranslation of the net assets of overseas subsidiaries and the intangible assets arising on consolidation in accordance with IFRS 10 Consolidated Financial Statements.

Increase/(decrease)	£/\$		£/€		£/NOK		£/ISK		£/THB	
	Profit £000	Equity £000	Profit £000	Equity £000	Profit £000	Equity £000	Profit £000	Equity £000	Profit £000	Equity £000
2018 10% increase in rate	3,085	(23,196)	(16)	(1,745)	166	(4,072)	-	(3,968)	-	(1,647)
2018 10% reduction in rate	(3,771)	28,351	19	2,133	(202)	4,977	-	4,850	-	2,014
2017 10% increase in rate	3,213	(17,949)	(186)	(1,735)	115	(3,480)	427	(2,888)	-	(961)
2017 10% reduction in rate	(3,927)	21,938	227	2,121	(140)	4,253	(521)	3,530	-	1,174

*Liquidity risk*

Liquidity risk arises from the Group's management of working capital and the finance charges and principal repayments on its debt instruments. It is the risk that the Group will encounter difficulty in meeting its financial obligations as they fall due.

The Group's policy is to ensure that it will always have sufficient cash to allow it to meet its liabilities when they become due. To achieve this aim, the Group seeks to maintain cash balances (or agreed facilities) sufficient to meet expected requirements detailed in rolling three month cashflow forecasts, and in longer term cashflow forecasts.

**NOTES FORMING PART OF THE FINANCIAL STATEMENTS (continued)**

for the year ended 30 September 2018

**3 Financial instruments — Risk Management (continued)**

The following table sets out the contractual maturities (representing undiscounted contractual cash-flows) of financial liabilities:

Group	Up to 3 months £000	Between 3 and 12 months £000	Between 1 and 2 years £000	Between 2 and 5 years £000	Over 5 years £000
<b>As at September 2018</b>					
Trade and other payables	24,579	14,519	277	942	-
Loans and borrowings	1,114	3,027	5,108	61,334	18,503
<b>Total</b>	<b>25,693</b>	<b>17,546</b>	<b>5,385</b>	<b>62,276</b>	<b>18,503</b>

	Up to 3 months £000	Between 3 and 12 months £000	Between 1 and 2 years £000	Between 2 and 5 years £000	Over 5 years £000
<b>As at September 2017</b>					
Trade and other payables	34,803	3,332	-	937	-
Loans and borrowings	6,411	1,146	1,314	38,091	60
<b>Total</b>	<b>41,214</b>	<b>4,478</b>	<b>1,314</b>	<b>39,028</b>	<b>60</b>

**Company**

	Up to 3 months £000	Between 3 and 12 months £000	Between 1 and 2 years £000	Between 2 and 5 years £000	Over 5 years £000
<b>As at September 2018</b>					
Trade and other payables	38,995	375	-	-	-
Loans and borrowings	1,041	1,263	2,304	53,451	60
<b>Total</b>	<b>40,036</b>	<b>1,638</b>	<b>2,304</b>	<b>53,451</b>	<b>60</b>

	Up to 3 months £000	Between 3 and 12 months £000	Between 1 and 2 years £000	Between 2 and 5 years £000	Over 5 years £000
<b>As at September 2017</b>					
Trade and other payables	25,615	241	-	-	-
Loans and borrowings	328	984	1,312	38,091	60
<b>Total</b>	<b>25,943</b>	<b>1,225</b>	<b>1,312</b>	<b>38,091</b>	<b>60</b>

**Capital Management**

The capital structure of the Group consists of debt, as analysed in Note 22, and equity attributable to the equity holders of the Parent Company, comprising share capital, share premium, merger reserve, capital redemption reserve, foreign exchange reserve, retained earnings, and share based payment reserve, and non-controlling interest as shown in the Consolidated Statement of Changes in Equity. The Group manages its capital with the objective that all entities within the Group continue as going concerns while maintaining an efficient structure to minimise the cost of capital and ensuring that the Group complies with the banking covenants associated with the external borrowing facilities. These covenants are related to interest cover and leverage. The Group is not restricted by any externally imposed capital requirements.

**NOTES FORMING PART OF THE FINANCIAL STATEMENTS (continued)**

for the year ended 30 September 2018

**4 Revenue****Revenue arises from:**

	2018 £000	2017 £000
Sale of goods	128,287	122,513
Provision of services	23,180	17,659
	<b>151,467</b>	<b>140,172</b>

**5 Expenses by nature**

	2018 £000	2017 £000
Changes in inventories of finished goods and work in progress	(2,854)	4,788
Changes in biological assets	(4,128)	(4,413)
Write-down of inventory to net realisable value	246	1,414
Course fees	2,308	2,871
Raw materials and consumables used	59,726	56,288
Transportation expenses	3,402	3,306
Staff costs (see note 7)	41,833	37,183
Motor, travel and entertainment	4,572	4,580
Premises costs	11,188	8,169
Advertising and marketing	1,632	1,909
Professional fees	5,189	4,846
Foreign exchange gains	11	(136)
Losses on disposal of property, plant and equipment	8	18
Exceptional expenses (see note 10)	1,239	(5,649)
Other research and development costs	4,801	5,180
Depreciation of PPE	6,841	4,877
Amortisation and impairment of intangible assets	18,002	18,473
Other income	(1,416)	(1,646)
Other costs	7,569	5,776
<b>Total cost of sales, operating costs, depreciation, amortisation and impairment</b>	<b>160,169</b>	<b>147,834</b>

**6 Auditor's remuneration**

	2018 £000	2017 £000
Audit of these financial statements	105	66
Amounts receivable by auditors and their associates in respect of:		
Audit of financial statements of subsidiaries pursuant to legislation	381	304
Audit related assurance services	24	24
Due diligence	-	13
	<b>510</b>	<b>407</b>



**NOTES FORMING PART OF THE FINANCIAL STATEMENTS (continued)**

for the year ended 30 September 2018

**7 Staff costs**

	£000	£000
Staff costs (including Directors) comprise:		
Wages and salaries	35,094	30,992
Social security contributions and similar taxes	3,432	2,946
Defined contribution pension cost	1,796	1,643
Share-based payment expense (note 30)	1,511	1,602
	<b>41,833</b>	<b>37,183</b>
	2018	2017
	No.	No.
The average monthly number of employees, including Directors, during the year was as follows:		
Production	713	636
Administration	151	138
Management	104	107
	<b>968</b>	<b>881</b>

**Directors' remuneration**

	Salary £000	Bonus £000	Taxable benefits £000	Long-term incentive £000	Pension £000	Fees £000	2018 £000	2017 £000
Mark Plampin	254	165	2	-	25	-	446	250
Malcolm Pye	315	204	4	-	31	-	554	318
Alex Hambro	-	-	-	-	-	27	27	45
Susan Searle	-	-	-	-	-	45	45	45
Kevin Quinn	-	-	-	-	-	45	45	38
Peter George	-	-	-	-	-	48	48	-
Hugo Wahnish	-	-	-	-	-	41	41	-
Yngve Myhre	-	-	-	-	-	41	41	-
Roland Bonney	-	-	-	-	-	-	-	271
<b>Total</b>	<b>569</b>	<b>369</b>	<b>6</b>	<b>-</b>	<b>56</b>	<b>247</b>	<b>1,247</b>	<b>967</b>

Of the 2017 total of £967,000, £899,000 was emoluments and £68,000 related to pension and other post-employment benefit costs.

During the year retirement benefits were accruing to 2 Directors (2017: 3) in respect of defined contribution pension schemes. The cost of employer National Insurance contributions in relation to the Directors was £128,000 (2017: £119,000).

The value of the Group's contributions paid to a defined contribution pension scheme in respect of the highest paid Director amounted to £31,000 (2017: £28,000).

In addition to the above, there was an accounting charge for share-based payments in respect of the Directors for £92,000 (2017: £81,000). The aggregate gain on the exercise of options by the Directors during the year was £nil (2017: £106,000).

**NOTES FORMING PART OF THE FINANCIAL STATEMENTS (continued)**

for the year ended 30 September 2018

**7 Staff costs (continued)****Directors' interests under the Company's employee share plans**

Director	Share option scheme	Options held at 30 September 2017	Options exercised in year	Options granted in year	Options held at 30 September 2018	Exercise price	Grant date	Date from which exercisable
Mark Plampin	CSOP II	67,647	-	-	67,647	0.1p	9 March 2015	8 March 2018
Mark Plampin	CSOP II	56,398	-	-	56,398	0.1p	6 March 2017	5 March 2017
Mark Plampin	CSOP I	-	-	43,165	43,165	69.5p	24 January 2018	23 January 2018
Mark Plampin	CSOP II	-	-	356,835	356,835	69.5p	24 January 2018	23 January 2018
Malcolm Pye	CSOP I	-	-	43,165	43,165	69.5p	24 January 2018	23 January 2018
Malcolm Pye	CSOP II	-	-	456,385	456,385	69.5p	24 January 2018	23 January 2018

Further details of Directors' remuneration are provided in the Remuneration Report on pages 79 to 83.

The key management of the Group is deemed to be the Board of Directors who have authority and responsibility for planning and controlling all significant activities of the Group.

**8 Segment information**

Operating segments are reported in a manner consistent with the reports made to the chief operating decision maker. It is considered that the role of chief operating decision maker is performed by the Board of Directors.

The Group operates globally and for management purposes is organised into reportable segments as follows:

- *Animal Health Division* — provides veterinary services, environmental services diagnostics and animal health products to global aquaculture, and manufactures licenced veterinary vaccines and vaccine components;
- *Benchmark Genetics Division* — harnesses industry leading salmon breeding technologies combined with state-of-the-art production facilities to provide a range of year-round high genetic merit ova;
- *Advanced Animal Nutrition Division* — manufactures and provides technically advanced nutrition and health products to the global aquaculture industry.

In addition to the above, reported as "all other segments" is the Knowledge Services division, this was created on 1 October 2017 by a combination of Sustainability Science Division and Technical Publishing Division, the results of which were not significant on an individual basis. The division provides sustainable food production consultancy, technical consultancy and assurance services and promotes sustainable food production and ethics through online news and technical publications for the international agriculture and food processing sectors and through delivery of training courses to the industries.

In order to reconcile the segmental analysis to the Consolidated Income Statement, Corporate and Inter-segment sales are also shown. Corporate represents revenues earned from recharging certain central costs to the operating divisions, together with unallocated central costs.

*Measurement of operating segment profit or loss*

Inter-segment sales are priced along the same lines as sales to external customers, with an appropriate discount being applied to encourage use of Group resources at a rate acceptable to local tax authorities. This policy was applied consistently throughout the current and prior period.

**NOTES FORMING PART OF THE FINANCIAL STATEMENTS (continued)**

for the year ended 30 September 2018

**8 Segment information (continued)**

Year ended 30 September 2018

	Notes	Animal Health £000	Genetics £000	Advanced Animal Nutrition £000	All other segments £000	Corporate £000	Inter-segment sales £000	Total £000
<b>Revenue</b>		16,153	35,755	85,746	15,786	5,277	(7,250)	151,467
Cost of sales		(13,494)	(14,822)	(40,998)	(9,811)	(440)	2,118	(77,447)
<b>Gross profit / (loss)</b>		2,659	20,933	44,748	5,975	4,837	(5,132)	74,020
Research and development costs		(5,593)	(3,611)	(2,836)	-	-	-	(12,040)
Operating costs		(8,058)	(9,089)	(20,285)	(5,772)	(6,632)	5,236	(44,600)
Share of profit of equity-accounted investees, net of tax		-	(362)	-	-	-	-	(362)
<b>Adjusted EBITDA</b>		(10,992)	7,871	21,627	203	(1,795)	104	17,018
Exceptional including acquisition related items	10	-	(1,013)	-	-	(226)	-	(1,239)
<b>EBITDA</b>		(10,992)	6,858	21,627	203	(2,021)	104	15,779
Depreciation		(2,459)	(1,330)	(1,679)	(1,242)	(131)	-	(6,841)
Amortisation and impairment		(108)	(2,171)	(14,523)	(1,200)	-	-	(18,002)
<b>Operating profit / (loss)</b>		(13,559)	3,357	5,425	(2,239)	(2,152)	104	(9,064)
Finance cost								(4,927)
Finance income								332
<b>Loss before tax</b>								(13,659)

Year ended 30 September 2017

	Notes	Animal Health £000	Genetics £000	Advanced Animal Nutrition £000	All other segments £000	Corporate £000	Inter-segment sales £000	Total £000
<b>Revenue</b>		15,149	30,530	83,659	13,770	4,300	(7,236)	140,172
Cost of sales		(13,882)	(13,842)	(42,789)	(9,405)	(359)	2,496	(77,781)
<b>Gross profit / (loss)</b>		1,267	16,688	40,870	4,365	3,941	(4,740)	62,391
Research and development costs		(7,343)	(2,682)	(3,030)	-	-	-	(13,055)
Operating costs		(5,527)	(8,221)	(20,159)	(5,240)	(4,890)	4,740	(39,297)
Share of profit of equity-accounted investees, net of tax		-	-	27	-	-	-	27
<b>Adjusted EBITDA</b>		(11,603)	5,785	17,708	(875)	(949)	-	10,066
Exceptional including acquisition related items	10	(631)	7,005	(19)	(51)	(655)	-	5,649
<b>EBITDA</b>		(12,234)	12,790	17,689	(926)	(1,604)	-	15,715
Depreciation		(851)	(1,217)	(1,630)	(1,053)	(126)	-	(4,877)
Amortisation		(523)	(2,113)	(14,950)	(887)	-	-	(18,473)
<b>Operating profit / (loss)</b>		(13,608)	9,460	1,109	(2,866)	(1,730)	-	(7,635)
Finance cost								(1,960)
Finance income								1,495
<b>Loss before tax</b>								(8,100)

**NOTES FORMING PART OF THE FINANCIAL STATEMENTS (continued)**

for the year ended 30 September 2018

**8 Segment information (continued)**

External revenue by location of customers

	2018 £000	2017 £000
Norway	19,284	18,803
India	18,190	15,040
United Kingdom	14,742	14,661
Singapore	11,748	9,821
Ecuador	9,253	9,223
Rest of Europe	36,680	30,471
Other	41,570	42,153
	<b>151,467</b>	<b>140,172</b>

One customer in Advanced Animal Nutrition accounted for greater than 10% of total revenue in the year with revenue of £18,892,000, no customer accounted for more than 10% of revenue in the previous year.

Non-current assets by location of assets

	2018 £000	2017 £000
Belgium	247,979	244,627
UK	49,384	44,911
Rest of Europe	126,158	109,916
Rest of world	31,525	19,022
	<b>455,046</b>	<b>418,476</b>

**9 Net finance costs**

	2018 £000	2017 £000
Interest received on bank deposits	301	258
Foreign exchange gains on financing activities	-	1,225
Dividend income	31	12
<b>Finance income</b>	<b>332</b>	<b>1,495</b>
Finance leases (interest portion)	(5)	(5)
Foreign exchange losses on financing activities	(1,054)	-
Foreign exchange losses on operating activities	(1,441)	-
Interest expense on financial liabilities measured at amortised cost	(2,427)	(1,955)
<b>Finance costs</b>	<b>(4,927)</b>	<b>(1,960)</b>
<b>Net finance costs recognised in profit or loss</b>	<b>(4,595)</b>	<b>(465)</b>



**NOTES FORMING PART OF THE FINANCIAL STATEMENTS (continued)**

for the year ended 30 September 2018

**10 Exceptional items**

Items that are material because of their nature, non-recurring or whose significance is sufficient to warrant separate disclosure and identification within the consolidated financial statements are referred to as exceptional items. The separate reporting of exceptional items helps to provide an understanding of the Group's underlying performance.

	2018 £000	2017 £000
Acquisition related items	1,239	(6,254)
Exceptional expenses	-	605
<b>Total exceptional items</b>	<b>1,239</b>	<b>(5,649)</b>

Acquisition related items are costs incurred in investigating and acquiring new businesses. During the year, the contingent consideration element of the provision for deferred consideration held for previous acquisitions has been recalculated considering up to date performance of those acquisitions and the projected performance for the final 3 months of the earn out period (which ended on 31 December 2017) against the relevant sales volumes and revenue targets. As a result, £206,000 (2017: £7,283,000) has been released in the year.

Exceptional expenses include: costs of £nil (2017: £452,000) for legal fees incurred in relation to a dispute around building works with the main contractor at premises in Braintree within the Animal Health Division; costs totalling £nil (2017: £182,000) relating to a restructuring in an Animal Health Division business in Thailand, this included £nil (2017: £97,000) of redundancy payments (staff costs) and £nil (2017: £85,000) loss on disposal of property, plant and equipment; also included is a £nil (2017: £29,000) credit in relation to balances written off in preparation for liquidating an entity in the Advanced Animal Nutrition division.

**11 Taxation****Amounts recognised in profit or loss**

	2018 £000	2017 £000
<b>Current tax expense</b>		
Analysis of charge in period		
<b>Current tax:</b>		
Current income tax expense on profits for the period	6,041	4,404
Adjustment in respect of prior periods	(309)	245
<b>Total current tax</b>	<b>5,732</b>	<b>4,649</b>
<b>Deferred tax expense</b>		
Origination and reversal of temporary differences	(14,990)	(5,812)
Deferred tax movements in respect of prior periods	(12)	183
<b>Total deferred tax credit (Note 24)</b>	<b>(15,002)</b>	<b>(5,629)</b>
<b>Total tax credit</b>	<b>(9,270)</b>	<b>(980)</b>

**NOTES FORMING PART OF THE FINANCIAL STATEMENTS (continued)**

for the year ended 30 September 2018

**11 Taxation (continued)**

The reasons for the difference between the actual tax credit for the year and the standard rate of corporation tax in the United Kingdom applied to profits for the year are as follows:

	2018 £000	2017 £000
Accounting loss before income tax	(13,659)	(8,100)
Expected tax credit based on the standard rate of UK corporation tax at the domestic rate of 19.0% (2017: 19.5%)	(2,595)	(1,580)
Income not taxable	(155)	(1,484)
Expenses not deductible for tax purposes	686	801
Deferred tax not recognised	4,788	2,835
Adjustment to tax charge in respect of prior periods	(321)	428
Effects of changes in tax rates	(10,496)	(142)
Different tax rates in overseas jurisdictions	(1,177)	(2,162)
Other	-	324
<b>Total tax credit</b>	<b>(9,270)</b>	<b>(980)</b>

*Changes in tax rates and factors affecting the future tax charge*

Reductions in the UK corporation tax rate were substantively enacted in the year. The main rate of corporation tax was reduced from 20% to 19% effective from 1 April 2017 and to 17% from 1 April 2020. Deferred tax is calculated at the substantively enacted rates, at which the temporary differences and tax losses are expected to reverse, in the territories in which they arose. Reductions in the corporation tax rate in Belgium were substantively enacted in the year. The main rate of corporation tax was reduced from 34% to 29.58% effective from 1 January 2018 and to 25% from 1 January 2020, this change is reflected in the "Effects of changes in tax rates" item in the current period in the above reconciliation.

The adjustment in respect of prior periods includes £nil (2017: £109,356) in relation to Research and Development tax credits from 2015 and 2016 received during the year. Income not taxable includes a release of provision for deferred consideration.

There was no deferred tax recognised in other comprehensive income.

**12 Loss per share**

Basic loss per share is calculated by dividing the profit or loss attributable to ordinary equity holders of the Company by the weighted average number of ordinary shares in issue during the period.

	2018	2017
Loss attributable to equity holders of the parent (£000)	(5,009)	(7,440)
Weighted average number of shares in issue (thousands)	531,651	522,092
Basic loss per share (pence)	(0.94)	(1.43)

Diluted loss per share is calculated by adjusting the weighted average number of ordinary shares outstanding to assume conversion of all dilutive potential ordinary shares. This is done by calculating the number of shares that could have been acquired at fair value (determined as the average market price of the Company's shares since admission to AIM) based on the monetary value of the subscription rights attached to outstanding share options and warrants.

Therefore, the Company is required to adjust the loss per share calculation in relation to the share options that are in issue under the Company's share based incentive schemes as follows:

	2018	2017
Loss attributable to equity holders of the parent (£000)	(5,009)	(7,440)
Weighted average number of shares in issue (thousands)	531,651	522,092
Diluted loss per share (pence)	(0.94)	(1.43)

A total of 3,724,453 potential ordinary shares have not been included within the calculation of statutory diluted loss per share for the year (2017: 4,464,413) as they are anti-dilutive. However, these potential ordinary shares could dilute earnings/loss per share in the future.

**NOTES FORMING PART OF THE FINANCIAL STATEMENTS (continued)**

for the year ended 30 September 2018

**13 Property, plant and equipment**

Group	Freehold Land and Buildings £000	Assets in the course of construction £000	Long Term Leasehold Property Improvements £000	Plant and Machinery £000	E commerce Infrastructure £000	Office Equipment and Fixtures £000	Total £000
<b>Cost</b>							
Balance at 1 October 2016	12,448	21,807	4,847	15,512	247	1,136	55,997
Additions	5,147	21,708	893	7,993	-	309	36,050
Reclassification	15,047	(16,118)	(1,188)	2,254	-	5	-
Exchange differences	310	(245)	(54)	150	-	19	180
Disposals	4	-	(217)	(318)	-	(242)	(773)
<b>Balance at 30 September 2017</b>	<b>32,956</b>	<b>27,152</b>	<b>4,281</b>	<b>25,591</b>	<b>247</b>	<b>1,227</b>	<b>91,454</b>
Balance at 1 October 2017	32,956	27,152	4,281	25,591	247	1,227	91,454
Additions	1,678	17,705	874	3,593	-	1,222	25,072
Reclassification	(2,450)	-	(99)	2,610	-	(61)	-
Increase/(decrease) through transfers from assets in the course of construction	71	(5,060)	3,534	1,455	-	-	-
Exchange differences	196	573	10	475	-	117	1,371
Disposals	(23)	(10)	(63)	(636)	-	(224)	(956)
<b>Balance at 30 September 2018</b>	<b>32,428</b>	<b>40,360</b>	<b>8,537</b>	<b>33,088</b>	<b>247</b>	<b>2,281</b>	<b>116,941</b>
<b>Accumulated Depreciation</b>							
Balance at 1 October 2016	956	-	916	3,601	242	259	5,974
Depreciation charge for the year	1,029	-	759	2,817	2	270	4,877
Reclassification	245	-	(305)	22	-	37	(1)
Exchange differences	184	-	(36)	108	-	12	268
Disposals	-	-	(123)	(160)	-	(226)	(509)
<b>Balance at 30 September 2017</b>	<b>2,414</b>	<b>-</b>	<b>1,211</b>	<b>6,388</b>	<b>244</b>	<b>352</b>	<b>10,609</b>
Balance at 1 October 2017	2,414	-	1,211	6,388	244	352	10,609
Depreciation charge for the year	1,269	-	843	4,410	2	317	6,841
Reclassification	-	-	(5)	25	-	(20)	-
Exchange differences	193	-	34	359	-	93	679
Disposals	(21)	-	(94)	(515)	-	(85)	(715)
<b>Balance at 30 September 2018</b>	<b>3,855</b>	<b>-</b>	<b>1,989</b>	<b>10,667</b>	<b>246</b>	<b>657</b>	<b>17,414</b>
<b>Net book value</b>							
<b>At 30 September 2018</b>	<b>28,573</b>	<b>40,360</b>	<b>6,548</b>	<b>22,421</b>	<b>1</b>	<b>1,624</b>	<b>99,527</b>
At 30 September 2017	30,542	27,152	3,070	19,203	3	875	80,845
At 30 September 2016	11,492	21,807	3,931	11,911	5	877	50,023

**NOTES FORMING PART OF THE FINANCIAL STATEMENTS (continued)**

for the year ended 30 September 2018

**13 Property, plant and equipment (continued)**

Security over the assets is disclosed within note 22.

The above includes the following in respect of plant and machinery held under finance leases (note 28):

	2018 £000	2017 £000
Cost	42	599
Accumulated depreciation	(23)	(396)
Net book value	19	203

**Company**

	Office equipment and fixtures £000
<b>Cost</b>	
Balance at 1 October 2016	366
Additions	137
Balance at 1 October 2017	503
Additions	68
<b>Balance at 30 September 2018</b>	<b>571</b>

**Accumulated Depreciation**

Balance at 1 October 2016	126
Depreciation charge for the year	90

Balance at 1 October 2017	216
Depreciation charge for the year	130
<b>Balance at 30 September 2018</b>	<b>346</b>

**Net book value**

<b>At 30 September 2018</b>	<b>225</b>
At 30 September 2017	287
At 1 October 2016	240



**NOTES FORMING PART OF THE FINANCIAL STATEMENTS (continued)**

for the year ended 30 September 2018

**14 Intangible assets**

	Websites £000	Goodwill £000	Patents and Trademarks £000	Intellectual Property £000	Customer Lists £000	Contracts £000	Licences £000	Genetics £000	Development costs £000	Total £000
<b>Cost or valuation</b>										
Balance at 1 October 2016	561	153,184	1,075	138,390	6,783	9,648	35,578	26,189	1,440	372,848
Additions — on acquisition	-	12	-	-	157	-	-	-	-	169
Additions — externally acquired	36	-	30	26	-	18	-	-	-	110
Additions — internally developed	-	-	-	-	-	-	-	-	2,144	2,144
Exchange differences	-	(3,255)	(294)	(3,778)	(156)	(156)	(914)	56	(53)	(8,550)
<b>Balance at 30 September 2017</b>	<b>597</b>	<b>149,941</b>	<b>811</b>	<b>134,638</b>	<b>6,784</b>	<b>9,510</b>	<b>34,664</b>	<b>26,245</b>	<b>3,531</b>	<b>366,721</b>
Balance at 1 October 2017	597	149,941	811	134,638	6,784	9,510	34,664	26,245	3,531	366,721
Additions — on acquisition	-	51	-	-	-	-	-	-	-	51
Additions — externally acquired	86	-	30	118	-	-	-	-	139	373
Additions — internally developed	-	-	-	-	-	-	-	-	7,178	7,178
Disposals	-	(447)	-	-	-	-	-	-	-	(447)
Exchange differences	2	3,171	6	3,679	149	20	1,018	(59)	57	8,043
<b>Balance at 30 September 2018</b>	<b>685</b>	<b>152,716</b>	<b>847</b>	<b>138,435</b>	<b>6,933</b>	<b>9,530</b>	<b>35,682</b>	<b>26,186</b>	<b>10,905</b>	<b>381,919</b>
<b>Accumulated amortisation and impairment</b>										
Balance at 1 October 2016	518	279	607	10,290	491	4,123	2,858	1,144	-	20,310
Amortisation charge for the period	13	-	79	13,544	552	1,443	2,162	680	-	18,473
Exchange differences	-	(3)	(55)	(932)	(15)	(60)	(121)	(13)	-	(1,199)
<b>Balance at 30 September 2017</b>	<b>531</b>	<b>276</b>	<b>631</b>	<b>22,902</b>	<b>1,028</b>	<b>5,506</b>	<b>4,899</b>	<b>1,811</b>	<b>-</b>	<b>37,584</b>
Balance at 1 October 2017	531	276	631	22,902	1,028	5,506	4,899	1,811	-	37,584
Amortisation charge for the period	21	-	158	12,631	403	1,399	2,161	782	-	17,555
Impairment	-	447	-	-	-	-	-	-	-	447
Disposals	-	(447)	-	-	-	-	-	-	-	(447)
Exchange differences	-	1	11	1,037	17	35	294	(1)	-	1,394
<b>Balance at 30 September 2018</b>	<b>552</b>	<b>277</b>	<b>800</b>	<b>36,570</b>	<b>1,448</b>	<b>6,940</b>	<b>7,354</b>	<b>2,592</b>	<b>-</b>	<b>56,533</b>
<b>Net book value</b>										
<b>At 30 September 2018</b>	<b>133</b>	<b>152,439</b>	<b>47</b>	<b>101,865</b>	<b>5,485</b>	<b>2,590</b>	<b>28,328</b>	<b>23,594</b>	<b>10,905</b>	<b>325,386</b>
At 30 September 2017	66	149,665	180	111,736	5,756	4,004	29,765	24,434	3,531	329,137
At 1 October 2016	43	152,905	468	128,100	6,292	5,525	32,720	25,045	1,440	352,538

**NOTES FORMING PART OF THE FINANCIAL STATEMENTS (continued)**

for the year ended 30 September 2018

**15 Impairment testing of goodwill and other intangible assets**

Goodwill acquired in a business combination is allocated, at acquisition, to the cash generating units (CGUs) that are expected to benefit from the business combination. The Group tests goodwill annually for impairment, or more frequently if there are indications that goodwill might be impaired.

Goodwill arises across all of the Group's operating segments, and is allocated specifically against the following CGUs:

	Animal Health 2018 £000	Sustainability Science 2018 £000	Genetics 2018 £000	Technical Publishing 2018 £000	Advanced Animal Nutrition 2018 £000	Total 2018 £000
<b>FVG Limited</b>	<b>288</b>	-	-	-	-	<b>288</b>
<b>Benchmark Vaccines Limited</b>	<b>432</b>	-	-	-	-	<b>432</b>
<b>Atlantic Veterinary Services Limited</b>	<b>167</b>	-	-	-	-	<b>167</b>
<b>FAI do Brasil Criacao Animal Ltda</b>	-	<b>96</b>	-	-	-	<b>96</b>
<b>FAI Aquaculture Limited</b>	-	<b>450</b>	-	-	-	<b>450</b>
<b>5M Enterprises Limited</b>	-	-	-	<b>379</b>	-	<b>379</b>
<b>Salmobreed AS</b>	-	-	<b>7,435</b>	-	-	<b>7,435</b>
<b>Stofnfiskur HF</b>	-	-	<b>13,874</b>	-	-	<b>13,874</b>
<b>Akvaforsk Genetic Center*</b>	-	-	<b>9,194</b>	-	-	<b>9,194</b>
<b>Improve International Limited</b>	-	-	-	<b>2,995</b>	-	<b>2,995</b>
<b>Improve International GmbH</b>	-	-	-	<b>12</b>	-	<b>12</b>
<b>INVE Aquaculture Group</b>	-	-	-	-	<b>117,117</b>	<b>117,117</b>
	<b>887</b>	<b>546</b>	<b>30,503</b>	<b>3,386</b>	<b>117,117</b>	<b>152,439</b>

\*Includes goodwill arising from the joint acquisition of Akvaforsk Genetics Center AS and Akvaforsk Genetics Center Inc.

	Animal Health 2017 £000	Sustainability Science 2017 £000	Genetics 2017 £000	Technical Publishing 2017 £000	Advanced Animal Nutrition 2017 £000	Total 2017 £000
FVG Limited	288	-	-	-	-	288
Benchmark Vaccines Limited	432	-	-	-	-	432
Atlantic Veterinary Services Limited	167	-	-	-	-	167
FAI do Brasil Criacao Animal Ltda	-	96	-	-	-	96
FAI Aquaculture Limited	-	450	-	-	-	450
5M Enterprises Limited	-	-	-	775	-	775
Salmobreed AS	-	-	7,401	-	-	7,401
Stofnfiskur HF	-	-	14,049	-	-	14,049
Akvaforsk Genetic Center*	-	-	9,099	-	-	9,099
Improve International Limited	-	-	-	2,996	-	2,996
Improve International GmbH	-	-	-	12	-	12
INVE Aquaculture Group	-	-	-	-	113,900	113,900
	<b>887</b>	<b>546</b>	<b>30,549</b>	<b>3,783</b>	<b>113,900</b>	<b>149,665</b>

\*Includes goodwill arising from the joint acquisition of Akvaforsk Genetics Center AS and Akvaforsk Genetics Center Inc.

The recoverable amounts of the above CGUs have been determined from value in use calculations which have been predicated on discounted cash flow projections using formally approved 3-year budgets and in some cases a 5-year business plan. These forecasts were then extrapolated into perpetuity taking account of specific growth rates for future cash flows, using individual business operating margins based on past experience and future expectations in light of anticipated economic and market conditions.

**NOTES FORMING PART OF THE FINANCIAL STATEMENTS (continued)**

for the year ended 30 September 2018

**15 Impairment testing of goodwill and other intangible assets (continued)**

The pre-tax cashflows that these projections produced were discounted at pre-tax discount rates based on the Group's beta adjusted cost of capital reflecting management's assessment of specific risks related to each cash generating unit. Pre-tax discount rates of between 10.6% and 14.9% (2017: between 9.0% and 11.0%) have been used in the impairment calculations which the Directors believe fairly reflect the risks inherent in each of the CGUs, and growth rates of 2.5%-4% (2017: 2.5%) were used in extrapolating the budgets into perpetuity.

The value in use assessment is sensitive to changes in the key assumptions used, most notably the discount rate, the growth rates and the timing of new product launches. Sensitivity analysis has been performed on the individual CGUs, and based on this analysis, no reasonably possible changes, such as a 1% increase in discount rate or a 1% reduction in long term growth rate, to these assumptions resulted in an additional impairment charge being required.

**Sensitivities to changes in assumptions**

Management has identified the following assumptions as key sources of estimation uncertain within the most sensitive CGUs (see note 3).

	Weighted average risk adjusted discount rate	Long term growth rate	Impact of increase of 1% in the discount rate £000	Impact of decrease of 1% in the long term growth rate £000
Animal Health	14.9%	2.5%	(13.7)	(12.1)
Benchmark Genetics	11.2%	2.5%	(20.9)	(18.2)
Advanced Animal Nutrition	11.7%	4.0%	(42.2)	(36.9)

Management has performed sensitivity analysis on the key assumptions with other variables held constant and incorporating the potential impact of downside scenarios concerning assumptions in relation to availability and timing of licences associated with sea lice treatment field trials, supply and pricing of key raw materials, the out-licensing of certain products in development and the timing of new product launches within the next five years. Management have identified that for one of the CGUs, a reasonably possible change in two key assumptions could cause the carrying amount to exceed the recoverable amount. In Advanced Animal Nutrition if the discount rate was to increase by 1.9% or if the long term growth rate beyond year 5 was to reduce by 2.4%, the estimated recoverable amount would equal the carrying amount.

**16 Equity-accounted investees**

	2018 £000	2017 £000
Interest in joint venture	16,192	1,934
Interest in associate	1,265	578
	17,457	2,512

**Joint ventures**

During the year ended 30 September 2017 the Group invested in Salmar Genetics AS (SGA). SGA is a joint venture in which the Group has joint control and a 50% ownership interest.

SGA is structured as a separate vehicle and the Group has a residual interest in the net assets of SGA. Accordingly, the Group has classified its interest in SGA as a joint venture.

**NOTES FORMING PART OF THE FINANCIAL STATEMENTS (continued)**

for the year ended 30 September 2018

**16 Equity-accounted investees (continued)**

The following table summarises the financial information of SGA as included in its own financial statements for the year ended 30 September 2018, adjusted for fair value adjustments and differences in accounting policies. The table also reconciles the summarised financial information to the carrying amount of the Group's interest in SGA.

	2018 £000	2017 £000
Percentage ownership interest	50%	50%
Non-current assets	3,895	3,173
Current assets	2,150	2,917
Non-current liabilities	(420)	(441)
Current liabilities	(1,199)	(863)
Net assets (100%)	4,426	4,786
Group's share of net assets (50%)	2,213	2,393
Elimination of unrealised profit	(336)	(459)
<b>Carrying amount of interest in joint venture</b>	<b>1,877</b>	<b>1,934</b>
Revenue	2,104	1,966
Cost of sales and operating costs	(2,463)	(1,965)
Finance costs	-	(1)
Taxation	73	-
Profit and total comprehensive income (100%)	(286)	-
<b>Group's share of total comprehensive income (50%)</b>	<b>(143)</b>	<b>-</b>

The company is registered in Norway and the registered address is 7266 Kverva, Frøya, Norway.

During the year the Group invested in Benchmark Genetics Chile SPA (BGCSPA). BGCSPA is a joint venture in which the Group has joint control although only a 49% ownership interest. Total consideration of \$21.25m (£16.09m) consisted of cash paid of \$7.5m (£5.68m), deferred consideration of \$8.75m (£6.63m) (which was paid in December 2018 and January 2019) and Intellectual Property contributed by the Group, this has been valued at \$5.0m (£3.78m) (49% of this Intellectual Property contribution (£1.85m) was eliminated on consolidation). The sale of Intellectual Property is shown in the Consolidated Statement of Cash Flows as £1,931,000 as Other adjustments for non-cash items. BGCSPA is structured as a separate vehicle and the Group has a residual interest in the net assets of BGCSPA. Accordingly, the Group has classified its interest in BGCSPA as a joint venture. The following table summarises the financial information of BGCSPA as included in its own financial statements for the period from 1 June 2018 to 30 September 2018, adjusted for fair value adjustments and differences in accounting policies. The table also reconciles the summarised financial information to the carrying amount of the Group's interest in BGCSPA.



**NOTES FORMING PART OF THE FINANCIAL STATEMENTS (continued)**

for the year ended 30 September 2018

**16 Equity-accounted investees (continued)**

	2018 £000	2017 £000
Percentage ownership interest	49%	0%
Non-current assets	53,847	-
Current assets	5,855	-
Non-current liabilities	(22,657)	-
Current liabilities	(4,075)	-
Net assets (100%)	32,970	-
Group's share of net assets (49%)	16,155	-
Elimination of unrealised profit	(1,840)	-
<b>Carrying amount of interest in joint venture</b>	<b>14,315</b>	-
Revenue	1,806	-
Cost of sales and operating costs	(1,801)	-
Finance costs	(404)	-
Taxation	116	-
Profit and total comprehensive income (100%)	(283)	-
<b>Group's share of total comprehensive income (49%)</b>	<b>(139)</b>	-

The company is registered in Chile and the registered address is Cardonal S/N, Lote B- Barrio Industrial, Puerto Montt, Chile.

**Associate**

The Group has a 22% interest in an associate Great Salt Lake Brine Shrimp Cooperative, Inc (the "Cooperative"). The Cooperative is one of the Group's strategic suppliers and is an aquacultural cooperative organised for the purpose of harvesting, processing, manufacturing, and marketing artemia cysts and artemia feeds.

The Group's interest in the Cooperative represents 22% of the Cooperative's unallocated equity reserves.

The company is registered in USA and the registered address is 1750 West 2450 South, Ogden, Utah.

**NOTES FORMING PART OF THE FINANCIAL STATEMENTS (continued)**

for the year ended 30 September 2018

**17 Subsidiary undertakings**

The direct and indirect subsidiary undertakings of Benchmark Holdings plc, all of which have been included in these consolidated financial statements, are as follows:

Company name	Registered address	Country of Incorporation	Direct/Indirect Group Interest	Share class	% of share capital/voting rights held by Group companies	Note
<b>Animal Health Division</b>						
Atlantic Veterinary Services Limited	Unit 7B Oranmore Business Park, Oranmore, Co Galway, H91 XP3F	Ireland	Indirect	1€ ordinary shares	100%	
Benchmark Animal Health Group Limited	Benchmark House, 8 Smithy Wood Drive, Sheffield, S35 1QN	United Kingdom	Direct	£1 ordinary	100%	
Benchmark Animal Health Limited	Benchmark House, 8 Smithy Wood Drive, Sheffield, S35 1QN	United Kingdom	Indirect	£1 ordinary	100%	
Benchmark Vaccines Limited	Benchmark House, 8 Smithy Wood Drive, Sheffield, S35 1QN	United Kingdom	Indirect	£1 ordinary	100%	
Fish Vet Group Asia Limited	No.57/1 Moo 6, Samed Sub-District, Muang Chonburi District, Chonburi Province, 20000	Thailand	Indirect	THB 10 ordinary	100%	
Fish Vet Group Limited (dormant)	Benchmark House, 8 Smithy Wood Drive, Sheffield, S351QN	United Kingdom	Indirect	£1 ordinary	100%	
Fish Vet Group Norge AS	Hoffsveien 21-23, 0275, Oslo	Norway	Indirect	NOK 1 ordinary	100%	
Fish Vet Group SPA	Bernardino 1978, Puerto Montt	Chile	Indirect	CLP 1 ordinary	100%	
FVG Canada Inc	1600-3500 Boulevard De Maisonneuve, Ouest, Westmount, QC, H3Z 3C1	Canada	Indirect	CAD 1 ordinary	100%	
FVG Inc	Gulf of Maine Research Institute, 350 Commercial Street, Portland, Maine 04101	USA	Indirect	\$10 common stock	100%	
FVG Limited	22 Carsegate Road, Inverness, IV3 8EX	United Kingdom	Indirect	£1 ordinary	100%	
<b>Knowledge Services — Sustainability Science Division</b>						
Allan Environmental Limited	Benchmark House, 8 Smithy Wood Drive, Sheffield, S35 1QN	United Kingdom	Indirect	£1 ordinary	100%	
Dust Collective Limited	340 Glossop Road, Sheffield, S10 2HW	United Kingdom	Direct	£1 ordinary	100%	
FAI Aquaculture Limited	Benchmark House, 8 Smithy Wood Drive, Sheffield, S35 1QN	United Kingdom	Direct	£1 ordinary	100%	
FAI do Brasil Criação Animal LTDA	Fazenda Santa Terezinha, S/N – Zona Rural, Jaboticabal/SP, CEP: 14870-000	Brazil	Indirect	R\$1 ordinary	99.25%	
FAI Farms Limited	Benchmark House, 8 Smithy Wood Drive, Sheffield, S35 1QN	United Kingdom	Direct	£1 ordinary	100%	
RL Consulting Limited	Benchmark House, 8 Smithy Wood Drive, Sheffield, S35 1QN	United Kingdom	Direct	£1 ordinary	100%	
Trie Benchmark Limited	The Field Station, Northfield Farmhouse, Wytham, Oxford, OX2 8QJ	United Kingdom	Direct	£1 ordinary	100%	
Viking Fish Farms Limited (dormant)	Benchmark House, 8 Smithy Wood, Sheffield, S35 1QN	United Kingdom	Indirect	£1 ordinary	100%	
Woodland Limited (dormant)	Benchmark House, 8 Smithy Wood, Sheffield, S35 1QN	United Kingdom	Direct	£1 ordinary	100%	

## NOTES FORMING PART OF THE FINANCIAL STATEMENTS (continued)

for the year ended 30 September 2018

## 17 Subsidiary undertakings (continued)

Company name	Registered address	Country of Incorporation	Direct/ Indirect Group Interest	Share class	% of share capital/ voting rights held by Group companies	Note
<b>Knowledge Services - Technical Publishing Division</b>						
5M Enterprises Inc	CBoT, 141 West Jackson Boulevard, Chicago, IL 60604-2900	USA	Direct	ordinary shares	100%	
5M Enterprises Limited	Benchmark House, Smithy Wood, Sheffield, S35 1QN	United Kingdom	Indirect	£1 ordinary	100%	
AquacultureUK Limited (dormant)	Benchmark House, Smithy Wood, Sheffield, S35 1QN	United Kingdom	Direct	£5 ordinary	100%	
Continuous Medical Training LDA	53 Rua do Bolhao, 4000-112 Oporto	Portugal	Indirect	£1 ordinary	100%	
Curriculo Limited (dormant)	Benchmark House, Smithy Wood, Sheffield, S35 1QN	United Kingdom	Indirect	£1 ordinary	100%	
European School of Veterinary Post-Graduate Studies Ltd (ESVPS)	Benchmark House, Smithy Wood, Sheffield, S35 1QN	United Kingdom	Indirect	N/A	0%	b
Improve Formacion Veterinaria	Calle Rio Lozoya 5, Bloque Derecho 3 A, 28981 Parla, Madrid	Spain	Indirect	N/A	100%	
Improve France SARL	11 rue Laugier, 75017 Paris	France	Indirect	N/A	100%	
Improve International Australia Pty	PO Box 59, Kenmore QLD 4069	Australia	Indirect	AUD 1 ordinary shares	100%	
Improve International GmbH	Amtsgericht, Frankfurt, HRB 90624	Germany	Indirect	N/A	100%	
Improve International Limited	Alexandra House, Wroughton, Swindon SN4 0QJ	United Kingdom	Direct	1p ordinary	100%	
000 5M Enterprises	Shlizovaya embarkmet 8/1, Moscow, 115 115	Russia	Indirect	Shares	0%	b
<b>Benchmark Genetics Division</b>						
Akvaforsk Do Brasil Cultivo De Especies Aquaticas LTDA	Rua Doutor Ribamar Lobo, 451, Coco, Fortaleza, CEI	Brazil	Indirect	ordinary	80%	a
Akvaforsk Genetic Center AS	Auragata 3, 6600 Sunndalsøra.	Norway	Indirect	ordinary	100%	
Akvaforsk Genetic Center Spring Mexico, SA de CV (dormant)	Caguama 3023, Zapopan, Loma Bonita, Jaalisco 45086	Mexico	Indirect	ordinary	80%	a
Akvaforsk Genetics Center Inc	25508 SW 169th Ave, Miami Florida 33031	USA	Indirect	ordinary	80%	a
Benchmark Genetics Limited	Benchmark House, 8 Smithy Wood Drive, Sheffield, S35 1QN	United Kingdom	Direct	£1 ordinary	100%	
Genetica Spring SAS	Calle 32, 8a-33 Office 215	Colombia	Indirect	ordinary	100%	
Genetilapia, SA de CV	Avenida Dr Carlos Canseco 5994 Planta Alta El Cid C.R 82110 Mazatlan, Sinaloa	Mexico	Indirect	ordinary	41%	a
Salmobreed AS	Sandviksboder 3A, 5035 Bergen	Norway	Indirect	ordinary	100%	
Salmobreed Salten AS	Sørfjordmoen, Kobbelv, 8264 Engan	Norway	Indirect	ordinary	75%	
Spring Genetics SRL	Calle Los Alemanes, Condominium Condado de Baviera, Apt 703	Costa Rica	Indirect	ordinary	80%	

## NOTES FORMING PART OF THE FINANCIAL STATEMENTS (continued)

for the year ended 30 September 2018

## 17 Subsidiary undertakings (continued)

Company name	Registered address	Country of Incorporation	Direct/ Indirect Group Interest	Share class	% of share capital/ voting rights held by Group companies	Note
Stofnfiskur Chile Limitada (dormant)	Urmeneta 581, Of. 42, Puerto Montt, Reg. X	Chile	Indirect	ordinary	89.45%	
Stofnfiskur HF.	Stadarberg 2-4, Hafnarfjordur	Iceland	Indirect	ordinary	89.45%	
Stofngen EHF (dormant)	Stadarberg 2-4, Hafnarfjordur	Iceland	Indirect	ordinary	62.62%	
Sudourlax EHF (dormant)	Stadarberg 2-4, Hafnarfjordur	Iceland	Indirect	ordinary	89.45%	
<b>Advanced Animal Nutrition Division</b>						
Fortune Ocean Americas, LLC	3528 W 500 South, Salt Lake City, Utah 84104	USA	Indirect	N/A	100%	
Fortune Ocean Technologies Ltd.	25/F., OTB Building 160 Gloucester Road, Wanchai	Hong Kong	Indirect	1 HKD ordinary	100%	
Golden West Artemia	3528 W 500 South, Salt Lake City, Utah 84104	USA	Indirect	\$1 shares	100%	
Inland Sea Incorporated	3528 W 500 South, Salt Lake City, Utah 84104	USA	Indirect	shares	100%	
INVE (Thailand) Ltd.	No. 79/ 1 Moo 1 Nakhonsawan-Pitsanulok Road, Tumbol Nhong Lhum, Amphur, Wachirabharamee, Phichit Province	Thailand	Indirect	THB 1,000 shares	100%	
Inve Animal Health, S.A.	Policarpo Sanz 12, 4º, 36202 Vigo, Pontevedra	Spain	Indirect	10€ shares	100%	
Inve Aquaculture Europe Holding B.V.	Verlengde Poolseweg 16, 4818 CL Breda	Netherlands	Indirect	1€ shares	100%	
Inve Aquaculture Holding B.V.	Verlengde Poolseweg 16, 4818 CL Breda	Netherlands	Direct	\$1 shares	100%	
Inve Aquaculture México, S.A. de C.V.	Avenida Camaron Sabalo # 51, Local 6, Interior, Plaza Riviera, Zona Dorada, Mazatlán Sinaloa 82110	Mexico	Indirect	MXN \$1,000 shares	100%	
Inve Aquaculture NV	Hoogveld 93, 9200 Dendermonde	Belgium	Indirect	shares	100%	
Inve Aquaculture Temp Holding B.V.	Verlengde Poolseweg 16, 4818 CL Breda	Netherlands	Indirect	1€ shares	100%	
INVE Aquaculture, Inc.	3528 W 500 South, Salt Lake City, Utah 84104	USA	Indirect	shares	100%	
Inve Asia Ltd	25/F., OTB Building, 160 Gloucester Road, Wanchai	Hong Kong	Indirect	\$1 shares	100%	
INVE Asia Services Ltd.	471 Bond Street, Tumbol Bang-Pood, Amphur Pakkred, Nonthaburi Province Tumbol bang-pood, Amphur Pakkred, Nonthaburi Province	Thailand	Indirect	THB 100 shares	100%	
Inve do Brasil Ltda.	Rua Augusto Calheiros, nº 226, Messejana, Fortaleza, Ceará, Zip Code 60.863-290	Brazil	Indirect	BRL 1 shares	100%	
Inve Eurasia SA	Karacaoglan Mahallesi 6170 Sokak No. 17/B İşikkent/Izmir	Turkey	Indirect	6.25 TL shares	100%	
Inve Hellas S.A.	93 Kiprou Str., 16451, Argypoli	Greece	Indirect	\$29.35 shares	100%	



**NOTES FORMING PART OF THE FINANCIAL STATEMENTS (continued)**

for the year ended 30 September 2018

**17 Subsidiary undertakings (continued)**

Company name	Registered address	Country of Incorporation	Direct/ Indirect Group Interest	Share class	% of share capital/ voting rights held by Group companies	Note
Inve Latin America B.V.	Verlengde Pooleweg 16, 4818 CL Breda	Netherlands	Indirect	10€ shares	100%	
Inve Technologies NV	Hoogveld 93, 9200 Dendermonde	Belgium	Indirect	shares	100%	
INVE USA Holdings, Inc.	3528 W 500 South, Salt Lake City, Utah 84104	USA	Indirect	\$0.001 shares	100%	
Inve Vietnam Company Ltd	8F1-19 Tan Canh, Ward 1, Tan Binh District, Ho Chi Minh City	Vietnam	Indirect	N/A	100%	
Invecuador S.A.	CDLA. Las Conchas, MZ A-11 No. Lot 8, Salinas, Santa Elena	Ecuador	Indirect	\$1 shares	100%	
Inveservicios, S.A. de C.V.	Avenida Camaron Sabalo # 51, Local 6, Interior, Plaza Riviera, Zona Dorada, Mazatlán Sinaloa 82110	Mexico	Indirect	shares	100%	
Maricoltura di Rosignano Solvay S.r.l.	Rosignano Marittimo (LI), in via Pietro Gigli, 57013, Solvay Loc. Lillatro	Italy	Indirect	shares	100%	
PT. Inve Indonesia	Cilandak Commercial Estate, Jl. Cilandak KKO — Cilandak Timur — PasarMinggu — South Jakarta 12560	Indonesia	Indirect	A shares & B shares	100%	
Salt Creek Holdings, Inc	3528 W 500 South, Salt Lake City, Utah 84104	USA	Indirect	\$0.001 shares	100%	
Salt Creek, Inc.	3528 W 500 South, Salt Lake City, Utah 84104	USA	Indirect	\$0.05 shares	100%	
Sanders Brine Shrimp Company, L.C.	3528 W 500 South, Salt Lake City, Utah 84104	USA	Indirect	N/A	100%	
Tianjin INVE Aquaculture Co., Ltd	No. 108, 83 Area, Xiamen Road, Tanggu Economic Development Zone, Binhai, New Area, Tianjin	China	Indirect	shares	100%	
Tom Algae C.V.B.A.	Graaf van Hoornestraat 1, 9850 Nevele	Belgium	Direct	fixed and variable shares	100%	
United Aquaculture Technologies, LLC	3528 W 500 South, Salt Lake City, Utah 81404	USA	Indirect	N/A	100%	

## Notes

- a A put and call option agreement is in place to acquire the remaining 20% of Akvaforsk Genetic Center Inc, so the Group controls 100% of that company and its wholly owned subsidiaries despite having an 80% equity holding in addition the Group controls 51% of Genetilapia, SA de CV despite having a 41% equity holding.
- b European School of Veterinary Post-Graduate Studies is a company limited by guarantee and although the Group has no equity holding in the company, its results are consolidated into this annual report by virtue of control exercised under the provisions of IFRS 10 — Consolidated Financial Statements. The same is true of 0005M Enterprises, a limited company incorporated in Russia.

**NOTES FORMING PART OF THE FINANCIAL STATEMENTS (continued)**

for the year ended 30 September 2018

**17 Subsidiary undertakings (continued)**

	Investments in subsidiary companies £000
<b>Cost or valuation</b>	
Balance at 1 October 2016	262,752
Additions	1,233
Capitalisation of intercompany balances	706
Balance at 1 October 2017	264,691
Additions	1,337
Transfer of shares to subsidiary	(706)
<b>Balance at 30 September 2018</b>	<b>265,322</b>
<b>Provisions</b>	
<b>Balance at 1 October 2016, 30 September 2017 and 30 September 2018</b>	<b>(850)</b>
<b>Net book value</b>	
<b>At 30 September 2018</b>	<b>264,472</b>
At 30 September 2017	263,841
At 1 October 2016	261,902

During 2018, intercompany balances totalling £nil were converted into share capital (2017: £706,000). During the year this investment of £706,000 was transferred to a subsidiary company, FVG Limited at book value. Additionally, £1,304,000 (2017: £1,233,000) of the charge associated with share options relates to employees of subsidiary companies, and so this amount has been treated as an investment by the Company.

During the year the company acquired the remaining 1.5% of 5M Enterprises Limited not already owned for a consideration of £33,000.

Management have performed an impairment review of the investments in subsidiaries at the period end taking into account both net assets of the subsidiaries and value in use calculations using assumptions consistent with those disclosed in note 15. No reasonable change in key assumptions would have resulted in an impairment.

**18 Inventories**

Group	2018 £000	2017 £000
Raw materials	5,467	8,120
Work in progress	2,058	1,781
Finished goods and goods for resale	12,958	10,152
<b>Total inventories at the lower of cost and net realisable value</b>	<b>20,483</b>	<b>20,053</b>

During 2018, £60,044,000 (2017: £57,702,000) was recognised as an expense for inventories carried at net realisable value. This is recognised in cost of sales. The cost of inventories recognised as an expense includes £246,000 (2017: £1,414,000) in respect of write-downs of inventory to net realisable value.

The Company did not have any inventories at the year-end (2017: £nil).

**NOTES FORMING PART OF THE FINANCIAL STATEMENTS (continued)**

for the year ended 30 September 2018

**19 Biological assets**

Group	2018 £000	2017 £000
Organic sheep	123	214
Organic beef	150	201
Organic hens	26	24
Frozen Milt	484	876
Broodstock, eggs and fingerlings	19,611	15,228
<b>Total biological assets</b>	<b>20,394</b>	<b>16,543</b>
<b>Less: non current broodstock</b>	<b>(8,502)</b>	<b>(5,745)</b>
<b>Total current biological assets</b>	<b>11,892</b>	<b>10,798</b>

**Livestock**

The Group operates a commercial and research farming and technology transfer business, and at 30 September 2018 held 2,192 (2017: 2,909) head of sheep, 299 (2017: 327) head of cattle, and 11,088 (2017: 9,011) hens. The Group had farming sales of £443,144 in the year ended 30 September 2018 (2017: £346,194).

The Group is exposed to financial risks arising from changes in the market value of farm animals. The Group does not anticipate that prices will decline significantly in the foreseeable future and, therefore, has not entered into derivative or other contracts to manage the risk of a decline in livestock price. The Group reviews its outlook for livestock prices regularly in considering the need for active financial risk management.

**Frozen Milt**

Where we have identified individual salmon carrying particular traits or disease resistance, semen (milt) can be extracted and deep frozen using cryopreservation techniques (the process of freezing biological material at extreme temperatures in liquid nitrogen). The calculation of the fair value of milt is based on production and freezing costs and, where appropriate, an uplift to recognise the additional selling price that can be achieved from eggs fertilised by premium quality milt. The estimated fair value of Frozen Milt at 30 September 2018 was £484,000 (2017: £876,000). The decrease in value of £392,000 relates to usage during the year.

**Broodstock, eggs and fingerlings**

	Salmon Broodstock £000	Salmon eggs £000	Salmon fingerlings £000	Lumpfish eggs and fingerlings £000	Tilapia and Shrimp £000	Total £000
Biological assets 1 October 2017	9,273	3,913	292	1,661	89	15,228
Increase due to production / purchase	17,521	1,952	262	2,639	222	22,596
Due to physical changes	(15,595)	19,812	397	328	-	4,942
Foreign exchange movements	(150)	(49)	(3)	(16)	3	(215)
Reduction due to sales / discarding of stock	-	(19,910)	(767)	(3,108)	(2)	(23,787)
Fair value adjustments	675	54	84	81	(47)	847
<b>Biological assets 30 September 2018</b>	<b>11,724</b>	<b>5,772</b>	<b>265</b>	<b>1,585</b>	<b>265</b>	<b>19,611</b>
<b>Broodstock, eggs and fingerlings - non current</b>	<b>8,502</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>8,502</b>
<b>Broodstock, eggs and fingerlings - current</b>	<b>3,222</b>	<b>5,772</b>	<b>265</b>	<b>1,585</b>	<b>265</b>	<b>11,109</b>
	<b>11,724</b>	<b>5,772</b>	<b>265</b>	<b>1,585</b>	<b>265</b>	<b>19,611</b>

**NOTES FORMING PART OF THE FINANCIAL STATEMENTS (continued)**

for the year ended 30 September 2018

**19 Biological assets (continued)****Assumptions used for determining fair value of broodstock, eggs and fingerlings**

IAS41 requires that biological assets are accounted for at the estimated fair value net of selling and harvesting costs. Fair value is measured in accordance with IFRS13 and is categorised into level 3 in the fair value hierarchy as the inputs include unobservable inputs in the valuation of broodstock, eggs and fingerlings for which there are no published market data available.

The calculation of the estimated fair value of salmon broodstock is primarily based upon its main harvest output being salmon eggs, which are priced upon our current seasonally adjusted selling prices for salmon eggs. These prices are reduced for harvesting costs, freight costs, incubation costs and market capacity to arrive at the net value of broodstock. The valuation also reflects the internally generated data to arrive at the biomass. This includes the weight of the broodstock, the yield that each kilogram of fish will produce and mortality rates. The fish take approximately four years to reach maturity, and the age and biomass of the fish is taken into account in the fair value.

The calculation of the fair value of the salmon eggs is based upon the current seasonally adjusted selling prices for salmon eggs less transport and incubation costs, and taking account of the market capacity. The valuation also takes account of the mortality rates of the eggs and expected life as sourced from internally generated data.

The calculation of the fair value of the salmon and lumpfish fingerlings is valued on current selling prices less transport costs. Internally generated data is used to incorporate mortality rates and the weight of the fish.

The lumpfish eggs are valued at cost. Internally generated data is used to calculate mortality rates.

The valuation models by their nature are based upon uncertain assumptions on sales prices, market capacity, weight, mortality rates, yields and assessment of the discounts to reflect the stages of maturity. The Group has a degree of expertise in these assumptions but these assumptions are subject to change. Relatively small changes in assumptions would have a significant impact on the valuation. A 1% increase/decrease in assumed selling price would increase/decrease the fair value of biological assets by £183,000. A 10% increase/decrease in the biomass of salmon broodstock and the quantity of salmon eggs valued would increase/decrease the fair value of those biological assets by £1,172,000 and £577,000 respectively.

Total quantities held at 30 September were:

	2018	2017
Salmon broodstock and fingerlings	612 tonnes	538 tonnes
Lumpfish fingerlings	3.4m units	2.1m units
Salmon eggs	51.0m units	37.2m units

The Company did not hold any biological assets at the year-end (2017: £nil).



**NOTES FORMING PART OF THE FINANCIAL STATEMENTS (continued)**

for the year ended 30 September 2018

**20 Trade and other receivables**

Group	2018 £000	2017 £000
Trade receivables	34,253	33,284
Less: provision for impairment of trade receivables	(3,309)	(3,210)
Trade receivables — net	30,944	30,074
<b>Total financial assets other than cash and cash equivalents classified as loans and receivables</b>	<b>30,944</b>	<b>30,074</b>
Prepayments	4,829	2,812
Other receivables	9,709	5,644
<b>Total trade and other receivables</b>	<b>45,482</b>	<b>38,530</b>
Less: non-current portion: other receivables	(4,145)	-
<b>Current portion</b>	<b>41,337</b>	<b>38,530</b>

The non-current portion of other receivables relates to a loan made to a joint venture, Benchmark Genetics Chile SPA this is repayable no later than 17 July 2023 and had interest payable of 6.28% p.a.

The fair values of trade and other receivables classified as loans and receivables are not materially different to their carrying values. As at 30 September 2018 trade receivables of £5,775,000 (2017: £4,577,000) were past due but not impaired. They relate to customers with no default history. The ageing analysis of these receivables is as follows:

	2018 £000	2017 £000
Up to 3 months overdue	4,279	3,616
3 to 6 months overdue	1,206	716
6 to 12 months overdue	290	245
	<b>5,775</b>	<b>4,577</b>

Movements on the Group provision for impairment of trade receivables are as follows:

	2018 £000	2017 £000
At 1 October	3,210	2,130
Assumed in a business combination	-	-
Provided during the year	618	1,347
Receivable written off during the year as uncollectable	(519)	(267)
At 30 September	<b>3,309</b>	<b>3,210</b>

The movement on the provision for impaired receivables has been included in the administrative expenses line in the consolidated income statement.

Other classes of financial assets included within trade and other receivables do not contain impaired assets.

Company	2018 £000	2017 £000
Receivables from related parties	158,034	117,986
Loan provided to subsidiary company	7,412	8,362
<b>Total financial assets other than cash and cash equivalents classified as loans and receivables</b>	<b>165,446</b>	<b>126,348</b>
Prepayments	448	475
Other receivables	379	20
<b>Total trade and other receivables</b>	<b>166,273</b>	<b>126,843</b>
Less: non-current portion	-	-
<b>Current portion</b>	<b>166,273</b>	<b>126,843</b>

The balance of receivables from related parties include a provision for impairment of £9,283,000 (2017: £6,600,000) A provision of £2,683,000 (2017: £6,600,000) was made during the year following a review of the individual subsidiaries' net assets.

**NOTES FORMING PART OF THE FINANCIAL STATEMENTS (continued)**

for the year ended 30 September 2018

**21 Trade and other payables**

Group	2018 £000	2017 £000
Trade payables	17,141	22,534
Other payables	11,294	5,629
Accruals	10,384	9,687
<b>Financial liabilities, excluding loans and borrowings, classified as financial liabilities measured at amortised cost</b>	<b>38,819</b>	<b>37,850</b>
Other payables — contingent consideration	1,498	1,222
<b>Financial liabilities, excluding loans and borrowings, classified as financial liabilities at fair value through profit or loss</b>	<b>1,498</b>	<b>1,222</b>
Other payables — tax and social security payments	2,094	2,882
Deferred income	4,488	3,757
<b>Total trade and other payables</b>	<b>46,899</b>	<b>45,711</b>
Less: non-current portion of other payables (including contingent consideration)	(1,219)	(1,213)
<b>Current portion</b>	<b>45,680</b>	<b>44,498</b>

Book values approximate to fair value at 30 September 2018 and 2017.

The financial liability at fair value through profit and loss relates to contingent consideration outstanding from business combinations. The majority of this relates to deferred cash consideration dependent on the performance of the acquired businesses and the fair value is derived from the likely liabilities based on current performance against the targets at each reporting date. As disclosed in note 10, there has been a release of £206,000 (2017: £7,283,000) of the amount provided. Included in contingent consideration is a put/call agreement exercisable and payable in 2022 to acquire the remaining 20% stake in Akvaforsk Genetics Center Inc for a sum determined by future performance. The minimum consideration is NOK 1 (one Krone) payable in the event the business under performs the minimum target set and the maximum consideration is capped at NOK 60m. If Akvaforsk Genetics Center Inc achieves the projections provided by the vendors, payment will be NOK 10m and this assumption has been used in calculating the fair value of the liability.

Included within Other Payables is £6,716,000 relating to deferred consideration for the acquisition of the Group's 49% share of investment in the joint venture Benchmark Genetics Chile SPA which is payable in less than one year.

Company	2018 £000	2017 £000
Trade payables	384	474
Payables to related parties	37,098	24,156
Accruals	1,803	1,142
<b>Financial liabilities, excluding loans and borrowings, classified as financial liabilities measured at amortised cost</b>	<b>39,285</b>	<b>25,772</b>
Other payables - contingent consideration	85	84
<b>Financial liabilities, excluding loans and borrowings, classified as financial liabilities at fair value through profit or loss</b>	<b>85</b>	<b>84</b>
Other payables — tax and social security payments	152	339
<b>Total trade and other payables</b>	<b>39,522</b>	<b>26,195</b>
Less: non-current portion of other payables — contingent consideration	-	-
<b>Current portion</b>	<b>39,522</b>	<b>26,195</b>

Book values approximate to fair value at 30 September 2018 and 2017.

**NOTES FORMING PART OF THE FINANCIAL STATEMENTS (continued)**

for the year ended 30 September 2018

**22 Loans and borrowings**

Group	2018 £000	2017 £000
<b>Non-Current</b>		
Bank borrowings	78,808	36,391
Other loans	60	60
Finance lease creditor (note 28)	-	2
	<b>78,868</b>	<b>36,453</b>
<b>Current</b>		
Bank borrowings	894	-
Other loans	-	6,019
Finance lease creditor (note 28)	4	215
	<b>898</b>	<b>6,234</b>
<b>Total loans and borrowings</b>	<b>79,766</b>	<b>42,687</b>

The fair value of loans and borrowings is not materially different to the carrying value and has not been separately disclosed.

On 30 December 2015, the Group completed the acquisition of the Inve Aquaculture Group and on the same day entered into new borrowing facilities consisting of a five-year revolving credit facility (expiring on 11 December 2020) of up to \$70,000,000 secured on the assets of the parent company, UK subsidiary companies and certain overseas subsidiary companies. At 30 September 2018, \$69,200,000 was drawn down on the facility. The interest rate on the facility is between 1.9% and 3.5% above LIBOR depending on leverage. In December 2018 the Group identified that a condition of the borrowing facility agreement had not been met both historically and as at the year end, which could cause the loan of £52.2m (2017: £36.4m) to become repayable on demand. The facility agreement allows the company 15 business days in which to rectify the position and the directors have determined that as the company would have intended to and always had the ability to rectify the position within the 15 business day period the loan remains classified as non-current at the reporting date.

The finance lease liabilities are secured on the assets to which they relate.

At 30 September 2018 SalmoBreed Salten AS has a loan of NOK 216 million provided by Nordea Bank Norge ASA. The loan is a five-year term loan ending November 2023 at an interest rate of 2.65% above 3 month NIBOR. In addition, SalmoBreed Salten AS has a loan of NOK 55 million provided by Innovasjon Norge. The loan is a twelve-and-a-half-year term loan ending March 2031 at an interest rate of 4.2% above Norges Bank base rate. Salmobreed Salten AS has a loan of NOK 16.75 million provided by Salten Aqua ASA (the minority shareholder) this loan attracts interest at 2.5% above 3-month NIBOR and is repayable in a minimum of 6 years but not before the bank loans.

The currency profile of the Group's loans and borrowings is as follows:

	2018 £000	2017 £000
Sterling	13,918	71
US Dollar	38,564	36,391
Euro	-	200
Norwegian Krone	27,282	6,019
Thai Baht	2	6
	<b>79,766</b>	<b>42,687</b>

**Company**

The book value and fair value of loans and borrowings are as follows:

	2018 £000	2017 £000
<b>Non-Current</b>		
Bank borrowings	52,231	36,391
Other loans	60	60
<b>Total loans and borrowings</b>	<b>52,291</b>	<b>36,451</b>

The fair value of loans and borrowings is not materially different to the carrying value and has not been separately disclosed.

**NOTES FORMING PART OF THE FINANCIAL STATEMENTS (continued)**

for the year ended 30 September 2018

**22 Loans and borrowings (continued)**

The currency profile of the Company's loans and borrowings is as follows:

	2018 £000	2017 £000
Sterling	13,916	60
US Dollar	38,375	36,391
	<b>52,291</b>	<b>36,451</b>

**Reconciliation of movements of liabilities to cash flows arising from financing activities**

Group	Liabilities:	Assets:	Equity:		
Year ended 30 September 2018	Loans and borrowings £000	Trade and other receivables — non-current £000	Share capital/ additional paid-in capital £000	Non-controlling interest £000	Total £000
<b>Balance at 1 October 2017</b>	<b>42,687</b>	<b>-</b>	<b>339,953</b>	<b>4,971</b>	
<b>Changes from financing cash flows</b>					
Proceeds of share issues	-	-	18,498	-	18,498
Proceeds from bank or other borrowings	41,206	-	-	-	41,206
Acquisition of NCI	-	-	-	(33)	(33)
Repayment of bank or other borrowings	(5,815)	-	-	-	(5,815)
Cash advances and loans made to other parties	-	(4,076)	-	-	(4,076)
Interest and finance charges paid	(2,442)	-	-	-	(2,442)
Payments to finance lease creditors	(218)	-	-	-	(218)
<b>Total changes from financing cash flows</b>	<b>32,731</b>	<b>(4,076)</b>	<b>18,498</b>	<b>(33)</b>	<b>47,120</b>
<b>The effect of changes in foreign exchange rates</b>	<b>1,869</b>	<b>(69)</b>	<b>-</b>	<b>-</b>	
Other changes — liability-related					
Interest expense	2,193	-	-	-	
Capitalised borrowing fees	286	-	-	-	
<b>Total liability-related other changes</b>	<b>2,479</b>	<b>-</b>	<b>-</b>	<b>-</b>	
<b>Total equity-related other changes</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>740</b>	
<b>Balance at 30 September 2018</b>	<b>79,766</b>	<b>(4,145)</b>	<b>358,451</b>	<b>5,678</b>	



**NOTES FORMING PART OF THE FINANCIAL STATEMENTS (continued)**

for the year ended 30 September 2018

**22 Loans and borrowings (continued)**

Year ended 30 September 2017	Liabilities: Loans and borrowings £000	Equity: Share capital/ additional paid-in capital £000	Total £000
Balance at 1 October 2016	37,696	339,952	
<b>Changes from financing cash flows</b>			
Proceeds of share issues	-	1	1
Proceeds from bank or other borrowings	5,921	-	5,921
Interest and finance charges paid	(1,869)	-	(1,869)
Payments to finance lease creditors	(301)	-	(301)
<b>Total changes from financing cash flows</b>	<b>3,751</b>	<b>1</b>	<b>3,752</b>
<b>The effect of changes in foreign exchange rates</b>	<b>(998)</b>	-	
Other changes — liability-related			
Interest expense	1,937	-	
Capitalised borrowing fees	301	-	
<b>Total liability-related other changes</b>	<b>2,238</b>	-	
<b>Balance at 30 September 2017</b>	<b>42,687</b>	<b>339,953</b>	

Company Year ended 30 September 2018	Liabilities: Loans and borrowings £000	Equity: Share capital/ additional paid-in capital £000	Total £000
Balance at 1 October 2017	36,451	339,953	
<b>Changes from financing cash flows</b>			
Proceeds of share issues	-	18,498	18,498
Proceeds from bank or other borrowings	14,500	-	14,500
Interest and finance charges paid	(1,800)	-	(1,800)
<b>Total changes from financing cash flows</b>	<b>12,700</b>	<b>18,498</b>	<b>31,198</b>
<b>The effect of changes in foreign exchange rates</b>	<b>(1,054)</b>	-	
Other changes — liability-related			
Interest expense	1,800	-	
Capitalised borrowing fees	286	-	
<b>Total liability-related other changes</b>	<b>2,086</b>	-	
<b>Balance at 30 September 2018</b>	<b>50,183</b>	<b>358,451</b>	

**NOTES FORMING PART OF THE FINANCIAL STATEMENTS (continued)**

for the year ended 30 September 2018

**22 Loans and borrowings (continued)**

Year ended 30 September 2017	Liabilities: Loans and borrowings £000	Equity: Share capital/ additional paid-in capital £000	Total £000
Balance at 1 October 2016	(37,193)	339,952	
<b>Changes from financing cash flows</b>			
Proceeds of share issues	-	1	1
Interest and finance charges paid	(1,304)	-	(1,304)
Payments to finance lease creditors	(301)	-	(301)
<b>Total changes from financing cash flows</b>	<b>(1,605)</b>	<b>1</b>	<b>(1,604)</b>
<b>The effect of changes in foreign exchange rates</b>	<b>743</b>	-	
<b>Other changes — liability-related</b>			
Interest expense	1,304	-	
Capitalised borrowing fees	300	-	
<b>Total liability-related other changes</b>	<b>1,604</b>	-	
<b>Balance at 30 September 2017</b>	<b>(36,451)</b>	<b>339,953</b>	

**23 Provisions**

	Legal fees provision £000	Repairs provision £000	Other provisions £000	Total £000
At 1 October 2016	462	70	554	1,086
Charged to profit or loss	-	-	(336)	(336)
Provision reversed during the year	-	-	-	-
Foreign exchange movement	-	-	7	7
Utilised in year	(262)	-	(45)	(307)
At 1 October 2017	200	70	180	450
Charged to profit or loss	(3)	-	-	(3)
Provision reversed during the year	-	-	(187)	(187)
Foreign exchange movement	-	-	7	7
Utilised in year	(197)	-	-	(197)
<b>At 30 September 2018</b>	<b>-</b>	<b>70</b>	<b>-</b>	<b>70</b>
Current	-	70	-	70
Non-current	-	-	-	-
<b>At 30 September 2018</b>	<b>-</b>	<b>70</b>	<b>-</b>	<b>70</b>
Current	200	70	180	450
Non-current	-	-	-	-
<b>At 30 September 2017</b>	<b>200</b>	<b>70</b>	<b>180</b>	<b>450</b>

**Legal fees provision**

The legal fees provision related to potential costs the Group may be liable for relating to a legal action it took against a third party in relation to intellectual property matters. The provision was utilised during the current year.

**NOTES FORMING PART OF THE FINANCIAL STATEMENTS (continued)**

for the year ended 30 September 2018

**23 Provisions (continued)****Repairs provision**

Under property operating lease agreements, FAI Farms Limited, a subsidiary company, has a rolling obligation to maintain all properties to the standard that prevailed at the inception of the lease. The Directors estimate the costs of this obligation at £15,000 (2017: £15,000). Additionally, Benchmark Vaccines Limited has a repairs provision of £55,000 (2017: £55,000) in respect of its Braintree premises.

**Other provisions**

During the year provisions of a £187,000 were released as no longer required to total £nil (2017: £180,000) in relation to potential rebates to customers/distributors based on targeted volumes, price fluctuations and potential stock returns under right of return clauses.

A provision of £354,000 held at the 30 September 2016 end for an overseas customs duty dispute was released to profit or loss in the previous year as it was no longer required.

No provisions were held by the Company at the year-end (2017: £nil).

**24 Deferred tax**

Deferred tax is calculated in full on temporary differences under the liability method using the substantively enacted rates in the relevant territories in which the temporary differences and tax losses are expected to reverse.

The movement on the net deferred tax account is as shown below:

Group	2018 £000	2017 £000
At 1 October	(56,359)	(63,261)
<i>Recognised in income statement</i>		
Tax credit (note 11)	15,002	5,629
Exchange differences	(280)	1,273
At 30 September	(41,637)	(56,359)

The Company did not have a deferred tax balance at the year-end (2017: £nil).

There was no deferred tax recognised in other comprehensive income.

Deferred tax assets have been recognised in respect of all tax losses and other temporary differences giving rise to deferred tax assets where the Directors believe it is probable that these assets will be recovered. The Directors believe there is sufficient evidence that the amounts recognised will be recovered against future taxable profits in the relevant tax jurisdiction. The Group did not recognise deferred tax assets of £13,332,000 (2017: £9,112,000) in respect of losses amounting to £46,540,000 (2017: £28,492,000) and temporary differences of £1,839,000 (2017: £1,363,000), where there was insufficient evidence that the amounts will be recovered.

No deferred tax is recognised on the unremitted earnings of overseas subsidiaries and joint ventures. As the earnings are continually reinvested by the Group and there is no intention for these entities to pay dividends, no tax is expected to be payable on them in the foreseeable future.

**NOTES FORMING PART OF THE FINANCIAL STATEMENTS (continued)**

for the year ended 30 September 2018

**24 Deferred tax (continued)**

The movements in deferred tax assets and liabilities (prior to the offsetting of balances within the same jurisdiction as permitted by IAS 12) during the period, together with amounts recognised in the consolidated income statement and amounts recognised in other comprehensive income are as follows:

Group	Asset 2018 £000	Liability 2018 £000	Net 2018 £000	(Charged)/ credited to profit or loss 2018 £000	(Charged)/ credited to equity 2018 £000
Accelerated capital allowances	-	(40,406)	(40,406)	18,074	-
Biological assets	-	(1,594)	(1,594)	(438)	-
Other temporary and deductible differences	26	-	26	(49)	-
Available losses	337	-	337	(2,585)	-
Fair value of share options	-	-	-	-	-
Net tax assets / (liabilities)	363	(42,000)	(41,637)	15,002	-

Group	Asset 2017 £000	Liability 2017 £000	Net 2017 £000	(Charged)/ credited to profit or loss 2017 £000	(Charged)/ credited to equity 2017 £000
Accelerated capital allowances	-	(58,348)	(58,348)	3,126	-
Other temporary and deductible differences	-	(933)	(933)	(132)	-
Available losses	2,922	-	2,922	2,635	-
Fair value of share options	-	-	-	-	-
Net tax assets / (liabilities)	2,922	(59,281)	(56,539)	5,629	-

Company	Asset 2018 £000	Liability 2018 £000	Net 2018 £000	(Charged)/ credited to profit or loss 2018 £000	(Charged)/ credited to equity 2018 £000
Accelerated capital allowances	-	-	-	-	-
Other temporary and deductible differences	-	-	-	-	-
Available losses	-	-	-	-	-
Fair value of share options	-	-	-	-	-
Net tax assets / (liabilities)	-	-	-	-	-

Company	Asset 2017 £000	Liability 2017 £000	Net 2017 £000	(Charged)/ credited to profit or loss 2017 £000	(Charged)/ credited to equity 2017 £000
Accelerated capital allowances	-	-	-	-	-
Other temporary and deductible differences	-	-	-	-	-
Available losses	-	-	-	-	-
Fair value of share options	-	-	-	-	-
Net tax assets / (liabilities)	-	-	-	-	-



**NOTES FORMING PART OF THE FINANCIAL STATEMENTS (continued)**

for the year ended 30 September 2018

**25 Share capital and additional paid-in capital**

	Number	Share Capital £000	Share Premium £000
<b>Allotted, called up and fully paid</b>			
<b>Ordinary shares of 0.1 penny each</b>			
Balance at 30 September 2016	521,348,079	521	339,431
Exercise of share options	991,144	1	-
Benchmark Share Incentive Plan	25,811	-	-
<b>Balance at 30 September 2017</b>	<b>522,365,034</b>	<b>522</b>	<b>339,431</b>
Exercise of share options	290,302	-	-
Shares placed to fund investment in Joint Venture	34,545,455	35	18,463
<b>Balance at 30 September 2018</b>	<b>557,200,791</b>	<b>557</b>	<b>357,894</b>

On 1 December 2016, the Company issued a total of 670,173 shares of 0.1p each to certain employees of the Group relating to share options granted in August 2013 and March 2015.

On 6 March 2017, the Company issued a total of 203,105 shares of 0.1p each to certain employees of the Group relating to share options granted in August 2013 and March 2015.

On 13 March 2017, the Company issued a total of 25,811 shares of 0.1p each in respect of the Benchmark Share Incentive Plan ("SIP"). The shares are free matching shares issued upon certain conditions being met following purchase by eligible employees of partnership shares in 2014.

On 3 April 2017, the Company issued a total of 117,866 shares of 0.1p each to certain employees of the Group relating to share options granted in August 2013 and March 2015.

During the year ended 30 September 2018, the Company issued a total of 29,302 shares of 0.1p each to certain employees of the Group relating to share options granted in August 2013, March 2015 and March 2016.

On 25 June 2018, the Company issued 34,545,455 shares of 0.1p each at a price of 55p per share to fund the investment in the Joint Venture Benchmark Genetics Chile SPA. Non-recurring costs of £0.5m were incurred in relation to the share placing and this has been charged to the share premium account.

**Employee share option scheme**

The Company introduced an employee share option scheme in 2010. The options existing immediately before admission to trading on AIM on 18 December 2013 were subdivided into equivalent options over the new 0.1p ordinary shares. At the year end, options exist over 14,549,686 (2017: 4,543,420) 0.1p ordinary shares in the Company. Exercise prices and movements in the share options are disclosed in note 30.

Members of the scheme can exercise the options at any point from the third anniversary of the option grant date until the options lapse on the tenth anniversary of the option grant date. Options cannot be exercised after the option holder ceases to hold employment with any member of the Group.

**NOTES FORMING PART OF THE FINANCIAL STATEMENTS (continued)**

for the year ended 30 September 2018

**26 Reserves**

The following describes the nature and purpose of each reserve within equity:

Reserve	Description and purpose
Share premium reserve	Amount subscribed for share capital in excess of nominal value.
Merger reserve	Under merger relief, the amount in excess of nominal value attributed to shares issued as consideration in an acquisition where the Group has secured at least a 90% equity holding in the other company.
Capital redemption reserve	Amounts transferred from share capital on redemption of issued shares.
Foreign exchange reserve	Gains/losses arising on retranslating the net assets of overseas operations into sterling.
Retained earnings	All other net gains and losses and transactions with owners (e.g. dividends) not recognised elsewhere. To simplify presentation, the share-based payment reserve has been combined with the retained earnings reserve. The share-based payment reserve recognised the value of equity-settled share-based payment transactions provided to employees, including management personnel, as part of their remuneration. Refer to note 31 for further details of these plans.

The balance of additional paid-in share capital includes the merger reserve balance of £33,188,000, the balance being the share premium reserve. The merger reserve arose due to the Company issuing 38,635,671 shares of 0.1p each at 86p as part consideration for the acquisition of INVE Aquaculture Holdings B.V. on 30 December 2015.

**27 Non-controlling interest**

The following table summarises the information relating to each of the Group's subsidiaries that has a material non-controlling interest (NCI), before any intra-group eliminations.

	Stofnfiskur HF £000	Salmobreed Salten AS £000	Other individually immaterial subsidiaries £000	Total £000
<b>Year ended 30 September 2018</b>				
<b>NCI percentage</b>	10%	25%		
Non-current assets	19,257	43,104		
Current assets	13,633	7,734		
Non-current liabilities	(2,133)	(26,388)		
Current liabilities	(11,177)	(9,402)		
<b>Net assets</b>	<b>19,580</b>	<b>15,048</b>		
<b>Net assets attributable to NCI</b>	2,050	3,767	(139)	5,678
Revenue	21,208	136		
Profit	5,112	995		
OCI	533	70		
<b>Total comprehensive income</b>	<b>5,645</b>	<b>1,065</b>		
Profit allocated to NCI	535	249	(164)	620
OCI allocated to NCI	56	18	(5)	69
Cash flows from operating activities	1,794	(2,118)		
Cash flows used in investment activities	(1,417)	(17,992)		
Cash flows (used in)/from financing activities (dividends to NCI: £nil)	(1,273)	24,716		
<b>Net increase in cash and cash equivalents</b>	<b>(896)</b>	<b>4,606</b>		

**NOTES FORMING PART OF THE FINANCIAL STATEMENTS (continued)**

for the year ended 30 September 2018

**27 Non-controlling interest (continued)**

	Stofnfiskur HF. £000	Salmobreed Salten AS £000	Other individually immaterial subsidiaries £000	Total £000
<b>Year ended 30 September 2017</b>				
<b>NCI percentage</b>	10%	25%		
Non-current assets	16,184	24,517		
Current assets	11,330	716		
Non-current liabilities	(1,880)	-		
Current liabilities	(11,698)	(11,250)		
<b>Net assets</b>	<b>13,936</b>	<b>13,983</b>		
<b>Net assets attributable to NCI</b>	<b>1,459</b>	<b>3,500</b>	<b>12</b>	<b>4,971</b>
Revenue	14,345	-		
Profit/(loss)	4,116	(99)		
OCI	(1,280)	(256)		
<b>Total comprehensive income</b>	<b>2,836</b>	<b>(355)</b>		
Profit/(loss) allocated to NCI	431	(25)	(86)	320
OCI allocated to NCI	(134)	(64)	37	(161)
Cash flows from operating activities	2,425	3,781		
Cash flows used in investment activities	(1,815)	(23,858)		
Cash flows from financing activities (dividends to NCI: £nil)	500	20,737		
<b>Net increase in cash and cash equivalents</b>	<b>1,110</b>	<b>660</b>		

**NOTES FORMING PART OF THE FINANCIAL STATEMENTS (continued)**

for the year ended 30 September 2018

**28 Leases****Finance leases**

The Group leases plant and machinery with a carrying value of £19,000 (2017: £203,000). Such leases are generally classified as finance leases as the rental period amounts to the estimated useful economic life of the assets concerned and often the Group has the right to purchase the assets outright at the end of the minimum lease term by paying a nominal amount.

Future lease payments are due as follows:

	Minimum lease payments 2018 £000	Interest 2018 £000	Present value 2018 £000
Not later than one year	4	1	4
Later than one year and not later than five years	-	-	-
Later than five years	-	-	-
	<b>4</b>	<b>1</b>	<b>4</b>

	Minimum lease payments 2017 £000	Interest 2017 £000	Present value 2017 £000
Not later than one year	220	5	215
Later than one year and not later than five years	2	-	2
Later than five years	-	-	-
	<b>222</b>	<b>5</b>	<b>217</b>

The present values of future lease payments are analysed as:

	2018 £000	2017 £000
Current liabilities	4	215
Non-current liabilities	-	2
	<b>4</b>	<b>217</b>

**Operating leases — lessee**

The Group has entered into commercial leases on certain items of property, plant and equipment. These leases have an average life of greater than five years. There are no restrictions placed on the Group by entering into these leases.

The total future value of minimum lease payments under non-cancellable operating leases for property, plant and equipment are as follows:

	2018 £000	2017 £000
Not later than one year	2,388	2,860
Later than one year and not later than five years	4,604	5,667
Later than five years	4,286	4,021
	<b>11,278</b>	<b>12,548</b>



**NOTES FORMING PART OF THE FINANCIAL STATEMENTS (continued)**

for the year ended 30 September 2018

**29 Retirement benefits**

The Group operates a defined contribution pension scheme. The assets of the scheme are held separately from those of the Group in an independently administered fund. The pension cost represents contributions payable by the Group and amounted to £1,796,000 (2017: £1,506,000). Contributions totalling £833,000 (2017: £783,000) were payable to the fund at the balance sheet date and are included in other payables.

**30 Capital commitments**

At 30 September 2018, the Group and Company had capital commitments as follows:

	Group 2018 £000	Group 2017 £000	Company 2018 £000	Company 2017 £000
Contracted for but not provided within these financial statements	736	9,339	-	-

**31 Share-based payment****Share options**

The Group operates equity settled share option schemes for certain employees. Options are exercisable at a price equal to the nominal value of the parent Company's shares. The vesting period is three years. If the options remain unexercised after a period of ten years from the date of grant the options expire. Options are forfeited if the employee leaves the Group before the options vest.

The share options under the scheme are as follows:

**Year ended 30 September 2018:**

Year	No. of options						Option Price*	Exercise Period
	As at 1 October 2017	Granted in 2018	Exercised in 2018	Forfeited in 2018	As at 30 September 2018			
2013	222,000	-	-	-	222,000	0.10p	August 2016 to July 2023	
2015	775,036	-	(268,042)	(1,394)	505,600	0.10p	March 2018 to February 2025	
2015	97,575	-	(16,260)	-	81,315	0.10p	July 2018 to June 2025	
2016	2,985,107	-	(6,000)	(63,569)	2,915,538	0.10p	March 2019 to February 2026	
2017	463,702	-	-	(24,968)	438,734	0.10p	March 2020 to February 2027	
2018	-	10,711,851	-	(325,082)	10,386,769	69.5p	January 2021 to January 2028	

\* The option price is the nominal value of the parent Company's shares for options issued except for the options issued in 2018 for which the option price is the market price of the share on the date the options were granted.

Of the total number of options outstanding at 30 September 2018, 808,915 (2017: 222,000) were exercisable.

Options exercised in 2018 resulted in 290,302 shares being issued at a weighted average price of 0.1p. The related weighted average share price at the time of exercise was 58.1p per share.

**NOTES FORMING PART OF THE FINANCIAL STATEMENTS (continued)**

for the year ended 30 September 2018

**31 Share-based payment (continued)****Year ended 30 September 2017:**

Year	No. of options						Option Price*	Exercise Period
	As at 1 October 2016	Granted in 2017	Exercised in 2017	Forfeited in 2017	As at 30 September 2017			
2013	89,000	-	(89,000)	-	-	0.10p	August 2016 to July 2023	
2013	1,113,000	-	(891,000)	-	222,000	0.10p	August 2016 to July 2023	
2015	864,903	-	(11,144)	(78,723)	775,036	0.10p	March 2018 to February 2025	
2015	119,396	-	-	(21,821)	97,575	0.10p	July 2018 to June 2025	
2016	3,071,132	-	-	(86,025)	2,985,107	0.10p	March 2019 to February 2026	
2017	-	463,702	-	-	463,702	0.10p	March 2020 to February 2027	

\* The option price is the nominal value of the parent Company's shares

Options exercised in 2017 resulted in 991,144 shares being issued at a weighted average price of 0.1p. The related weighted average share price at the time of exercise was 83.6p per share.

**Share options issued in August 2013**

Share options outstanding at the year-end had a weighted average exercise price of 0.1p and a weighted average remaining contractual life of 5 years.

The fair value of the equity settled share options granted is estimated at the date of grant using the Black Scholes Merton model taking into account the terms and conditions on which the options were granted. The expense recognised for these options during the year was £nil (2017: £nil).

**Additional share options issued in August 2013**

Share options outstanding at the year-end had a weighted average exercise price of 0.1p and a weighted average remaining contractual life of 5 years. The fair value of the equity settled share options granted is estimated at the date of grant using the Black Scholes Merton model taking into account the terms and conditions on which the options were granted.

The expense recognised for these options during the year was £nil (2017: £nil).

**Share options issued in March 2015 and July 2015**

Share options outstanding at the year-end had a weighted average exercise price of 0.1p and a weighted average remaining contractual life of 6 years. The fair value of the equity settled share options granted is estimated at the date of grant using the Black Scholes Merton model taking into account the terms and conditions on which the options were granted.

The expense recognised for these options during the year was £246,000 (2017: £329,000). This has been reflected in the income statement and included within operating costs.

**Share options issued in March 2016**

Share options outstanding at the year-end had a weighted average exercise price of 0.1p and a weighted average remaining contractual life of 7 years. The fair value of the equity settled share options granted is estimated at the date of grant using the Black Scholes Merton model taking into account the terms and conditions on which the options were granted.

The expense recognised for these options during the year was £617,000 (2017: £663,000). This has been reflected in the income statement and included within operating costs.

Of the options issued in March 2016, 6,000 were exercised early in respect of good leavers.

**NOTES FORMING PART OF THE FINANCIAL STATEMENTS (continued)**

for the year ended 30 September 2018

**31 Share-based payment (continued)****Share options issued in March 2017**

Share options outstanding at the year-end had a weighted average exercise price of 0.1p and a weighted average remaining contractual life of 8 years. The fair value of the equity settled share options granted is estimated at the date of grant using the Black Scholes Merton model taking into account the terms and conditions on which the options were granted.

The expense recognised for these options during the year was £165,000 (2017: £110,000). This has been reflected in the income statement and included within operating costs.

**Share options issued in January 2018**

In 2017 a decision was made to replace an element of cash bonuses for the year with an award of share options to be granted after the year end this resulted in share options being issued in January 2018. Share options outstanding at the year-end had a weighted average exercise price of 69.5p and a weighted average remaining contractual life of 9 years. The fair value of the equity settled share options granted is estimated at the date of grant using the Black Scholes Merton model taking into account the terms and conditions on which the options were granted.

The expense recognised for these options during the year was £483,000 (2017: £500,000). This has been reflected in the income statement and included within operating costs.

**Share warrants**

In January 2015, the Company issued warrants to acquire 259,312 ordinary shares at 112p per share as part consideration for the acquisition of the Improve International Limited business and its subsidiaries. The exercise of these warrants is subject to the extension of certain contracts and the warrants are exercisable at any point between the extension of these contracts and six months thereafter.

The Group did not enter into any other share-based payment transactions with parties other than employees during the current or previous period.

The total charge reflected in the consolidated income statement in relation to all of the above share-based transactions, and included within operating costs was £1,511,000 (2017: £1,602,000). The share-based payment expense comprises:

	2018 £000	2017 £000
Equity-settled schemes	1,511	1,602
<b>Total share based payment charge</b>	<b>1,511</b>	<b>1,602</b>

The total charge reflected in the Company's income statement was £312,000 (2017: £369,000), all charged to operating costs in both years.

**NOTES FORMING PART OF THE FINANCIAL STATEMENTS (continued)**

for the year ended 30 September 2018

**32 Related party transactions**

Transactions between the Company and its subsidiary undertakings (see note 17), which are related parties, amounted to £3,737,400 in the year (2017: £1,912,800). These transactions related to intercompany recharges. Balances with subsidiary undertakings are shown in notes 20 and 21. Details of transactions between the Group and other related parties are disclosed below.

Included within trade and other payables due after more than one year are the following loans from related parties:

	Group 2018 £000	Group 2017 £000	Company 2018 £000	Company 2017 £000
Director	(60)	(60)	(60)	60
<b>Total</b>	<b>(60)</b>	<b>(60)</b>	<b>(60)</b>	<b>60</b>

The loan from Malcolm Pye, Chief Executive Officer, has no fixed repayment date and no interest is payable.

Group entities entered into the following trading transactions and outstanding balances with related parties that are not members of the Group:

	Transaction values for the year ended 30 September		Balance outstanding as at 30 September	
	2018 £000	2017 £000	2018 £000	2017 £000
<b>Sales of good and services</b>				
Salmar Genetics AS <sup>1</sup>	162	974	-	-
Bechmark Genetics Chile S.A. <sup>1</sup>	692	-	-	-
Great Salt Lake Brine Shrimp Cooperative, Inc <sup>2</sup>	343	195	18	103
Andromeda S.A. <sup>3</sup>	332	-	-	-
<b>Purchases</b>				
Benchmark Holdings Limited Executive Pension scheme <sup>4</sup>	90	72	22	-
Great Salt Lake Brine Shrimp Cooperative, Inc <sup>2</sup>	21,035	15,819	2,313	3,344

<sup>1</sup> Joint venture <sup>2</sup> Associate <sup>3</sup> A Director is a director of the parent undertaking of Andromeda S.A. <sup>4</sup> Pension scheme of a director

A contribution of Intellectual Property of £3.78m to Benchmark Genetics Chile S.A. as part of the acquisition during the year (note 16) has not been included in the value of sales above.

Remuneration for Key management personnel is included within note 7.

The Company is controlled by the shareholders. There is no single controlling party.

**33 Contingent liabilities**

There is a full cross guarantee in respect of certain borrowings of other Group undertakings. Total such borrowings of other Group undertakings at 30 September 2018 were £nil (2017: £nil).

**34 Notes supporting statement of cash flows**

Cash and cash equivalents for purposes of the statement of cash flows comprises:

	2018 £000	2017 £000
<b>Group</b>		
Cash at bank and in hand	24,090	18,779
<b>Cash and cash equivalents</b>	<b>24,090</b>	<b>18,779</b>
<b>Company</b>		
Cash at bank and in hand	2,309	1,776
<b>Cash and cash equivalents</b>	<b>2,309</b>	<b>1,776</b>



# 04

## ADDITIONAL INFORMATION

156 Glossary

157 Advisers



**GLOSSARY**

<b>3Es</b>	Environment, Ethics & Economics — Benchmark's framework for sustainability	<b>Histopathology</b>	Diagnosis and study of disease
<b>AAN</b>	Benchmark's Advanced Animal Nutrition division	<b>IFRS</b>	International Financial Reporting Standards
<b>Adjusted EBITDA</b>	EBITDA before exceptional and acquisition costs	<b>Investing Activities</b>	Investing Activities are those activities which have no associated income stream in the current period, but which are intended to provide the Group with income generating operations in future periods. Includes exceptional items, research and development expenditure, pre-operational expenses for new ventures and costs of acquiring new businesses
<b>Adjusted Operating Profit</b>	Adjusted Operating Profit is operating loss before exceptional items including acquisition related items and amortisation and impairment of intangible assets excluding development costs	<b>IP</b>	Intellectual Property
<b>AGM</b>	Annual General Meeting	<b>IPO</b>	Initial Public Offering
<b>AHD</b>	Benchmark's Animal Health division	<b>LTIP</b>	Long-term Incentive Plan
<b>AHPND</b>	Acute Hepatopancreatic Necrosis Disease — a shrimp disease — previously known as Early Mortality Syndrome	<b>M&amp;A</b>	Mergers & Acquisitions
<b>AIM</b>	Alternative Investment Market	<b>Organic growth</b>	Organic growth, as it applies to financial information, is the growth arising year on year in any part of the business eliminating the impact of the different ownership periods of any acquisitions made in either the current or prior year as appropriate
<b>CAGR</b>	Compound Annual Growth Rate	<b>PD</b>	Pancreas Disease
<b>CEO</b>	Chief Executive Officer	<b>QCA Code</b>	Quoted Companies Alliance Code — outlining best practice for quoted companies
<b>CFO</b>	Chief Financial Officer	<b>qPCR</b>	Quantitative polymerase chain reaction — a diagnostic tool
<b>CGU</b>	Cash Generating Unit	<b>QTL</b>	Quantitative Trait Loci — DNA containing/linked to genes that underlie a quantitative trait
<b>CleanTreat®</b>	Benchmark's purification system which removes any detectable traces of medicine from treatment water before it is discharged into the ocean	<b>R&amp;D</b>	Research & Development
<b>Constant currency</b>	2018 figures in GBP converted using average foreign exchange rates prevalent in 2017	<b>SalmoBreed Salten</b>	Benchmark's new land-based salmon egg and broodstock production facility currently under construction
<b>CPD</b>	Continuing Professional Development	<b>Salmosan®</b>	Benchmark's sea lice bath treatment
<b>EBITDA</b>	Earnings before interest, tax, depreciation and amortisation	<b>SIP</b>	Share Incentive Plan
<b>EMI scheme</b>	Enterprise Management Incentive scheme	<b>SPR</b>	Specific Pathogen Resistant
<b>EMS</b>	Early Mortality Syndrome in shrimp, now known as AHPND	<b>Total investment in R&amp;D</b>	R&D expensed costs plus capitalised development costs
<b>EU GMP</b>	EU Good Manufacturing Practice	<b>Trading Activities</b>	Trading Activities are those operations which generate earnings in the current period excluding Investing Activities
<b>FAO</b>	Food and Agriculture Organisation		
<b>FAWC</b>	Farm Animal Welfare Committee		
<b>FCR</b>	Feed Conversion Ratio		
<b>FY</b>	Financial Year		
<b>Genomic Selection</b>	Targeted breeding by selecting individuals based on their genome		
<b>GWE</b>	Gutted Weight Equivalent		

All images copyright © 2018 Benchmark Holdings plc and its subsidiaries.

This document and any information contained with it is the property of Benchmark Holdings Plc and its affiliates.

Printed on FSC Certified paper — Manufactured with Windpower

**ADVISERS****Nominated Adviser and Broker: Numis Securities**

10 Paternoster Square  
London  
EC4M 7LT

**Auditor: KPMG LLP**

1 Sovereign Square  
Sovereign Street  
Leeds  
LS1 4DW

**Registrars: Equiniti Limited**

Aspect House  
Spencer Road  
Lancing  
West Sussex  
BN99 6DA

**Financial Public Relations: MHP Communications**

6 Agar Street  
London  
WC2N 4HN

**Lawyers: Travers Smith LLP**

10 Snow Hill  
London  
EC1A 2AL

**Bankers: Lloyds Bank**

1st Floor  
Butt Dyke House  
33 Park Row  
Nottingham  
NG1 6GY

**Financial Advisers: Equity Strategies**

3rd Floor  
New Liverpool House  
15 Eldon Street  
London  
EC2M 7LD

**Information regarding forward-looking statements**

This document includes statements that are, or may be deemed to be, 'forward-looking statements'. These forward-looking statements can be identified by the use of forward-looking terminology, including the terms 'believes', 'estimates', 'plans', 'projects', 'anticipates', 'expects', 'intends', 'may', 'will', or 'should' or, in each case, their negative or other variations or comparable terminology, or by discussions of strategy, plans, objectives, goals, future events or intentions. These forward-looking statements include all matters that are not historical facts. They appear in a number of places throughout this document and include, but are not limited

to, statements regarding the Company's intentions, beliefs or current expectations concerning, among other things, its business, results of operations, financial position, prospects, growth, product pipeline, strategies and the industry in which it operates. By their nature, forward-looking statements involve risk and uncertainty because they relate to future events and circumstances and are not guarantees of future performance. The actual results may differ materially from those described in, or suggested by, the forward-looking statements contained in this document. Any forward-looking statements in this document

reflect only the Directors' and the Company's current intentions or beliefs. Subject to the requirements of the AIM Rules, the Disclosure and Transparency Rules and any other applicable law or regulation, Benchmark explicitly disclaims any obligation or undertaking publicly to release the result of any revisions to any forward-looking statements in this document that may occur due to any change in Benchmark's expectations or to reflect events or circumstances after the date of this document.





**COMMITTED TO  
THE SUSTAINABLE  
DEVELOPMENT OF THE  
AQUACULTURE INDUSTRY**





**Benchmark Holdings plc**

Benchmark House  
8 Smithy Wood Drive  
Sheffield  
S35 1QN

t. +44 (0)114 240 9939  
w. [benchmarkplc.com](http://benchmarkplc.com)  
e. [info@benchmarkplc.com](mailto:info@benchmarkplc.com)