

Company number 03568010 (England and Wales)

Microsaic Systems plc

Annual Report and Financial Statements

31 December 2017

CORPORATE INFORMATION AND ADVISORS

Directors	P W Grant G D Tracey B J Metcalf C J Buckley A S Holmes E M Yeatman
Company Secretary	A S Holmes
Company number	03568010
Company website	www.microsaic.com
Registered office	GMS House Boundary Road Woking Surrey GU21 5BX
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CHAIRMAN'S STATEMENT

For the year ended 31 December 2017

On behalf of the Board, I am pleased to present the Company's Annual Report and Financial Statements for the year ended 31 December 2017.

Investment case

Having joined as Non-Executive Chairman at the beginning of January 2018, in my first statement, I thought it would be informative to set out what attracted me to join Microsaic:

- There is a clear vision and strategy, which recently appointed Chief Executive Officer ("CEO"), Glenn Tracey, and a skilled management team and staff have the commitment and expertise to deliver;
- A key target is the growing and very substantial market for manufacturing biopharmaceuticals ("bioprocessing"), where the Company's products have the potential to support significant enhancements in efficiency and quality assurance;
- The primary approach to market is through strategic collaborations with OEMs ("Original Equipment Manufacturers"). In December 2017, one collaboration, with one of the foremost players in the global market for scientific instrumentation, was extended into a second phase of integration, ahead of a potential commercialisation phase; and
- The Company's technology, originally conceived at Imperial College London, is protected by over 60 patents, many years of in-field experience, and a pragmatic development programme focused on meeting unmet market needs and creating new market opportunities.

Strategic Progress

During 2017, significant progress has been made in realigning the primary focus of the Company on applications in the growing biopharma market. In April we signed an amended agreement with one of the foremost players in the global market for scientific instrumentation. Following the successful completion of phase one, we signed a further extension to our collaboration in December. This second phase is expected to be completed in H2 2018, and our goal is to follow this with full phase three product development. This alone would represent a major commercial opportunity for the Company. During 2017, we have also continued to develop relationships with other partners to add further sales opportunities in the biopharma market.

The Company has a strong product development programme aimed at supporting its bioprocessing applications and maintaining its leading position in miniaturised mass spectrometer ("MS") detection instruments and technologies. Enhancements currently in the pipeline will further extend the mass range for biologics detection, and introduce new capabilities, such as on-line desalting, which allows for the purification of biomolecules in real time.

CHAIRMAN'S STATEMENT

For the year ended 31 December 2017

Financial Results

In June 2017 we advised that conditions in our traditional small molecule markets continued to be challenging, and as a result, our H1 revenues were significantly reduced compared with H1 2016. In H2 these conditions continued, with some improvement in sales over H1 but, as expected, full year revenues at £342,514 were substantially lower than 2016 (£851,180). The challenge of achieving growth in our traditional markets illustrates why we have shifted our strategy and development emphasis onto new market sectors, particularly in bioprocessing, where we believe there are significant commercial opportunities in the medium to long term.

Through cost reductions and control, overheads in 2017 were £3,049,611, £616,704 below 2016 and, as a result, EBITDA at -£2,754,284 (2016: -£3,267,408), loss before tax at £2,888,482 (2016: £3,405,804) and cash at £3,182,176 (2016: £5,728,544) were all in line with the Board's expectations.

Key commercial goals for 2018

Over the coming 12 months, we are aiming to significantly advance our commercial development in the biopharma market, as well as continuing to support existing partners and establish new partnerships with OEMs which see the potential of our unique technology. The primary focus will remain on bioprocessing and successfully completing phase two of our agreement with one of the foremost players in the global market for scientific instrumentation.

Our platform approach to development, and its commercialisation through incremental product releases, is relatively low risk and designed to ensure that our technology remains distinct and increasingly suited to the evolving needs of pharmaceutical R&D and manufacturing. We are looking to leverage this capability to open up new opportunities for future growth.

Board and management

The past year has seen significant changes in the Board. Colin Nicholl retired as Chairman on 31 January 2017, with non-executive director Eric Yeatman taking the post of Interim Chairman until the end of the year. I was very pleased to accept the position of Non-Executive Chairman in December, and to take up the role on 1 January 2018. We were delighted to announce the appointment of Glenn Tracey, formerly Chief Operating Officer, as CEO on 25 September 2017, following the retirement of Jim Ramage, for health reasons, on 15 May 2017.

I am looking forward to continuing to work with Glenn and the whole Board in the delivery of our strategic objectives in 2018 and beyond. On behalf of the Board I would like to express our thanks once again to Jim Ramage and Colin Nicholl for the major contributions each made to the Company and to Eric Yeatman for taking on the Interim Chairman role.

CHAIRMAN'S STATEMENT

For the year ended 31 December 2017

Staff

On behalf of the Board, I would like to express my sincere thanks to all our staff for their hard work and loyalty during 2017.

Peter Grant

Chairman

2 March 2018

STRATEGIC REPORT - Chief Executive's Review

For the year ended 31 December 2017

Introduction

2017 was a year of transition as we made substantial progress towards the key strategic goal of establishing our technology in the bioprocessing market. Lower sales in the year were a result of the challenging conditions in the small molecule market. The organisation was streamlined to mitigate the impact of lower sales leading to a significant improvement in our bottom line over 2016.

I was delighted to be appointed to the role of CEO in September 2017. I firmly believe that Microsaic is well-positioned to transform bio-molecular detection by bringing its unique technology to improve efficiency and process control in the development and production of biopharmaceuticals.

Key achievements in 2017

- Successfully completed a technical feasibility phase with one of the foremost players in the global market for scientific instrumentation in a bioprocessing application and moving this into technical integration, ahead of a potential commercialisation phase;
- Collaborations with UK and US leaders in bioprocessing science and technology, which will inform further OEM discussions and wider application opportunities;
- Completion of development of the 4500 MiD[®], with extended mass range specifically designed for peptide and small protein detection, as the current market moves into biological synthesis;
- Memorandum of Understanding signed to further extend the Company's outsourced manufacturing to increase capacity and focus future investment on product innovation; and
- Cost reduction programme implemented in Q1, reducing non-R&D headcount and leading to a reduction in operating expenses of £616,704 compared with 2016.

Partnerships

The Company made good progress on product development and collaborations in support of its growth strategy in the large and high-growth bioprocessing market. This includes the completion of a technical feasibility phase and the signing of a next collaboration phase with one of the foremost players in the global market for scientific instrumentation. The Company's goal is to follow this with full product development and commercial launch. As stated above, the Board believes that this opportunity alone represents a major commercial opportunity for Microsaic.

In the Company's traditional (small molecule) market, there have been limited sales to OEMs and distributors and it has become clear that the market opportunity with these partners was substantially less than their original expectations. Notwithstanding this, the Board believes that there are opportunities in the small molecule market, and is engaged with existing and potential OEM and distributor partners with a view to resuming growth in this segment of the market.

STRATEGIC REPORT - Chief Executive's Review

For the year ended 31 December 2017

Bioprocessing

Pharma is making substantial capital investment in support of biologics demand

Microsaic's technology is a powerful point of use analysis tool within complex biologic manufacturing workflows. A typical workflow requires real-time data to drive production optimisation, ensure process-control compliance and reduce risk for the final product.

The Board believes the bioprocessing market to be a strong opportunity for Microsaic's MS detectors, with the potential to drive substantial new revenues from new customers with global reach. The total Biologics Market is estimated to be approximately \$450Bn by 2019¹, which represents a third of total revenues in the Pharmaceutical sector. The rate of biologic production line installations represents a significant investment for this sector, with a current estimated value of approximately \$20Bn either in planning or underway².

The Board believes that the Company's long-term sustainable growth will come from matching focused innovation in MS-directed bioprocessing technology with strategic OEM needs.

Achieving the right quality, and ensuring compliance

The complex structure of biologics makes them sensitive to small changes in manufacturing parameters, raw materials and storage conditions. Slight changes in the structure of the biologic could increase the chance of an adverse therapeutic event, if left undetected.

Quality by Design ("QbD") ensures process compliance through systematic discipline, focused on the drug's critical quality attributes ("CQA"). These attributes relate to the physical, chemical and biological attributes of the biologic drug.

Biologic manufacture demands real-time analysis throughout the entire process: the raw incoming goods, the upstream 'in-cell' drug production, and subsequent downstream product purification.

This requires:

- That the drug company has identified critical material attributes ("CMA") of its input materials;
- That the manufacturing process conforms to critical process parameters ("CPP"); and
- That there is a functional relationship that binds CMA/PP to CQA.

¹ Global Life Sciences Outlook, Deloitte, 2016

² Interview with Andrew Skibo, Head of Global Biologics Operations and Global Engineering, MedImmune/AZ, Life Science Leader, December 2016

STRATEGIC REPORT - Chief Executive's Review

For the year ended 31 December 2017

Point of need mass detection serves multiple access points during bioprocessing

Microsaic's "all in one" small footprint detection is ideally placed for biomolecular confirmation throughout the bioprocessing workflow. Microsaic's technology does not require cumbersome external pumps, and there is no need for an external PC, allowing for complete integration with third party OEMs. The software and hardware also offer easy maintenance and ease of use so that line operators can be trained to carry out the analysis in the production line. This should significantly improve efficiency and process control compared with traditional MS detection methods, which often involve sending samples to be analysed by specialists in a separate laboratory, possibly off-site, and then waiting for results to return, potentially several days or weeks later, before knowing whether the batch meets the CQA.

The Company's continued investment in state of the art product design for point of need MS detection will ensure current and future compliance with customer expectations in a wide range of bioprocessing applications.

Small molecule MS applications

Continued support in areas of specific focus for small molecule MS applications

Although more emphasis is being placed on new application areas, especially in bioprocessing, the Company will continue to operate in the traditional small molecule market and fully support its existing OEMs. The Company's 4500 MiD® Detector will be launched in 2018 and provides an opportunity to attract new OEMs and open new application areas previously not accessible. The compact 4500 MiD® combines the vacuum system, electronics and computer inside one box.

The Board believes in continuing to seek growth in this market, through commercialisation of new technology via OEM partners and new distribution networks.

Products and product development

Microsaic has successfully developed and implemented advanced technology at the core of its design with over 60 patents to date. This has led to a solid foundation serving scientists in the laboratory in small molecule drug discovery.

During 2017, a number of product improvements were brought together in the 4500 MiD® MS Detector, which the Board believes will be attractive to the growing market for lab-based applications with larger biological molecules, such as peptides and small proteins.

In 2017, good progress has been made in extending the product capabilities further into bioprocessing applications, where a range of biological entities, including monoclonal antibodies, can be analysed by direct analysis in minutes. This compares with traditional analysis in remote centralised laboratories sometimes taking many days or even weeks to produce results.

STRATEGIC REPORT - Chief Executive's Review

For the year ended 31 December 2017

Future product specifications will be driven by end-user requirements. This will inform Microsaic's product strategy as its MS Detectors move from the lab into production, and front-line operating environments. Microsaic will ensure that its strategic product development will remain focused on meeting demanding bioprocessing applications.

However, many of these enhancements are expected to also provide a pipeline of competitive features able to address a wider range of small molecule application areas.

Microsaic has identified a number of opportunities for further substantial enhancement of the product range, including:

- Widened mass range to detect whole and partial biologics;
- Greater sensitivity to enable wider application for CQA, CPP and CMAs (see above);
- Software and hardware driven "ease of use" initiatives, to reduce planned product maintenance and drive bioprocessing efficiencies; and
- Data driven analytics, to generate insights from information to optimise bioprocessing workflows.

In the longer-term, increasing trends towards personalized medicine present very significant opportunities in diagnostics for Microsaic, where rapid and accurate, point-of-care bio-molecular detection will be essential to determining the right treatment for patients. Although not part of the current development plans, we believe Microsaic's unique patented technology has the potential to offer important solutions in this significant and growing market.

Commercial Model

Building long-term co-development partnerships establishes greater competitive advantage

Microsaic's core strengths are its technical and product development capabilities and its experience in working with OEM partners to co-develop products.

The Company derives revenues from R&D collaboration agreements, sale of products, mainly to OEMs and distributors, and from after-sale services, consumables and spare parts.

The Company's commercial approach is highly flexible to suit each partner's needs, helping to craft the OEM's application in the early stages of scientific proof of principle, or into a broader product concept. Microsaic has proven expertise in taking these ideas all the way through to development, commercialisation and shipping. Microsaic also brings expertise from its leading scientists, technologists, and engineers to meet the OEM's near term or longer-term challenges.

In general, the Company's strategy is to partner with OEMs which have established global sales and service channels.

STRATEGIC REPORT - Chief Executive's Review
For the year ended 31 December 2017

Building partnerships over the long-term will establish greater competitive advantage for the Company, as its products are tailored to specific application needs.

Performance Measurement

The ongoing performance of the Company is managed and monitored using a number of key financial and nonfinancial performance indicators as detailed below.

The Company's revenues are monitored as follows:

Revenue	Year to 31 December 2017 £	Year to 31 December 2016 £	Inc/(Dec) %
Products	229,400	723,515	(68.3)
Consumables, accessories and spares	96,797	88,508	9.4
Service and support	16,317	39,157	(58.3)
Total	342,514	851,180	(59.8)

Revenues comprise sales of products, consumables (which includes the sales of service spares, accessories and consumables) and service and support income. The Board was disappointed in the sales performance and has increased its efforts to add more OEM's and distributors.

The Company's trading results and cash are monitored on a monthly basis and for the full year were as follows:

Profit/(Loss) & Cash Metrics	Year to 31 December 2017 £	Year to 31 December 2016 £	Inc/(Dec) %
Loss from operations before share based payments, interest & tax	(2,877,366)	(3,308,373)	(13.0)
Net cash used in operating and investing activities	(2,546,368)	(2,938,860)	(13.4)
Cash and cash equivalents	3,182,176	5,728,544	(44.5)

STRATEGIC REPORT - Chief Executive's Review

For the year ended 31 December 2017

The Company's profitability is monitored against budget and forecast on a monthly basis. The cash position is also monitored monthly and forecasts are updated on a regular basis. The Board mitigated the impact of the fall in revenues by reducing overheads, ensuring that the cash position at 31 December 2017 was in line with market expectations at the time of the 2016 fundraise, whilst at the same time maintaining R&D capacity.

A full analysis of the financial performance is detailed below.

Non-financial key performance indicators are focused on a number of areas, including manufacturing - such as cleanroom efficiencies, supplier quality and final test - and are built into our Quality Management System. Another key non-financial indicator is the feedback from our OEMs on instrument downtime and reasons for this and utilising this information to optimise the product and its applications to provide a more efficient and proactive service.

Financial Results

Total revenue at £342,514 fell by 59.8% compared with last year (2016: £851,180). Product revenue of £229,400 decreased by 68.3%, as consumable sales of £96,797 increased by 9.4%, while service and support revenue decreased by 58.3%.

Gross profit for 2017 amounted to £121,241 which was 59.9% below 2016 as a result of the decline in product sales. The gross margin percentage for 2017 of 35.4% was in line with 2016.

Other operating income amounted to £51,004 which represented co-development income (£47,281) from one of the foremost players in the global market for scientific instrumentation and an insurance claim (£3,723).

Operating expenses were £3,049,611 (2016: £3,666,315), a reduction of 16.8% with savings achieved in all key areas of the business following the implementation of a cost reduction programme in Q1 as a result of difficult trading conditions. R&D expenses in 2017 were £893,579 (2016: £1,116,242) or 29.3% (2016: 30.4%) of total operating expenses.

The loss for the year, before share-based payments, tax and interest, was £2,877,366 (2016: Loss £3,308,373) a reduction of £431,007 or 13.0% over 2016.

The tax credit for the year is £245,479 and represents the R&D tax credit claim for the year.

The total comprehensive loss reduced by £458,982 to £2,643,003 (2016: Loss £3,101,985) due to the savings in overheads. As a result the basic loss per share fell by 50.2% to 1.46p (2016: Loss per share 2.93p).

Total assets at £4,372,866 are £2,757,754 below last year, mainly due to a lower cash balance at the year end of £3,182,176 (2016: £5,728,544). The Company raised £5,000,000 after expenses in H2 2016.

STRATEGIC REPORT - Chief Executive's Review

For the year ended 31 December 2017

Equity at £3,899,931 was £2,613,142 below last year. This can largely be explained by the increase in retained losses in the year.

Total liabilities reduced by 23.4% to £472,935, mainly due to lower trade and other payables (down £91,111), lower accruals (down £74,568), higher deferred income (up £37,090). The deferred income relates to 50% of the phase two development income with one of the foremost players in the global market for scientific instrumentation, which will be recognised as other operating income in 2018 on completion of joint milestones.

Total equity and liabilities at £4,372,866 was £2,757,754 down on 2016 due to the increase in retained losses and lower trade and other payables.

Going Concern

The Company has sufficient cash to cover its anticipated working capital requirements through to Q1 2019. Subject to resources being available, which the Directors have a reasonable expectation of, the Board plans to continue investment in R&D, in particular to support the enhancement of technology for the important bioprocessing market. Therefore, the Directors have adopted the going concern basis of reporting in preparing the financial statements. This is explained in more detail in Note 3.

Outlook

Microsaic is developing several OEM opportunities in the small molecule market which may convert into collaboration agreements, and then onto commercialisation during 2018 and 2019. Given the lead time for developing new relationships and applications, the Board anticipates modest growth in revenues in 2018 compared with 2017, though this is likely to be weighted to the second half of the year. Whilst the development of collaborations in the bioprocessing market is a key objective it will not contribute materially to revenues in 2018.

The Company plans to increase R&D resources in 2018 to meet its development goals. Therefore, we expect total overheads in 2018 to increase over 2017 levels as we invest in the business. This investment will be controlled and in line with our Budget and 5 Year Plan.

In order to scale up manufacturing in preparation for future growth opportunities, the Company is extending the outsourcing of the manufacture of its MS detection instruments in 2018 to include proprietary components and assemblies currently manufactured in-house. This move will lead to greater manufacturing efficiency, flexibility and capacity to meet market requirements. In the short term, cost of goods will increase at low volumes, but over time as volumes increase the Board anticipates that cost of goods will reduce through volume-related discounts and process efficiencies.

Given progress to date with product development and the collaboration with one of the foremost players in the global market for scientific instrumentation, the Board remains confident in the longer-term prospects for the business.

STRATEGIC REPORT – Risk Management
For the year ended 31 December 2017

The Company manages risk from an operational perspective, where it assesses and weighs up the potential risks to the business and how it can mitigate these risks. The Board has reviewed risks and uncertainties facing the Company and has identified the major risks, and associated mitigating actions to be as follows:

Description	Risk	Risk rating pre-mitigation	Mitigating action	Risk rating post-mitigation
Unable to raise sufficient funds in the future	Inability to continue as a going concern beyond Q1 2019	HIGH	Work closely with our advisors. Communicate effectively with the market. Control expenditure and cash and achieve key performance milestones	MEDIUM to HIGH
Loss of competitive advantage	New entrant to the market might capture market share	HIGH	Investment in R&D and ensure a strong commercial presence through OEMs	MEDIUM
Delay in bringing product development with OEM partners to market	Delay in developing and commercialising a combined product offering with an OEM partner	HIGH	Ensure the process is clearly defined and milestones are realistic. Continually monitor progress in each stage of the process and address delays	MEDIUM
Retention of key employees	Loss of key employees and subsequent difficulty in recruiting suitably qualified and skilled replacements	MEDIUM	Ensure the remuneration package is competitive including share based incentives. Maintain emphasis on retaining key staff by investing in them	MEDIUM
Theft of intellectual property (IP)	Competitor developing competing products	MEDIUM	Ensure security on servers is monitored and maintained. Ensure contracts are robust in protecting the Company's IP	LOW

The top risk for the Company is the potential inability to raise sufficient funds in the future and, therefore, being unable to realise its development plans. The potential for raising funds and the adoption of the going concern basis for the financial statements is dealt with in the Strategic Report and Note 3 to the financial statements. Key financial risks are dealt with in the Director's Report.

The Board is continuing to evaluate how Brexit may affect the Company and is preparing contingency plans for different eventualities. Currently, the Company sells the majority of its

STRATEGIC REPORT – Risk Management
For the year ended 31 December 2017

products to the European Union (“EU”) so if tariffs were applied this could have an adverse effect on profitability.

The Company currently manufactures its products in the UK but with some components imported from the EU. If tariffs were applied on imported components, this would increase cost of goods and adversely affect profitability.

STRATEGIC REPORT – Company and Product Overview

For the year ended 31 December 2017

Microsaic develops microengineered analytical instruments that are based on the scientific technique of mass spectrometry (“MS”). MS is widely accepted as one of the most reliable methods for identifying the chemical make-up of substances, and Microsaic was the first company to have commercialised and patented chip-based MS technology using silicon microengineering.

The analysis method of choice

MS is an established analytical technique used in many laboratories to accurately identify and quantify trace levels of chemical or biological compounds based on their unique molecular mass. Today, MS is the standard means of measuring the composition of samples during pharmaceutical development, and is also widely used in other industries including healthcare, environmental safety, food and drink, security, petrochemicals and mining. By miniaturising MS to desk-top size, Microsaic has made it practical for a wider range of users and applications within these fields, although Microsaic is now primarily focused on developments in the Pharma and Biopharma markets.

History of the Company

Microsaic Systems was established in 2001 from the highly regarded Optical and Semiconductor Devices Group at Imperial College London. It has been based at headquarters in Woking, UK since September 2004 and its ordinary shares were admitted to trading on AIM, a market of the London Stock Exchange, in April 2011 (ticker: MSYS).

Continuing evolution

The 3500 MiD® was the world’s smallest MS instrument when it was launched in 2012. Its successor, the 4000 MiD®, was launched in 2013 featuring an even smaller footprint than the 3500 MiD® and allowing it to fit even more comfortably into a standard laboratory fume hood. Its ‘plug & play’ components enable users to maintain the system themselves, resulting in less down-time, a lower maintenance cost and greater flexibility within the laboratory. Development of the 4500 MiD® was completed in 2017 and it will be launched in H1 2018. The 4500 MiD® has been designed to be highly robust and has a greater mass range for the detection of larger molecules.

Key features

Key features of the MiD® include:

- Fast install, low maintenance, and ease of use to non-specialist users;
- Best in class for power and utility requirements;
- Fits inside a standard fume hood without the need for an external pump;
- Integrated PC, remote operation, and intuitive to use;
- User serviceable consumable parts; and
- Open software for easy integration into lab systems.

STRATEGIC REPORT – Company and Product Overview
For the year ended 31 December 2017

To further expand the marketplace for the MiD®, the MiDas™ compact interface module offers automated liquid handling for direct MS analysis in real time at the lab bench or in the fume hood.

The Company has an on-going R&D programme building on the achievements already made and focused on increasing the reach of its core Ionchip® technology, which underpins the MiD®. The product pipeline also includes more sophisticated MS systems, including a triple quadrupole system (beta version). The Company is welcoming interest from new partners for further product development and channels to markets for this technology, especially in life science applications.

The Strategic Report was approved by the Board of Directors on 2 March 2018 and signed on its behalf by:

Glenn Tracey
Chief Executive Officer

BOARD OF DIRECTORS

For the year ended 31 December 2017

Peter Grant - Non-executive Chairman, Age 62

Peter Grant had an executive career spanning 40 years, nearly half at listed company board level. His executive career included CEO of Skyepharma PLC, CFO of Skyepharma PLC, Group Finance Director at Eurodis Electron PLC, CFO at WorldPay Group plc, Group Chief Executive at Molins PLC and Finance Director at Molins PLC. Prior to this he held a variety of senior commercial, financial and general management roles in the General Electric Company PLC group of companies. He holds an MA in Mathematics from the University of Oxford and is a Chartered Accountant. Peter is Chairman of LiDCO Group Plc, Non-Executive Director and Chair of the Audit and Risk Committee of Abzena plc, and a Non-Executive Director of Labatec Pharma SA. In addition to chairing the Board, Peter chairs the Finance and Audit Committee and is a member of the Remuneration Committee of the Company. Peter joined the Board on 1 January 2018.

Glenn Tracey - Chief Executive Officer, Age 46

Glenn Tracey has 20 years' experience leading product marketing and R&D for small and large companies in sensing and detection, across applications in human and environmental health. For the majority of this time, Glenn was at global life sciences company PerkinElmer, where he progressed through multiple senior roles advancing PerkinElmer's environmental health technologies from high-end laboratory detection to field-based sensing across a number of markets such as food, air, water and pharmaceuticals. Glenn joined the Company in March 2015 and was appointed to the Board on 1 December 2015.

Bevan Metcalf - Finance Director, Age 60

Bevan Metcalf has 35 years of financial management experience with international companies primarily in the mining and pharmaceuticals sectors, including Beowulf Mining (2014-2017), Afferro Mining (2008-2013), African Eagle Resources (2004-2011), Orion Corporation (1995-2003) and GlaxoSmithKline (1984-1995). In the past ten years, he has been involved with companies listed on the AIM market of the London Stock Exchange and on the Toronto stock exchange as Finance Director, Chief Financial Officer and in a non-executive director capacity. Bevan is a Member of the Chartered Accountants – Australia and New Zealand, and he has a degree in Management Studies from the University of Waikato, New Zealand. Bevan was appointed to the Board of the Company on 18 December 2015.

Christopher Buckley - Non-Executive Director, Age 56

Christopher Buckley has more than 30 years of international marketing and general management experience in the global Pharmaceutical industry with a proven track record of translating scientific innovations into competitive customer-focused benefits. Most recently, he was a Global Brand Director at Novartis, at which he spent the majority of his career progressing through a variety of local, regional and global roles. He brings Microsaic a wealth of strategic management experience, coupled with the pragmatic and commercial expertise to effectively grow global brands. Mr Buckley holds a B.Sc. Hons in Pharmacology and Physiology from the University of Aston, UK. Christopher was appointed to the Board of the Company on 1 April 2016 as a Non-Executive Director. He is a member of the Finance and Audit Committee and the Remuneration Committee.

BOARD OF DIRECTORS

For the year ended 31 December 2017

Andrew Holmes - Non-Executive Director, Age 53

Andrew Holmes is Professor of Micro-Electro-Mechanical Systems at Imperial College London and a co-founder of the Company. Professor Holmes was educated at Cambridge University and Imperial College London, and specialises in research into microfabrication and micropower technologies. Andrew has been Company Secretary since 2004 and is a member of the Finance and Audit Committee and the Board's Remuneration Committee.

Eric Yeatman - Non-Executive Director, Age 55

Eric Yeatman is Professor of Micro-Engineering at Imperial College London and was appointed Head of the Department of Electrical and Electronic Engineering in September 2015. Eric is a co-founder of the Company. He chairs the Remuneration Committee and sits on the Board's Finance and Audit Committee. Eric was educated at Dalhousie University (Halifax, Canada) and Imperial College London. He specialises in micro-systems research and has acted as an advisor to two venture capital funds.

Eric has held the following roles within the Company:

- Chairman: 2004 – December 2011
- Interim CEO: December 2011 – November 2012
- Chairman: November 2012 – June 2013
- Non-Executive Director: June 2013 – February 2017
- Interim Chairman: February 2017 – December 2017
- Non-Executive Director: January 2018 to date

DIRECTORS' REPORT

For the year ended 31 December 2017

The Directors present their report for the year ended 31 December 2017.

Principal activity, business review and business risks

The principal activity of the Company continued to be the research, development and commercialisation of mass spectrometry instruments. A review of the business, its prospects and its research and development activities is contained within the Strategic Report.

Results and dividends

The results for the Company are given in the statement of comprehensive income set out on page 39. The Company is currently making losses and has retained losses which have to be recovered before it can pay a dividend. Therefore, the Directors do not recommend the payment of a dividend (2016: nil).

Research and development ("R&D")

R&D is fundamental to the Company's operations and has led to the filing of over 60 patents. During the year the Company had approximately ten staff working on R&D. R&D expenses in 2017 were £893,579 (2016: £1,116,242) or 29.4% (2016: 30.4%) of total operating expenses. Subject to resources being available, current plans are to continue to invest in R&D, especially to support the enhancement of technology for the important bioprocessing market.

Directors

Since 1 January 2017 the following Directors have held office:

P W Grant (Appointed 1 January 2018)

G D Tracey

B J Metcalf

C J Buckley

A S Holmes

C J Nicholl (Retired 31 January 2017)

J C Ramage (Retired 15 May 2017)

E M Yeatman

P W Grant was appointed on 1 January 2018 as Non-Executive Chairman. At the forthcoming Annual General Meeting B J Metcalf will retire by rotation and be proposed for re-appointment and P W Grant will retire as he was appointed by the Board in the year and be proposed for re-appointment.

DIRECTORS' REPORT

For the year ended 31 December 2017

Directors' interests

The Directors' interests in the shares of the Company at 31 December 2017 were:

	Ordinary shares of 0.25p each at 31 December 2017		Ordinary shares of 0.25p each at 31 December 2016	
	Number	%	Number	%
P W Grant ⁽¹⁾	-	-	-	-
G D Tracey	300,000	0.17	300,000	0.17
B J Metcalf	300,000	0.17	300,000	0.17
C J Buckley	300,000	0.17	300,000	0.17
A S Holmes	3,182,111	1.75	3,182,111	1.75
E M Yeatman	3,896,632	2.14	3,896,632	2.14
	7,978,743	4.40	7,978,743	4.40

(1) P W Grant appointed 1 January 2018

Significant shareholdings

Shareholders, excluding Directors, having a beneficial interest of 3% or more of the Company's shares as at 31 December 2017:

	Ordinary shares of 0.25p each at 31 December 2017	
Shareholder	Number	%
Parkwalk Advisors	54,240,838	29.91
Octopus Investments	18,104,281	9.98
Fidelity International	17,304,696	9.54
Herald Investment Management	12,199,625	6.73
Nigel Wray	8,207,122	4.53
Directors	7,978,743	4.40
Hargreaves Lansdown, stockbrokers	6,782,576	3.74
Interactive Investor	5,685,318	3.13

Employees

The Company regards the expertise and contributions of its employees as critical to the future success of the business. The Company engages with its employees to understand all aspects of the business and seeks to remunerate its employees fairly. The Company gives full and fair consideration to applications for employment received regardless of age, gender, colour, ethnicity, disability, nationality, religious beliefs or sexual orientation.

DIRECTORS' REPORT

For the year ended 31 December 2017

The Board takes account of employees' interests when making decisions and suggestions from employees aimed at improving the Company's performance are encouraged.

Company share ownership plans

The Company operates two Employee Share Option Schemes ("ESOS"), an approved scheme and an unapproved scheme, for the benefit of its employees and Executives Directors.

The ESOS were formed to enable the incentivisation of key employees to be aligned to the performance of the Company. Under the ESOS the Company grants to employees options to acquire the Company's ordinary shares subject to:

- vesting periods (normally three years for new grants) and a total exercise period of ten years from the date of grant;
- the exercise price normally being the market price of the ordinary shares at the close of business the day before the date of grant as agreed with HMRC; and
- performance conditions, as appropriate.

Options are granted up to the maximum amount allowed under the limits of the Enterprise Management Incentive (EMI) Scheme - these options are called 'Approved Options'. The EMI Scheme is subject to the provisions of Schedule 5 of the Income Tax (Earnings and Pensions) Act 2003 and have tax advantages for the employee and employer. There is an unapproved scheme, which has no tax advantages, for those employees who do not qualify for the Approved Options.

The Company received approval at its 2011 AGM to issue equity securities to employees and Directors on conversion of their options up to a maximum of 10% of the Company's issued share capital over a rolling ten-year period. At 31 December 2017 181,365,146 shares were in issue, and so the maximum option pool is 18,136,515. Unexercised options outstanding at 31 December 2017 were 5,447,200. Of these, 4,821,000 have not yet vested. Since the Company was listed on AIM in 2011 1,534,100 shares have been issued in respect of exercised options. Thus the remaining option pool at 31 December 2017 was 11,155,215.

On 2 January 2018, the Company awarded options over 9,000,000 ordinary shares of 0.25 pence each in the Company, representing approximately 4.96% of the issued share capital of the Company. Details of the awards can be found in Note 29 to the financial statements.

Management of risk

The management of operational risk is covered in the Strategic Report. Financial risk is managed as follows:

Liquidity risk

The Company finances its operations from equity funding provided by shareholders and revenues generated by the business. The Company seeks to manage liquidity risk to ensure sufficient funds are available to meet requirements.

DIRECTORS' REPORT

For the year ended 31 December 2017

The Company invests its cash reserves in bank and money market deposits as a liquid resource to fund its operations. The Company's strategy for managing cash is to balance interest income with counterparty risk ensuring availability of cash to match the profile of the Company's cash flows.

Interest rate risk

The Company does not face any significant interest rate risk as it has no borrowings.

Surplus funds are invested to maintain a balance between accessibility of funds, competitive rates, and counterparty risk whilst investing funds prudently.

Credit risk

The Company manages its credit risk in cash and cash equivalents by spreading surplus funds between creditworthy financial institutions.

The Company is also exposed to credit risk attributable to trade and other receivables. The maximum credit risk in respect of the financial assets at each year end is represented by the balance outstanding on trade and other receivables. The Company has limited exposure to credit risk, as the majority of its trade and other receivables are due from major corporations and institutions.

Foreign currency risk

The majority of the Company's transactions are denominated in pounds sterling.

The Company has no long term commitments to purchase goods or services in foreign currencies. Purchases denominated in foreign currency are expensed at the exchange rate prevailing at the date of the transaction, and comprise an immaterial proportion of the Company's total expenditure.

The only assets and liabilities denominated in foreign currencies relate to trade payables with overseas counterparties together with small balances of US dollar and Euro currencies to settle these liabilities. The risks and sums involved are considered to be immaterial.

Health and safety and the environment

The Company is committed to providing a safe environment for its staff and other parties for whom it has a responsibility. It has set up systems and processes to ensure compliance with health and safety legislation and the Board considers health and safety matters at its regular monthly meetings.

The Company is also mindful of its corporate responsibilities concerning the impact of its activities on the environment and seeks to minimise this impact where practicable.

DIRECTORS' REPORT

For the year ended 31 December 2017

Quality Management System

Our mission is to supply, design and deliver mass spectrometry products that provide innovative compact detection with high quality and reliability.

Our quality policy applies to the development, manufacture, marketing and support of our products. In all of our activities we are strongly focused on commitment to the requirements of our customers including:

- Management of risks to prevent operational and product problems that may adversely impact customer satisfaction and the interests of other parties.
- Managing any externally provided products and services to ensure that they meet specified requirements including changing needs.

To help management achieve its policy the business management system has been developed using a process approach including a Plan-Do-Check cycle, risk-based thinking, and a fundamental commitment to the continual improvement of the system and its effectiveness and integration into company activities.

The Company's Quality Management System is based on ISO9001: 2008 which is being superseded by ISO9001: 2015. The new standard puts more emphasis on risk management and management involvement within the quality management system. The Company is currently transitioning to the new standard and will be audited for compliance in June 2018.

Directors' indemnity and insurance

The Company has granted an indemnity to its Directors under which the Company will indemnify them, subject to the terms of the deed of indemnity, against all costs, charges, losses, damages and liabilities incurred by them in the performance of their duties.

The Company also maintains insurance for its Directors and Officers against the consequences of actions brought against them in relation to their duties for the Company.

Related party transactions

The interests of the Directors are shown in the Directors' Report while their remuneration is detailed in the Directors' Remuneration Report. There were no other related party transactions involving the Directors. The only other related party transactions were for R Syms and Parkwalk Advisors and these are disclosed in Note 27.

Directors' responsibilities

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

Company law requires the Directors to prepare financial statements for each financial year. Under that law the Directors have prepared the Company financial statements in accordance with International Financial Reporting Standards (IFRSs) as adopted by the European Union

DIRECTORS' REPORT

For the year ended 31 December 2017

and applicable law. Under company law the Directors must not approve the financial statements unless they are satisfied that they give a true and fair view of the state of affairs of the Company and the profit or loss of the Company for that period.

In preparing the financial statements the Directors are required to:

- select suitable accounting policies and then apply them consistently;
- make judgements and accounting estimates that are reasonable and prudent; and
- state whether IFRSs as adopted by the European Union have been followed, subject to any material departures disclosed and explained in the financial statements.

The Directors are responsible for keeping adequate accounting records that are sufficient to show and explain the Company's transactions and disclose with reasonable accuracy at any time the financial position of the Company and enable them to ensure that the financial statements comply with the Companies Act 2006. They are responsible for safeguarding the assets of the Company and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

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

Statement of disclosure to auditors

So far as each Director is aware, there is no relevant audit information of which the Company's auditors are unaware. Additionally the Directors have taken all the steps that they should have taken to make themselves aware of any relevant audit information and to establish that the Company's auditors are aware of that information.

Auditors

Saffery Champness has expressed their willingness to remain in office as auditors of the Company, and a resolution for their re-appointment will be proposed at the forthcoming Annual General Meeting.

Future Developments

An indication of likely future developments in the business of the Company is included in the Strategic Report.

This Directors' Report was approved by the Board of Directors on 2 March 2018 and signed on its behalf.

Glenn Tracey

Chief Executive Officer

Company number 03568010

DIRECTORS' REMUNERATION REPORT

For the year ended 31 December 2017

This report on the Directors' remuneration sets out the Company's policy on the remuneration of Executive and Non-Executive Directors, together with details of Directors' remuneration packages and service contracts.

Remuneration policy

The remuneration policy for Executive Directors, determination of their individual remuneration packages and their performance appraisals have been delegated to the Board's Remuneration Committee comprising four Non-Executive Directors.

Remuneration of the Executive Directors

In setting remuneration for executive Directors, the Remuneration Committee considers a number of factors including:

- the basic salaries and benefits available to Executive Directors of comparable companies;
- the need to pay Executive Directors a competitive salary in line with the nature and complexity of their work;
- the need to attract and retain Executive Directors of an appropriate calibre;
- the need to ensure Executive Directors' commitment to the continued success of the Company by means of incentive schemes; and
- the need for the remuneration awarded to reflect performance.

The remuneration of the Executive Directors consists of basic salary, share options, life assurance and a contributory personal pension up to 7.5% of basic salary. A discretionary bonus scheme based on performance against individual and business objectives is operated by the Company. The Executive Directors both agreed not to receive bonus remuneration in 2017.

Remuneration of the Non-Executive Directors

The Chairman of the Remuneration Committee discusses the remuneration of the Non-Executive Directors with the Executive Directors. The remuneration is then discussed and agreed by the Board following recommendation by the Remuneration Committee, having a view to rates paid in comparable organisations. The Non-Executive Directors do not receive any pension, bonus or other Company benefits. Since becoming a public limited company, no share options have been issued to Non-Executive Directors, except for those issued to Peter Grant on 2 January 2018, as set out in Note 29 to the financial statements. Chris Buckley was awarded options in 2016, prior to becoming a Director of the Company.

The Interim Chairman received an annual fee of £35,000 and the other Non-Executive Directors received an annual fee of £20,000. Additional days worked beyond the contracted number of days are paid on an agreed day rate. Such days must be approved by the Chairman, or the Chair of the Remuneration Committee.

DIRECTORS' REMUNERATION REPORT

For the year ended 31 December 2017

Share options

It is the normal practice for the Company to award share options to Executive Directors. The award of additional options to Executive Directors, as well as to other employees, is reviewed annually by the Remuneration Committee. No award was made in 2017 but an award of options was made in January 2018 (refer to Note 29 of the financial statements for details).

Directors' notice periods

Details of each Director's notice period as per their service contract are as follows:

	Contract date	Term	Notice period
P W Grant	01-Jan-18	Indefinite	3 months
G D Tracey	01-Dec-15	Indefinite	6 months
B J Metcalf	18-Dec-15	Indefinite	3 months
C J Buckley	01-Apr-16	Indefinite	3 months
A S Holmes	01-Apr-06	Indefinite	3 months
E M Yeatman	01-Apr-06	Indefinite	3 months

Directors' emoluments

The Executive Directors received salary increases in 2017. Mr Tracey was promoted to CEO on 25 September 2017 on a basic salary of £122,000 per annum plus car allowance. Mr Metcalf, Finance Director, received a salary review effective 25 September 2017 where his basic salary increased to £86,000. Mr Metcalf's role is part time and he is paid a day rate for additional days worked. The Executive Directors did not receive a salary increase in 2016. Non-cash payments represent life assurance premiums.

	Salaries & fees	Non Cash Payments	Pension Contributions	Share based payments	Year to 31 December 2017	Year to 31 December 2016
	£	£	£	£	£	£
G D Tracey	103,546	215	5,031	14,376	123,168	107,229
B J Metcalf	81,997	629	6,150	7,753	96,529	115,509
C J Buckley	22,002	-	-	-	22,002	24,587
AS Holmes	20,000	-	-	-	20,000	20,000
CJ Nicholl ⁽¹⁾	2,917	-	-	-	2,917	47,600
J C Ramage ⁽²⁾	19,250	-	-	(909)	18,341	176,359
EM Yeatman	33,750	-	-	-	33,750	20,000
TOTAL	283,462	844	11,181	21,220	316,707	511,284

⁽¹⁾ Retired 31 January 2017

⁽²⁾ Retired 15 May 2017

DIRECTORS' REMUNERATION REPORT

For the year ended 31 December 2017

Directors' share options

No options were awarded in 2017. Mr Ramage retired from the Company on 15 May 2017 and his options lapsed during the year. The share options below are subject to service and/or performance conditions.

The share price on 3 January 2017 was 3.5p and on 29 December 2017 was 4.05p, with a high and low over the year of 4.05p and 0.925p respectively.

The share-based payment charge for the Directors during the year was £21,220 (2016: £83,701). No share options were issued during 2017.

Share options were awarded to Directors were in January 2016 and September 2016. Further options were issued in January 2018 as set out in Note 29 to the financial statements.

Share options over the Company's ordinary shares held by the Directors at the year end were as follows:

	At 1 January 2017 Number	Granted in the year Number	Lapsed in the year Number	Exercised in the year Number	At 31 December 2017 Number	Exercise price Pence	Exercise period
G D Tracey	100,000	-	-	-	100,000	47.75p	17 April 2015 - 17 April 2025
	200,000	-	-	-	200,000	23.5p	13 January 2016 - 13 January 2026
	1,000,000	-	-	-	1,000,000	5p	14 September 2016 - 14 September 2026
J C Ramage	500,000	-	(500,000)	-	-	23.5p	13 January 2016 - 13 January 2026
	1,000,000	-	(1,000,000)	-	-	5p	14 September 2016 - 14 September 2026
B J Metcalf	120,000	-	-	-	120,000	23.5p	13 January 2016 - 13 January 2026
	1,000,000	-	-	-	1,000,000	5p	14 September 2016 - 14 September 2026
C J Buckley	75,000	-	-	-	75,000	23.5p	13 January 2016 - 13 January 2026
	3,995,000	-	(1,500,000)	-	2,495,000		

The Directors' Remuneration Report was approved by the Board of Directors on 2 March 2018 and signed on its behalf by:

Eric Yeatman

Chairman of the Remuneration Committee

CORPORATE GOVERNANCE REPORT

For the year ended 31 December 2017

As an AIM quoted company, Microsaic Systems plc is not required to comply with the UK Corporate Governance Code, a set of recommended corporate governance principles for UK public companies issued by the Financial Reporting Council. However, the Directors support high standards of corporate governance and have established a set of corporate governance principles based on the QCA (Quoted Companies Alliance) Guidelines which they regard as appropriate for the size, nature and stage of development of the Company.

The Board

The Board comprises six Directors consisting of a Non-Executive Chairman, two Executive Directors (CEO and FD), and three Non-Executive Directors. Directors appointed by the Board are subject to re-election by shareholders at the following Annual General Meeting and, thereafter, Directors are subject to re-election at least every three years.

Independence of the Non-Executive Directors

The Board believes that the advice and behaviour of its Non-Executive Directors is independent and at all times in the best interest of all shareholders. In addition, the skills and business judgement which they possess and exercise contribute to the efficient and effective management of the Company. The Board believes that this applies equally to Mr Holmes and Mr Yeatman although both have been on the Board for over nine years and Mr Yeatman has been a Chief Executive Officer of the Company, both of which are factors which the UK Corporate Governance Code states is likely to affect or could appear to affect their independence.

Role of the Board

The Board is responsible for ensuring that the Company is managed in an efficient, effective and professional manner. These responsibilities include oversight of and approval of the corporate strategy, financial budgets, Company performance, major capital expenditure, executive performance and the framework of internal controls.

Role of the Management Team

The Management Team is comprised of the two Executive Directors (CEO and FD) and six senior managers who report to the CEO. This team is responsible for the day to day operations and execution of the strategy.

Within agreed authority limits the Management Team run the operations of the business and work towards defined goals and key performance indicators that are embedded within the Company's strategy, budget and performance goals.

Engagement with staff

The Executive team holds a quarterly meeting with staff, to communicate progress of the business and to receive feedback.

The Board holds regular meetings on a monthly basis and additional meetings at any other time as may be necessary to deal with any urgent matters. The agenda for Board meetings is

CORPORATE GOVERNANCE REPORT

For the year ended 31 December 2017

prepared by the Executive Directors (following an established framework) and agreed with the Chairman. All submissions are circulated in advance to allow due consideration of matters therein.

The Executive Directors prepare monthly reports which allow the Board to assess the Company's activities and review its performance and the Board has clearly specified the levels of authority delegated to management. Non-Executive Directors are able to have discussions with other employees where they feel it is appropriate. Non-Executive Directors also have the authority to seek external independent advice as they think fit at the expense of the Company.

The Board is ultimately responsible for the Company's system of internal control and for reviewing its effectiveness. This includes financial, operational and compliance controls and risk-management systems. Internal control systems are designed to meet the Company's particular needs and the risks to which it is exposed. The internal control systems are designed to minimise rather than eliminate the risk of failure to achieve business objectives and by their nature can only provide reasonable and not absolute assurance against misstatement and loss.

Conflicts of interest

Directors must keep the Board advised of any interest that could potentially conflict with those of the Company. At the start of each Board meeting the Chairman asks the Directors if a material conflict exists. Where a material conflict exists, the Director concerned must not participate in discussions or vote on the subject matter.

Directors' attendance record

The following table shows the attendance at the meetings of the Board of Directors during 2017:

	Meetings held	Meetings attended
	Number	Number
G D Tracey	12	12
B J Metcalf	12	12
C J Buckley	12	11
A S Holmes	12	10
E M Yeatman	12	12

CORPORATE GOVERNANCE REPORT

For the year ended 31 December 2017

Finance and Audit Committee

The remit of the Finance and Audit Committee is documented in its terms of reference which were adopted by the Board of Directors.

The purpose of the Committee is to assist the Board in the effective discharge of its responsibilities for corporate governance, financial reporting, corporate control and risk management. The Committee normally meets at least twice a year and, amongst other things, reviews the annual report and accounts and interim statements with the external auditors.

The Committee also approves external auditors' fees and ensures auditors' independence as well as focusing on compliance with legal requirements and accounting standards. The ultimate responsibility for reviewing and approving the annual financial statements and interim financial statements remains with the Board.

The members of the Finance and Audit Committee are: A S Holmes, C J Buckley, E M Yeatman and P W Grant. Mr Grant is the Chair of the committee. The external auditors, Chief Executive Officer, Finance Director and other executives may be invited to attend Committee meetings at the discretion of the Committee.

Remuneration Committee

The remit of the Remuneration Committee is documented in its terms of reference which were adopted by the Board of Directors.

The Remuneration Committee meets as required and at least once a year. Its responsibilities include reviewing the performance of the Executive Directors, setting their remuneration levels, determining the payment of bonuses and other benefits and considering the grant of options under the Company share option schemes (see Remuneration Report above).

The members of the Remuneration Committee are: A S Holmes, E M Yeatman, C J Buckley and P W Grant. The Chair of the committee is Mr Yeatman.

Board nominations

The appointment of replacement or additional Directors is the responsibility of the Board as a whole.

At this stage, it is not considered appropriate for the Company to have a formally constituted Nominations Committee, however, this will be kept under review.

Communications with shareholders

The Board keeps shareholders informed of all major developments concerning the Company. Information is communicated through the following channels:

CORPORATE GOVERNANCE REPORT
For the year ended 31 December 2017

- The release of announcements, trading updates and interim financial statements through the Regulatory News Service of the London Stock Exchange and on the Company's website; and
- The Annual Report including the financial statements which is sent to all registered shareholders.

The Board encourages shareholders to attend the Company's annual general meeting. Notices of statutory meetings of shareholders are sent to all registered shareholders.

The Corporate Governance Report was approved by the Board of Directors on 2 March 2018 and signed on its behalf by:

Peter Grant
Chairman

INDEPENDENT AUDITORS' REPORT TO THE MEMBERS OF MICROSAIC SYSTEMS PLC

For the year ended 31 December 2017

Opinion

We have audited the financial statements of Microsaic Systems Plc for the year ended 31 December 2017 which comprise the Statement of Comprehensive Income, the Statement of Financial Position, the Statement of Changes in Equity, the Statement of Cash flows and notes to the financial statements, including a summary of significant accounting policies set out on pages 39 to 66. The financial reporting framework that has been applied in their preparation is applicable law and International Financial Reporting Standards ("IFRS") as adopted by the European Union.

In our opinion, the financial statements:

- give a true and fair view of the state of affairs of the Company as at 31 December 2017 and of their losses for the period then ended;
- have been properly prepared in accordance with IFRS as adopted by the European Union; and
- have been prepared in accordance with the requirements of the Companies Act 2006.

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

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) ("ISAs (UK)") and applicable law. Our responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the financial statements section of our report. We are independent of the company in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, including the FRC's Ethical Standard, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Material Uncertainty Related to Going Concern

We draw attention to Note 3 in the financial statements, which indicates that the Company is currently loss making, had cash balances totalling £3,182,176 as at 31 December 2017, and is reliant on meeting its cash flow forecasts or on raising future funds in order to have sufficient working capital for the next 12 months. As stated in Note 3, these events or conditions, along with other matters as set forth in Note 3, indicate that a material uncertainty exists that may cast significant doubt on the Company's ability to continue as a going concern. Our opinion is not modified in respect of this matter.

INDEPENDENT AUDITORS' REPORT TO THE MEMBERS OF MICROSAIC SYSTEMS PLC
For the year ended 31 December 2017

Key audit matters

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the financial statements of the current period and include the most significant assessed risks of material misstatement (whether or not due to fraud) we identified, 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 statement as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters. This is not a complete list of all risks identified by our audit.

In addition to the matter described in the Material Uncertainty Related to Going Concern section, we have determined the matter described below to be a key audit matter to be communicated in our report.

Key audit matter	How our audit addressed the key audit matter
<p>Going concern</p> <p>The going concern assumption is a fundamental principle in the preparation of financial statements.</p> <p>The Company is reliant on meeting certain financial and operational targets in order to have sufficient working capital for the next 12 months. Due to the uncertainty of the Company meeting these targets, the operating losses made in recent years and the decline in sales activity, the going concern assumption has been recognised as a key audit matter.</p>	<p>Our audit procedures included the following:</p> <ul style="list-style-type: none"> • We have obtained and critically appraised the Directors' going concern assessment and management's strategic plans to return to profitability; • We have reviewed projected cash flows and other available evidence to assess the ability of the company to continue in operation for the 12 months after the date of signing; • We have discussed post balance sheet events with the Directors to assess their impact on the going concern assumption; and • We have performed a sensitivity analysis on the key assumptions underlying management's going concern assessment. <p>Based on our procedures we have considered that disclosures relating to going concern have been made appropriately, but that there exists a material uncertainty to the going concern assumption which should be drawn to the members' attention.</p>

INDEPENDENT AUDITORS' REPORT TO THE MEMBERS OF MICROSAIC SYSTEMS PLC
For the year ended 31 December 2017

<p>Carrying value of stock</p> <p>The carrying value of stock included in the Company's balance sheet at 31 December 2017 was stated at £483,496.</p> <p>The Directors must assess at each reporting period end whether there is any indication that an asset may be impaired.</p> <p>The launch of the MiD 4500 creates concern over the recoverability of previous models of the product, which are at risk of obsolescence as a result. The Directors have reviewed the year end stock report for items which may be slow-moving and have created a stock provision of £86,055 to reflect this.</p> <p>Due to the significance of the stock to the Company's financial statements and the significant judgements involved in these calculations, the carrying value of stock is a key audit matter.</p>	<p>Our audit procedures included the following:</p> <ul style="list-style-type: none"> • We have assessed the methodology used by the Directors to calculate the stock provision and evaluated if it complies with applicable IFRS standards; • We have reviewed the Directors' calculation of the stock provision against sales activity in the year for any slow-moving stock, in order to identify whether the stock provision at the year end is appropriate; • We have attended the year end stock take in Woking and tested a sample of stock by reviewing the quantity held as stated on the stock report against the quantity physically verified, investigating any discrepancies; • We have reviewed the level of stock with reference to expectations and prior year figures; • We have reviewed the higher value stock items to ensure that quantities have been accurately updated in the accounting system; • We have tested a sample of stock and reviewed its carrying value against its net realisable value in order to ensure it has been held at the correct amount; and • We have assessed the appropriateness and completeness of the related disclosures in note 13, inventories, of the financial statements against the requirements of IAS 2. <p>Based on our procedures, we noted no material exceptions and considered management's key assumptions to be within reasonable ranges.</p>
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INDEPENDENT AUDITORS' REPORT TO THE MEMBERS OF MICROSAIC SYSTEMS PLC

For the year ended 31 December 2017

Our application of materiality

We apply the concept of materiality in planning and performing our audit, in evaluating the effect of any identified misstatements and in forming our opinion. Our overall objective as auditor is to obtain reasonable assurance that the financial statements as a whole are free from material misstatement, whether due to fraud or error. We consider a misstatement to be material where it could reasonably be expected to influence the economic decisions of the users of the financial statements.

We have determined a materiality of £45,000 (2016: £46,000). This is based on 1.5% of actual expenditure for the year ended 31 December 2017.

An overview of the scope of our audit

We tailored the scope of our audit to ensure that we obtained sufficient evidence to support our opinion on the financial statements as a whole, taking into account the Company's accounting processes and controls and the industry in which the Company operates.

As part of designing our audit, we determined materiality and assessed the risks of material misstatement in the financial statements. In particular, we looked at where the Directors made subjective judgements, for example in respect of significant accounting estimates that involved making assumptions and considering future events that are inherently uncertain. We also addressed the risk of management override of internal controls, including evaluating whether there was evidence of bias by the Directors that represented a risk of material misstatement due to fraud.

Other information

The Directors are responsible for the other information. The other information comprises the information included in the Annual Report, other than the financial statements and our auditor's report thereon. Our opinion on the financial statements does not cover the other information and, except to the extent otherwise explicitly stated in our report, we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If we identify such material inconsistencies or apparent material misstatements, we are required to determine whether there is a material misstatement in the financial statements or a material misstatement of the other information. If, based on the work we have performed, we conclude that there is a material misstatement of this other information; we are required to report that fact.

We have nothing to report in this regard.

INDEPENDENT AUDITORS' REPORT TO THE MEMBERS OF MICROSAIC SYSTEMS PLC

For the year ended 31 December 2017

Opinions on other matters prescribed by the Companies Act 2006

In our opinion, based on the work undertaken in the course of the audit:

- the information given in the Strategic Report and the Directors' Report for the financial year for which the financial statements are prepared is consistent with the financial statements; and
- the Strategic Report and the Directors' Report have been prepared in accordance with applicable legal requirements.

Matters on which we are required to report by exception

In the light of the knowledge and understanding of the company and its environment obtained in the course of the audit, we have not identified material misstatements in the Strategic Report or the Directors' Report.

We have nothing to report in respect of the following matters in relation to which the Companies Act 2006 requires us to report to you if, in our opinion:

- adequate accounting records have not been kept, or returns adequate for our audit have not been received from branches not visited by us; or
- the 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.

Responsibilities of Directors

As explained more fully in the Directors' Responsibilities Statement set out on pages 24-25, the Directors are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view, and for such internal control as the Directors determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

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

INDEPENDENT AUDITORS' REPORT TO THE MEMBERS OF MICROSAIC SYSTEMS PLC
For the year ended 31 December 2017

Auditor's responsibilities for the audit of the financial statements

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

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

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Lucy Brennan (Senior Statutory Auditor)
for and on behalf of Saffery Champness LLP

Chartered Accountants
Statutory Auditors

71 Queen Victoria Street
London
EC4V 4BE

2 March 2018

STATEMENT OF COMPREHENSIVE INCOME

For the year ended 31 December 2017

	Notes	Year to 31 December 2017	Year to 31 December 2016
		£	£
Revenue	5	342,514	851,180
Cost of sales		(221,273)	(549,179)
Gross profit		121,241	302,001
Other operating income	6	51,004	55,941
Research and development expenses		(893,579)	(1,116,242)
Other operating expenses		(2,156,032)	(2,550,073)
Total Operating expenses	7	(3,049,611)	(3,666,315)
Loss from operations before share based payments		(2,877,366)	(3,308,373)
Share based payments		(29,861)	(109,963)
Loss from operations after share based payments		(2,907,227)	(3,418,336)
Finance income	8	18,745	12,532
Loss before tax		(2,888,482)	(3,405,804)
Tax on loss on ordinary activities	9	245,479	303,819
Total comprehensive loss for the year		(2,643,003)	(3,101,985)
Loss per share attributable to the equity holders of the Company			
Basic and diluted loss per ordinary share	10	(1.46)p	(2.93)p

The notes on pages 43 to 66 form part of these financial statements.

STATEMENT OF FINANCIAL POSITION

As at 31 December 2017

	Notes	31 December 2017 £	31 December 2016 £
ASSETS			
Non-current assets			
Intangible assets	11	65,972	84,377
Property, plant and equipment	12	160,743	196,970
Total non-current assets		226,715	281,347
Current assets			
Inventories	13	483,496	694,288
Trade and other receivables	14	235,000	163,731
Corporation tax receivable		245,479	262,710
Cash and cash equivalents		3,182,176	5,728,544
Total current assets		4,146,151	6,849,273
TOTAL ASSETS		4,372,866	7,130,620
EQUITY AND LIABILITIES			
Equity			
Share capital	18	453,413	453,413
Share premium	19	20,504,071	20,504,071
Share based payment reserve	19	273,380	302,069
Retained earnings		(17,330,933)	(14,746,480)
Total Equity		3,899,931	6,513,073
Current liabilities			
Trade and other payables	15	288,821	427,742
Non-Current liabilities			
Provisions	16	184,114	189,805
Total liabilities		472,935	617,547
TOTAL EQUITY AND LIABILITIES		4,372,866	7,130,620

The financial statements were approved for issue by the Board of Directors on 2 March 2018 and signed on its behalf by:

Glenn Tracey

Chief Executive Officer

Company number 03568010

The notes on pages 43 to 66 form part of these financial statements.

STATEMENT OF CHANGES IN EQUITY

For the year ended 31 December 2017

	Notes	Share capital £	Share premium £	Share based payment reserve £	Retained earnings £	Total equity £
At 1 January 2016		183,413	15,714,258	445,258	(11,897,647)	4,445,282
Shares issued	18	270,000	5,130,000	-	-	5,400,000
Share issue costs		-	(340,187)	-	-	(340,187)
Transfer in respect of lapsed share options		-	-	(253,152)	253,152	-
Total comprehensive loss for the year		-	-	-	(3,101,985)	(3,101,985)
Share based payments-share options		-	-	109,963	-	109,963
At 31 December 2016		453,413	20,504,071	302,069	(14,746,480)	6,513,073
Shares issued		-	-	-	-	-
Share issue costs		-	-	-	-	-
Transfer in respect of lapsed share options		-	-	(58,550)	58,550	-
Total comprehensive loss for the year		-	-	-	(2,643,003)	(2,643,003)
Share based payments-share options		-	-	29,861	-	29,861
At 31 December 2017		453,413	20,504,071	273,380	(17,330,933)	3,899,931

The notes on pages 43 to 66 form part of these financial statements.

STATEMENT OF CASH FLOWS

For the year ended 31 December 2017

	Notes	Year to 31 December 2017 £	Year to 31 December 2016 £
Total comprehensive loss for the year		(2,643,003)	(3,101,985)
Amortisation of intangible assets	11	38,757	41,509
Depreciation of property, plant and equipment	12	114,186	109,419
(Profit)/Loss on disposal of Intangibles		(5)	2,029
Loss/(Profit) on disposal of property, plant and equipment		6,907	(1,288)
Increase in Provision for leasehold dilapidations	16	7,751	16,779
(Decrease)/Increase in Provision for warranty	16	(28,442)	27,769
Provision for outsourced manufacturing	16	15,000	-
Provision for bad and doubtful debts		-	(1,989)
Share based payments		29,861	109,963
Increase/(Decrease) in inventory provision	13	86,055	(25,000)
Tax on loss on ordinary activities	9	(245,479)	(303,819)
Interest received		(9,769)	(12,532)
Decrease/(Increase) in inventories	13	124,737	(69,020)
(Increase)/Decrease in trade and other receivables	14	(71,269)	284,003
Decrease in trade and other payables	15	(138,921)	(180,243)
Cash used in operations		(2,713,634)	(3,104,405)
Corporation tax received		262,710	308,483
Net cash used in operating activities		(2,450,924)	(2,795,922)
Cash flows from investing activities			
Purchases of intangible assets	11	(20,347)	(25,611)
Purchases of property, plant and equipment	12	(84,916)	(131,359)
Proceeds from sale of property, plant and equipment		50	1,500
Interest received		9,769	12,532
Net cash used in investing activities		(95,444)	(142,938)
Cash flows from financing activities			
Proceeds from share issues		-	5,400,000
Share issue costs		-	(340,187)
Net cash from financing activities		-	5,059,813
Net (decrease)/Increase in cash and cash equivalents		(2,546,368)	2,120,953
Cash and cash equivalents at beginning of the year		5,728,544	3,607,591
Cash and cash equivalents at the end of the year		3,182,176	5,728,544

The notes on pages 43 to 66 form part of these financial statements.

NOTES TO THE FINANCIAL STATEMENTS

For the year ended 31 December 2017

The principal activity of the Company continued to be the research, development and commercialisation of mass spectrometry instruments. The Company is incorporated in England and its registered address is GMS House, Boundary Road, Woking, Surrey, GU21 5BX.

1. Accounting policies

The following principal accounting policies have been used consistently in the preparation of these financial statements.

Basis of preparation

These financial statements have been prepared in accordance with International Financial Reporting Standards (IFRS) and the interpretations of the International Financial Reporting Interpretations Committee (IFRIC) as adopted by the European Union, and with those parts of the Companies Act 2006 applicable to companies reporting under IFRS.

These financial statements have been prepared under the historical cost basis except where financial instruments are required to be carried at fair value under IFRS.

Revenue recognition

Revenue represents amounts receivable from the sale of goods and services, net of value added tax, trade discounts and commissions. Revenue from the sale of goods is recognised when the risks and rewards of ownership of the goods passes to the customer, which is normally upon delivery. Revenue from services is recognised in the period in which the service is provided.

Other operating income in 2017 included insurance income arising from a claim and income from development contracts, while other operating income in 2016 included insurance income and EU grant income. The Company's management assesses the contracts at each balance sheet date, including the costs to completion, which are subject to estimation uncertainty.

Segmental reporting

The Company currently has one business segment, being the research, development and commercialisation of scientific instruments. This is undertaken wholly within the United Kingdom. Revenue by geographical market is analysed between the UK and non-UK.

Intangible assets

Trademarks and patents are stated at historic cost of registration less accumulated amortisation and any accumulated impairment losses. Amortisation is charged to operating expenses and calculated to write off the cost in equal annual instalments over 5 years, which is considered to be a prudent estimate of their useful economic lives.

NOTES TO THE FINANCIAL STATEMENTS

For the year ended 31 December 2017

Property, plant and equipment

Items of property, plant and equipment are stated at cost of acquisition or production costs less accumulated depreciation and impairment losses.

Depreciation is charged to the statement of comprehensive income on a straight-line basis to write-off the carrying value of each asset to residual value over its estimated useful economic life as follows:

Plant and equipment	- 33.3% on a straight line basis
Fixtures and fittings	- 33.3% on a straight line basis
Software	- 33.3% on a straight line basis

Pensions

The Company has an auto-enrolment pension scheme for employees. Contributions are charged to the statement of comprehensive income in the period they are payable.

Inventories

Inventories are stated at the lower of cost and net realisable value. Cost is based on the first-in first-out principle and includes expenditure incurred in acquiring the inventories and bringing them into their present locations and condition. The cost of finished goods and work in progress comprises raw materials, direct labour and other direct costs. Net realisable value is the estimated selling price in the ordinary course of business less applicable selling expenses.

Provisions

Provisions are established where the Directors have identified an obligation which is probable and where the amount can be estimated reliably.

Taxation

Current taxes are based on the results of the Company and are calculated according to local tax rules, using the tax rates that have been enacted by the balance sheet date.

The Company recognises research and development tax credits receivable in cash as a current asset under the heading corporation tax receivable. Any difference with amounts actually received is dealt with as adjustments to prior period tax.

Deferred tax is provided in full using the balance sheet liability method for all taxable temporary differences arising between the tax bases of assets and liabilities and their carrying values for financial reporting purposes. Deferred tax is measured using currently enacted or substantially enacted tax rates.

Deferred tax assets are recognised to the extent the temporary difference will reverse in the foreseeable future and that it is probable that future taxable profit will be available against which the asset can be utilised.

NOTES TO THE FINANCIAL STATEMENTS

For the year ended 31 December 2017

Foreign currency translation

Monetary assets and liabilities denominated in foreign currencies are translated into sterling at the rates of exchange ruling at the balance sheet date. Transactions in foreign currencies are recorded at the rate ruling at the date of transaction, or forward contract rate, if applicable. All differences are taken to the statement of comprehensive income.

Financial instruments

The Company has adopted both IAS 32 and IAS 39. Financial assets and financial liabilities are recognised in the Company's statement of financial position when the Company becomes a party to the contractual provisions of the instrument. Examples of financial instruments include:

Cash and cash equivalents

The fair value of cash and cash equivalents is considered to be their carrying amount due to their short term maturity.

Trade receivables

Trade receivables do not carry interest and are stated at their nominal value as reduced by appropriate allowances for estimated irrecoverable amounts.

Financial liability and equity

Financial liabilities and equity instruments are classified according to the substance of the contractual arrangements entered into. An equity instrument is any contract that evidences a residual interest in the assets of the Company after deducting all of its liabilities.

Bank borrowings

Interest-bearing bank loans and overdrafts are recorded as the proceeds received, net of direct issue costs. Finance charges, including premiums payable on settlement or redemption and direct issue costs, are accounted for on an accrual basis to the statement of comprehensive income using the effective interest method and are added to the carrying amount of the instrument to the extent that they are not settled in the period in which they arise. The Company had no bank borrowings at 31 December 2016 and 2017.

Trade payables

Trade payables are not interest bearing and are stated at their nominal value.

Equity instruments

Equity instruments issued by the Company are recorded at the value of the proceeds received net of direct issue costs including the fair value of any warrants issued in lieu of issue costs.

Leases

Assets obtained under hire purchase contracts and finance leases are capitalised and depreciated over their useful lives. Obligations under such agreements are included in liabilities net of the finance charges allocated to future periods.

NOTES TO THE FINANCIAL STATEMENTS

For the year ended 31 December 2017

All other leases are considered operating leases, the costs of which are expensed on a straight line basis over the lease term. Rent free periods and other incentives are spread on a straight line basis over the lease term.

Research and development

Expenditure on research is recognised as an expense in the period in which it is incurred.

Development costs incurred on specific projects are capitalised when all the following conditions are satisfied:

- completion of the intangible asset is technically feasible so that it will be available for use or sale;
- the Company intends to complete the intangible asset and use or sell it;
- the Company has the ability to use or sell the intangible asset;
- the intangible asset will generate probable future economic benefits. Among other things, this requires that there is a market for the output from the intangible asset or for the intangible asset itself, or, if it is to be used internally, the asset will be used in generating such benefits;
- there are adequate technical, financial and other resources to complete the development and to use or sell the intangible asset; and
- the expenditure attributable to the intangible asset during its development can be measured reliably.

Costs incurred which do not meet the above criteria are expensed as incurred. No development costs have been capitalised to date.

Share based payments

In accordance with IFRS 2 “Share-based payments”, the Company reflects the economic cost of awarding shares and share options to Directors, employees and advisors by recording an expense in the statement of comprehensive income equal to the fair value of the benefit awarded, fair value being determined by reference to option pricing models. The expense is recognised in the statement of comprehensive income over the vesting period of the award.

The fair value of warrants issued to advisors as remuneration for their services in a fundraising will be charged to share premium over the vesting period of the award.

2. Adoption of new and revised standards

During the financial year, the Company has adopted the following new IFRSs (including amendments thereto) and IFRIC interpretations that became effective for the first time.

NOTES TO THE FINANCIAL STATEMENTS
For the year ended 31 December 2017

Standard	Effective date, annual period beginning on or after
Amendments to IAS 7 – <i>Disclosure Initiative</i>	1 January 2017
Amendments to IAS 12 – <i>Recognition of Deferred Tax for Unrealised Losses</i>	1 January 2017
Annual Improvements 2014-2016 cycle	1 January 2017/ 1 January 2018

Their adoption has not had any material impact on the disclosures or amounts reported in the financial statements.

Standards issued but not yet effective:

At the date of authorisation of these financial statements, the following standards and interpretations relevant to the Company and which have not been applied in these financial statements, were in issue but were not yet effective. In some cases these standards and guidance have not been endorsed for use in the European Union.

Standard	Effective date, annual period beginning on or after
Annual Improvements 2014-2016 cycle	1 January 2017/ 1 January 2018
IFRS 9 <i>Financial instruments</i>	1 January 2018
IFRS 15 <i>Revenue from contracts with Customers</i> including amendments to IFRS 15: <i>Effective date of IFRS 15.</i>	1 January 2018
Clarifications to IFRS 15 - <i>Revenue from contracts with Customers</i>	1 January 2018
IFRS 2 (amendments) - <i>Classification and Measurement of Share-based Payment Transactions</i>	1 January 2018
IFRS 4 (amendments) - <i>Applying IFRS 9 Financial Instruments with IFRS 4 Insurance Contracts</i>	1 January 2018
IFRIC Interpretation 22 - <i>Foreign Currency Transactions and Advance Consideration</i>	1 January 2018
Amendments to IAS 40 - <i>Transfers of Investment Property</i>	1 January 2018
IFRS 16 <i>Leases</i>	1 January 2019
IFRIC 23 – <i>Uncertainty over Income Tax Treatments</i>	1 January 2019
Amendments to IFRS 9 – <i>Prepayment Features with Negative Compensation</i>	1 January 2019
Amendments to IAS 28 – <i>Long-term Interests in Associates and Joint Ventures</i>	1 January 2019
Annual improvements 2015-2017 cycle	1 January 2019
IFRS 17 - <i>Insurance Contracts</i>	1 January 2021

NOTES TO THE FINANCIAL STATEMENTS

For the year ended 31 December 2017

IFRS 9 Financial Instruments (effective for accounting periods beginning on or after 1 January 2018)

This replaces IAS 39 Financial Instruments: Recognition and Measurement. The Standard includes requirements for recognition and measurement, impairment, derecognition and general hedge accounting.

The Company monitors closely potential credit losses on receivables. The Company does not have financial liabilities other than trade payables. In addition, the Company has minimal exposure to foreign currencies and hence has not needed to hedge its financial instruments.

In light of this the Directors have reviewed IFRS 9 and do not believe it will have a significant impact on the Company's financial results.

IFRS 15 Revenue from Contracts with Customers (effective for accounting period beginning on or after 1 January 2018)

IFRS 15 specifies how and when the Company will recognise revenue as well as requiring the Company to provide the users with more informative, relevant disclosures. The standard provides a single, principles based five-step model to be applied to all contracts with customers.

The five-step framework includes:

- 1) Identify the contract(s) with a customer;
- 2) Identify the performance obligations in the contract;
- 3) Determine the transaction price;
- 4) Allocate the transaction price to the performance obligations in the contract; and
- 5) Recognise revenue when the entity satisfies a performance obligation.

The Company has reviewed its contracts with customers and in general these are relatively straight forward in terms of the recognition of revenue. One contractual area that will be impacted by IFRS 15 is contracts with co-development partners where the Company provides R&D services to a joint product development programme and has to meet agreed milestones. Under IFRS 15 the recognition of revenue will occur when the Company satisfies the agreed milestones under the contract. This is in line with the Company's current accounting treatment.

IFRS 16 Leases (effective for accounting period beginning on or after 1 January 2019)

IFRS 16 specifies how the Company will recognise, measure, present and disclose leases. The standard provides a single lessee accounting model, requiring lessees to recognise assets and liabilities for all leases unless the lease term is 12 months or less or the underlying asset has a low value.

The Company has one lease agreement longer than two years, and this relates to the premises in Woking. From 1 January 2019 the Company will recognise an asset reflecting the

NOTES TO THE FINANCIAL STATEMENTS

For the year ended 31 December 2017

right to use the leased asset for the remaining lease term which ends on 8 September 2021 and a lease liability reflecting the obligation to make lease payments. Both the asset and the liability will be recognised on-balance sheet where previously they were off balance sheet. There will be no impact on cash flow but there will be an impact on the Income Statement as the operating lease payment will be replaced with a depreciation charge on the leased asset and an interest expense on the lease liability. EBITDA will also increase as both interest cost and depreciation charge will be excluded from the calculation.

The Directors have reviewed other standards effective from 1 January 2018 and do not believe they will have a material impact on the Company's financial reporting.

The Directors are evaluating the impact the other standards coming into effect from 1 January 2019 will have on the financial statements of the Company.

3. Going concern

Microsaic is engaged in the research, development and commercialisation of mass spectrometry detectors. The Company is currently loss making and has raised funds in the past by issuing equity. As at 31 December 2017 the Company had £3.2m in cash and cash equivalents. In common with other research-based companies Microsaic raises finance in discrete tranches to fund its working capital and research and development activities. The future cash consumption will depend on the trajectory of sales growth and the extent of investment in R&D. Subject to resources being available, the Board plans to continue to invest in R&D, especially to support the enhancement of technology for the bioprocessing market, which the Directors believe offers substantive potential for growth for the Company. Based on these plans and taking into account the Board's sales projections, the Directors have prepared and reviewed cash flow forecasts which indicate that the Company has sufficient cash to cover its anticipated working capital requirements through to Q1 2019. In order to implement the planned pace of development to benefit fully from opportunities in the bioprocessing market, the Board believes that the Company will need to raise further funds in the future. The Directors have a reasonable expectation that the Company will be able to raise funds within an appropriate timeline, although there can be no certainty of this. On this basis, the Directors have concluded that it is appropriate to prepare the financial statements on a going concern basis. The financial statements do not include any adjustments that may be necessary should the Company be unsuccessful in raising the required finance.

4. Critical accounting estimates and judgements

Accounting estimates and judgements are continually evaluated and are based on past experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances.

The Company makes estimates and assumptions concerning the future. The resulting accounting estimates could, by definition, differ from the actual outcome.

NOTES TO THE FINANCIAL STATEMENTS

For the year ended 31 December 2017

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 summarised below:

Going concern

The financial statements have been prepared on a going concern basis, as highlighted in note 3 above.

Recognition of other operating income

Other operating income includes grant income and income from development contracts. The Company's management assesses the contracts at each balance sheet date, including the costs to completion, which are subject to estimation uncertainty.

Amortisation of trademarks and patents

Capitalised costs relating to trademarks and patents are amortised over their estimated useful lives. As the product development programme is still ongoing and the lifetime of the Company's intellectual property is difficult to determine, the Directors have applied a prudent estimate of 5 years. This assumption is reviewed at each balance sheet date and amended if required.

Share based payments

The calculation of the share based payment expense utilises assumptions and estimates (for example volatility, future exercise rates) which may differ from actual results. Details of the assumptions are set out in notes 24 and 25 to the financial statements.

Provision for dilapidations

The Company occupies leasehold premises. The Directors have assessed the level of provision for dilapidations after consultation with their advisors and made a provision accordingly.

Provision for Inventories

The provision for inventories in 2017 of £86,055 assumes four instruments valued at £41,768 will be obsolete following the introduction of a new product in 2018. The balance of the provision is for the potential write-off of spares and replacement parts that may also become obsolete. The actual outcome may differ from this estimate.

Provision for warranties

The Company provides OEMs and distributors with a 15 month warranty on mass spectrometry products. The provision is based on an estimate of historical costs including materials, replacement parts and the cost of service engineers that may have to be incurred over the warranty period.

NOTES TO THE FINANCIAL STATEMENTS
For the year ended 31 December 2016

Research and development tax credits

The Company recognises research and development tax credits receivable in cash as a current asset under the heading corporation tax receivable. These credits are subject to acceptance by HM Revenue & Customs and the resulting cash receipt may be greater or less than this amount.

5. Revenue

Throughout 2017 the Company operated in one business segment, that of research, development and commercialisation of mass spectrometry instruments.

The geographical analysis of revenue was as follows:

	Year to 31 December 2017	Year to 31 December 2016
	£	£
UK	41,959	12,347
Non-UK	300,555	838,833
	342,514	851,180

Further attribution of the non-UK revenue is not possible due to the nature of the sales via OEM agreements which are then distributed globally. One customer represented 74% of total revenue (2016: 57%).

6. Other operating income

The Company's other operating income for the year ended 31 December 2017 is £51,004 (2016: £55,941) and includes income from an insurance claim (£3,723) and co-development income (£47,281) from one of the foremost players in the global market for scientific instrumentation.

NOTES TO THE FINANCIAL STATEMENTS
For the year ended 31 December 2017

7. Expenses by nature

	Year to 31 December 2017	Year to 31 December 2016
	£	£
Loss from operations is stated after charging/(crediting)		
Amortisation of intangible assets	38,757	41,509
Provision for bad and doubtful debts	-	(1,989)
Movement in inventory provision	86,055	(25,000)
Inventories expensed	7,760	65,253
Depreciation of property, plant and equipment	114,186	109,419
Loss/(Profit) on disposal of property, plant and equipment	6,907	(1,288)
Provision for dilapidations on leased buildings	7,751	16,779
Provision for warranty	(28,442)	27,769
Provision for outsourced manufacturing	15,000	-
(Profit)/Loss on disposal of intangible assets	(5)	2,029
Pension costs	101,812	116,146
Share based payments - equity settled	29,861	109,963
Operating lease rentals - land and buildings	158,667	155,155
Exchange loss/(gain)	4,248	(2,539)
Research and development expenditure (before pensions)	842,313	1,068,993
Directors' emoluments (before pensions and share based payments)	284,306	418,652

	Year to 31 December 2017	Year to 31 December 2016
	£	£
Services provided by the Company's auditors		
Fees payable to the Company's auditors for the audit of the financial statements	18,375	17,500
Fees payable to the Company's auditors for other services		
- Tax compliance	4,000	4,000
- Other	3,575	4,439
	25,950	25,939

NOTES TO THE FINANCIAL STATEMENTS
For the year ended 31 December 2017

8. Finance income

	Year to 31 December 2017	Year to 31 December 2016
	£	£
Bank interest receivable	18,745	12,532

9. Tax on loss on ordinary activities

	Year to 31 December 2017	Year to 31 December 2016
	£	£
Domestic current period tax		
UK corporation tax receivable	(245,479)	(262,710)
Adjustment for prior periods	-	(41,109)
Current tax credit	(245,479)	(303,819)
Tax on loss on ordinary activities	(245,479)	(303,819)

Factors affecting the current tax credit for the period

	Year to 31 December 2017	Year to 31 December 2016
	£	£
Loss before tax	(2,888,482)	(3,405,804)
Loss before tax multiplied by standard rate of UK corporation tax of 19.25*% (2016: 20%)	(556,033)	(681,161)
Effects of:		
Non-deductible expenses	6,744	32,279
Depreciation	21,981	21,884
Loss on disposal of property, plant and equipment	1,329	406
Capital allowances	(16,791)	(26,430)
Research and development expenditure	(103,786)	(105,163)
Tax losses carried forward	401,077	495,475
Previous period research and development adjustment	-	(41,109)
Current tax credit	(245,479)	(303,819)

* The tax rate was 20% until 1 April 2017. From the 1 April 2017 to 31 December 2017 it reduced to 19%.

NOTES TO THE FINANCIAL STATEMENTS
For the year ended 31 December 2017

The Company has estimated tax losses of £17,643,288 (2016: £15,566,843) available for carry forward against future trading profits.

10. Basic and diluted loss per ordinary share

	Year to 31 December 2017	Year to 31 December 2016
Loss after tax attributable to equity shareholders	(2,643,003)	(3,101,985)
Weighted average number of ordinary 0.25p shares for the purpose of basic and diluted loss per share	181,365,146	105,824,162
Basic and diluted loss per ordinary share	(1.46)p	(2.93)p

Potential ordinary shares are not treated as dilutive as the Company is loss making, therefore the weighted average number of ordinary shares for the purposes of the basic and diluted loss per share are the same.

11. Intangible assets

Intangible assets comprise patents and trademarks owned by the Company. The cost is amortised on a straight line basis over a five year period as this has been judged as their estimated useful life.

Year ended 31 December 2017:

	£
Cost	
At 1 January 2017	443,378
Additions	20,347
Disposals	(3,237)
At 31 December 2017	460,488
Amortisation	
At 1 January 2017	359,001
Charge for the year	38,757
Disposals	(3,242)
At 31 December 2017	394,516
Net book value	
At 31 December 2017	65,972

NOTES TO THE FINANCIAL STATEMENTS
For the year ended 31 December 2017

Year ended 31 December 2016:

	£
Cost	
At 1 January 2016	440,981
Additions	25,611
Disposals	(23,214)
At 31 December 2016	443,378
Amortisation	
At 1 January 2016	338,677
Charge for the year	41,509
Disposals	(21,185)
At 31 December 2016	359,001
Net book value	
At 31 December 2016	84,377

12. Property, plant and equipment

Year ended 31 December 2017:

	Plant and equipment £	Fixtures and fittings £	Total £
Cost			
At 1 January 2017	657,030	295,708	952,738
Additions	84,234	682	84,916
Disposals	(32,138)	-	(32,138)
At 31 December 2017	709,126	296,390	1,005,516
Depreciation			
At 1 January 2017	489,405	266,363	755,768
Charge for the year	87,550	26,636	114,186
Disposals	(25,181)	-	(25,181)
At 31 December 2017	551,774	292,999	844,773
Net book value			
At 31 December 2017	157,352	3,391	160,743

NOTES TO THE FINANCIAL STATEMENTS
For the year ended 31 December 2017

Year ended 31 December 2016:

	Plant and equipment £	Fixtures and fittings £	Total £
Cost			
At 1 January	768,515	303,643	1,072,158
Additions	130,885	474	131,359
Disposals	(242,370)	(8,409)	(250,779)
At 31 December 2016	657,030	295,708	952,738
Depreciation			
At 1 January	668,573	228,343	896,916
Charge for the year	62,990	46,429	109,419
Disposals	(242,158)	(8,409)	(250,567)
At 31 December 2016	489,405	266,363	755,768
Net book value			
At 31 December 2016	167,625	29,345	196,970

13. Inventories

	Year to 31 December 2017 £	Year to 31 December 2016 £
Raw materials	540,748	685,775
Work in progress	-	4,313
Finished goods	28,803	4,200
Subtotal	569,551	694,288
Provision for inventories	(86,055)	-
Total	483,496	694,288

Inventories are lower in 2017, as, due to difficult trading conditions, production of instruments was reduced in order to manage inventories. A provision of £86,055 was provided for in 2017 over concerns that the launch of the Company's latest MS detector would affect the sales of previous models of the product, which are at risk of obsolescence.

NOTES TO THE FINANCIAL STATEMENTS
For the year ended 31 December 2017

14. Trade and other receivables

	Year to 31 December 2017	Year to 31 December 2016
	£	£
Amounts falling due within one year		
Trade receivables	87,663	12,335
Other receivables	127,728	124,883
Other taxes and social security	19,609	26,513
	235,000	163,731

The ageing of trade receivables was as follows:

	£	£
Not past due	44,071	12,335
Up to 30 days past due	43,592	-
	87,663	12,335

The key invoice overdue at the year end was paid in January 2018. The Company has a tight credit control policy.

15. Trade and other payables

	Year to 31 December 2017	Year to 31 December 2016
	£	£
Amounts falling due within one year		
Trade payables	94,628	185,739
Other taxes and social security	45,934	55,897
Other payables	11,588	11,956
Accruals and deferred income	136,671	174,150
	288,821	427,742

NOTES TO THE FINANCIAL STATEMENTS
For the year ended 31 December 2017

16. Provisions

	Dilapidations	Outsourced Manufacturing	Warranties	TOTAL
	£	£	£	£
Balance at 1 January 2017	92,446	-	97,359	189,805
Movement during the year	7,751	15,000	(28,442)	(5,691)
Balance at 31 December 2017	100,197	15,000	68,917	184,114

The provision for anticipated dilapidations is in respect of the Company's leasehold properties at Woking and Abingdon. The provisions are based on potential future costs which could be incurred at the end of the lease.

The provision for outsourced manufacturing is in respect of the Company's 50% share of costs arising from the transfer of manufacturing to a third party in 2018.

The Company provides OEMs and distributors with a 15 month warranty on mass spectrometry products. The provision above is the anticipated cost of servicing those warranty claims which are serviced by Microsaic's own staff. The provision is based on historical costs including materials, replacement parts and the cost of service engineers that may have to be incurred over the warranty period.

17. Deferred tax

Deferred taxation provided in the financial statements:

	£
Balance at 1 January and 31 December 2017	-

A deferred tax asset in respect of tax losses has only been recognised to the extent of the deferred tax liability in respect of accelerated capital allowances at a tax rate of 19%.

	Year to 31 December 2017	Year to 31 December 2016
	£	£
Accelerated capital allowances	29,988	35,934
Tax losses carried forward	(29,988)	(35,934)
	-	-

NOTES TO THE FINANCIAL STATEMENTS
For the year ended 31 December 2017

18. Share capital

	Number	£
Allotted, called up and fully paid ordinary shares of 0.25p each		
Ordinary shares as at 31 December 2016	181,365,146	453,413
Ordinary shares issued for cash in the year	-	-
Ordinary shares as at 31 December 2017	181,365,146	453,413

The Company has one class of share, ordinary shares of 0.25p each, with each share carrying one vote and equal rights to discretionary dividends. No shares were issued during the year. In 2016 the Company issued the following ordinary shares of 0.25p each for cash:

	Shares issued Number	Issue price Pence	Cash consideration £
26 August 2016 Placing of shares	108,000,000	5	5,400,000

19. Reserves

The share premium account represents the excess over the nominal value for shares allotted, less issue costs.

The share option reserve represents accumulated charges made under IFRS 2 in respect of share based payments. Where share options expire, lapse or are exercised, the amounts within the share based payments reserve relating to those options are transferred to retained earnings as shown in the Statement of Changes in Equity.

20. Operating lease commitments

At the year end the Company had future minimum lease payments under non-cancellable operating leases which fall due as follows:

	Year to 31 December 2017 £	Year to 31 December 2016 £
Land and buildings		
Within one year	205,438	146,714
Between two and five years	199,856	270,637
	405,294	417,351

NOTES TO THE FINANCIAL STATEMENTS
For the year ended 31 December 2017

	Year to 31 December 2017 £	Year to 31 December 2016 £
Equipment		
Within one year	620	9,559
Between two and five years	2,100	-
	2,720	9,559

The lease on the Woking facility was renewed in September 2016 for a period of five years at an average annual rent of £73,500. There is no break clause in this lease. The lease on the Milton Park office in Abingdon was renewed in December 2017 for a period of three years at an annual rent of £61,354. The Company can terminate this lease on 22 December 2018 by giving at least four months written notice together with an exit payment equivalent to eight months' rent.

21. Capital commitments

At the balance sheet date the Company had no capital commitments.

	Year to 31 December 2017 £	Year to 31 December 2016 £
Contracted for but not provided in the financial statements	-	-

22. Directors' emoluments

	Year to 31 December 2017 £	Year to 31 December 2016 £
Salaries and fees	283,462	417,924
Non cash payments	844	728
Pension costs	11,181	8,931
Employment related share based payments	21,220	83,701
	316,707	511,284

NOTES TO THE FINANCIAL STATEMENTS

For the year ended 31 December 2017

In the year to 31 December 2017 two Executive Directors that served during the year accrued benefits under Company's Auto-enrolment pension scheme. There are no key management personnel other than the Directors.

The highest paid Director, Mr Tracey, received emoluments of £123,168 as disclosed in the Directors' Remuneration Report which included a share based payment charge of £14,376.

There were no gains on the exercise of share options in the year.

23. Employees

	Year to 31 December 2017 Number	Year to 31 December 2016 Number
Directors	6	7
Other staff	22	27
	28	34
Employment costs (including Directors)		
Wages and salaries	1,245,468	1,630,336
Social security costs	136,324	179,718
Termination payments	32,859	-
Pension costs	101,812	116,146
Employment related share based payments	29,861	109,963
	1,546,324	2,036,163

24. Share-based payments

Share option schemes

The Company operates an EMI and an unapproved share option scheme as a means of encouraging ownership and aligning interests of staff and shareholders. The table below shows the number of options outstanding and exercisable at 31 December 2017 and the weighted average exercise price.

	Year to 31 December 2017		Year to 31 December 2016	
	Number of options	Weighted average exercise price	Number of options	Weighted average exercise price
Outstanding at the beginning of the year	7,897,200	11.1p	2,764,391	43.1p
Granted during the year	-	-	7,195,000	7.6p
Forfeited/expired during the year	(2,450,000)	10.4p	(2,062,191)	41.8p
Exercised during the year	-	-	-	-
Outstanding at 31 December	5,447,200	11.4p	7,897,200	11.1p
Exercisable at 31 December	627,200	44.3p	342,200	46.6p

NOTES TO THE FINANCIAL STATEMENTS
For the year ended 31 December 2017

Details of options in issue at the year-end are:

Date of grant	Exercise price	Latest exercise date	Estimated fair value	Number of options 31 December 2017	Number of options 31 December 2016
February 2008	129.31p	February 2018	26.6p	23,200	23,200
December 2010	25.86p	December 2020	11.0p	29,000	29,000
July 2012	42.00p	July 2022	12.1p	290,000	290,000
May 2014	46.80p	May 2024	11.4p	110,000	160,000
November 2014	49.50p	November 2024	11.9p	100,000	100,000
April 2015	47.75p	May 2025	10.5p	100,000	100,000
January 2016	23.50p	January 2026	11.7p	395,000	995,000
September 2016	5.00p	September 2026	2.0p	2,400,000	3,200,000
September 2016	5.00p	September 2026	0.6p	2,000,000	3,000,000
				5,447,200	7,897,200

The estimated fair values of the share options were calculated by applying the Black Scholes or Monte Carlo models. The period of exercise for all options granted is between one and ten years from date of grant and the vesting period is normally 3 years from the date of grant. Prior to 2016 the expected volatility had been determined by calculating the historical volatility of the share price over the previous year. From September 2016 and consistent with the application guidance in IFRS 2 the Company considered the most appropriate method to obtaining volatility to be the use of the historical volatility of comparable listed companies. The fair value of options is calculated at the time of award using Black Scholes or Monte Carlo simulations. The model inputs are detailed below:

The model inputs using Black Scholes were:

Date of grant	Exercise price	Share price	Risk free rate	Expected volatility	Gross dividend yield
February 2008	*129.31p	*129.31p	5.25%	35%	-
December 2010	*25.86p	*25.86p	1.50%	75%	-
July 2012	42.00p	42.00p	0.50%	33%	-
May 2014	46.80p	46.80p	2.69%	16%	-
November 2014	49.50p	49.50p	2.05%	18%	-
April 2015	47.75p	47.75p	1.58%	17%	-
January 2016	23.50p	23.50p	1.74%	38%	-
September 2016	5.00p	5.12p	0.87%	30%	-

* the share prices and corresponding option exercise prices for grants made up to 2010 have been adjusted for a bonus issue and share sub-division that took place in April 2011.

NOTES TO THE FINANCIAL STATEMENTS

For the year ended 31 December 2017

Model inputs using Monte Carlo simulations

The three million options awarded to the Executive Directors in September 2016 have share price performance criteria linked to the vesting of the options and have therefore been valued using a Monte Carlo Simulation. The options vest in three tranches linked to the performance conditions detailed below. In addition, the Executive Directors must be employed by the Company for at least two years from the date of award.

Tranche 1: 999,999 options to vest if the average share price is greater than or equal to 10p over a period of 30 calendar days;

Tranche 2: 999,999 options to vest if the average share price is greater than or equal to 15p over a period of 30 calendar days; and

Tranche 3: 1,000,002 options to vest if the average share price is greater than or equal to 20p over a period of 30 calendar days.

The Monte Carlo Model was adapted to incorporate specific vesting conditions relating to the options. The model assumed the options vest on the second anniversary of the date of grant. The fair value of a single option subject to the share price condition is set out below along with the key model inputs:

	2021	2022	2023	2024	2025	2026	Total
Exercise Price	£0.05	£0.05	£0.05	£0.05	£0.05	£0.05	
Expected Life (years)	5	1	1	1	1	1	
Volatility	30%	30%	30%	30%	30%	30%	
Risk Free Rate	0.31%	0.12%	0.10%	0.13%	0.12%	0.10%	
Dividend Yield	0%	0%	0%	0%	0%	0%	
Probability	50%	15%	15%	10%	5%	5%	
Weighted Fair Value Per Option	£0.002	£0.001	£0.001	£0.001	£0.0005	£0.001	£0.006
Total Weighted Fair Value	£6,714	£2,542	£3,148	£2,569	£1,435	£2,057	£18,465

25. Warrants

On 20 October 2015, the Company granted Warrants to Numis Securities Ltd, the Company's brokers as part of their remuneration for the equity placing which was completed in October 2015, to subscribe for 1,467,303 ordinary shares, being 2% of the issued share capital of the Company on that date. The exercise price of the Warrants is 33p and the Warrants can be exercised for a period of 5 years from the date of grant.

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For the year ended 31 December 2017

The estimated fair value of the Warrants of 8.84p was calculated by applying the Black Scholes model. The period of exercise for the Warrants is 5 years from the date of grant and there is no vesting period. The expected volatility has been determined by calculating the historical volatility of the share price over the previous year.

The model inputs were:

Date of grant	Share price	Exercise Price	Risk free rate	Expected volatility
October 2015	33.0p	33.0p	1.86%	37%

26. Financial instruments

The Company's financial instruments comprise cash and various trade receivables and trade payables that arise directly from its operations. No trading in financial instruments is undertaken.

The main risks arising from the Company's financial instruments are liquidity, currency and interest rate. The Board oversees the management of these risks, which are summarised below.

Liquidity risk

The Company is financing its operations from equity funding provided by shareholders and revenues generated by the business. The Company seeks to manage liquidity risk to ensure sufficient funds are available to meet requirements.

The Company invests its cash reserves in bank and money market deposits as a liquid resource to fund its operations. The Company's strategy for managing cash is to balance interest income with counterparty risk ensuring the availability of cash to match the profile of the Company's cash flows.

Interest rate risk

The Company does not face any significant interest rate risk as it has no borrowings. Surplus funds are invested to maintain a balance between accessibility of funds, competitive rates, and counterparty risk whilst investing funds safely.

Credit risk

The Company manages its credit risk in cash and cash equivalents by spreading surplus funds between creditworthy financial institutions.

The Company is also exposed to credit risk attributable to trade and other receivables. The maximum credit risk in respect of the financial assets at each period end is represented by the balance outstanding on trade and other receivables. The Company has limited exposure to

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credit risk, as the majority of its trade and other receivables are due from major corporations and institutions.

Foreign currency risk

The majority of the Company's transactions are denominated in pounds sterling.

The Company has no long term commitments to purchase goods or services in foreign currencies. Purchases denominated in foreign currency are expensed at the exchange rate prevailing at the date of the transaction and comprise an immaterial proportion of the Company's total expenditure.

The only assets and liabilities denominated in foreign currencies relate to trade receivables and trade payables with overseas counterparties together with small balances of US dollar and Euro currencies to settle these liabilities. The risks and sums involved are considered to be immaterial.

Fair values

The Directors consider that there is no material difference between the book value and the fair value of the financial instruments at 31 December 2017 and 31 December 2016.

Capital management

The Company's capital base comprises equity attributable to shareholders. As the Company's focus has been on establishing itself as a successful supplier of MS detectors, the primary objective in managing cash spend has been to achieve progress on product development and commercialisation in a cost efficient manner and in managing liquidity risk to ensure the Company continues as a going concern.

27. Related party transactions

The remuneration paid to the Directors is shown in Note 22 to the financial statements. During the year £15,600 (2016: £15,600) was paid to Mr R Syms who is a consultant to the Company and has a 2% interest in Microsaic as at 31 December 2017. At 31 December 2017 the balance owed to Mr R Syms was nil (2016: nil).

A recruitment service was provided during the year by Parkwalk Advisors, the Company's largest shareholder with a 29.91% interest in the Company. The fee for this one off service was £15,000 including VAT. At 31 December 2017, £12,600 was outstanding.

There were no other related party transactions.

28. Control

As at 31 December 2017, no individual shareholder had a controlling interest in the Company.

NOTES TO THE FINANCIAL STATEMENTS

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29. Events after the Reporting Date

On 2 January 2018, the Company awarded options ("New Options") to Directors and employees over 9,000,000 ordinary shares of 0.25 pence each in the Company ("Ordinary Shares"), representing approximately 4.96% of the issued share capital of the Company. The 3,500,000 New Options awarded to Peter Grant, Non-Executive Chairman were awarded under the Company's Unapproved Share Option Scheme and have an exercise price of 4.05 pence per Ordinary Share being the closing share price on 29 December 2017. These options are subject to performance criteria as well as not being ordinarily exercisable prior to the third anniversary of the date of award. The award to Peter Grant was regarded as a one-off award and was agreed as part of his recruitment to the position of Non-Executive Chairman.

2,000,000 of the New Options awarded to the Executive Directors ("Management Options") were awarded under Microsaic's EMI Scheme. The Management Options have an exercise price of 4.05 pence per Ordinary Share, being the closing share price on 29 December 2017. These options are subject to performance criteria as well as not being ordinarily exercisable prior to the third anniversary of the date of award.

Of the new options 3,500,000 were awarded to all other employees of the Company ("Employee Options") under Microsaic's EMI Scheme. The Employee Options have an exercise price of 4.05 pence per Ordinary Share, being the closing share price on 29 December 2017. These options are not subject to performance criteria but are subject to not being ordinarily exercisable prior to the third anniversary of the date of award.

Following the award of the New Options, the total number of Ordinary Shares outstanding under share incentive scheme arrangements is 14,447,200 representing 7.97% of the Company's issued share capital.