microgen plc

Annual Report 2018

microgen® Financial Systems

Aptitude™ SOFTWARE

Directors and Company Secretary

Ivan Martin
Non-Executive Chairman / Chair of Nomination Committee
Ivan Martin was appointed to the Board on 1 January 2016 and assumed the role of Non-Executive Chairman on 4 March 2016. Ivan is also Non-Executive Chairman of Church Topco Limited, trading as Xceptor (a London-based international software business backed by CBPE Capital). He is also a member of various Wulstan Capital LLPs and Parch Three Estates LLP. Ivan served as Non-Executive Chairman of FDM Group (Holdings) plc since October 2006 but retired from that Board on 5 March 2019. He has no other significant commitments.

Tom Crawford
Chief Executive Officer, Aptitude Software
Tom Crawford was appointed to the Board on 1 January 2016 having joined the Group in 2003 as a Divisional Managing Director. Tom was appointed Senior Vice President of Aptitude Software in 2010 to expand its North American operations before being promoted to President in 2014 to lead the Aptitude Software business globally, a role that divides his time between North America and Europe.

Philip Wood
Chief Financial Officer and Acting Chief Executive Officer of Microgen Financial Systems
Philip Wood was appointed Chief Financial Officer on 2 January 2007. A Chartered Accountant, Philip spent seven years with AttentiV Systems Group plc and its group companies during which time he as Group Finance Director oversaw the group's flotation in 2004 and subsequent acquisition in 2005 by Tieto Corporation. Philip was additionally appointed as Acting Chief Executive Officer of Microgen Financial Systems on 29 October 2018.

Peter Whiting
Senior Independent Non-Executive Director / Chair of Remuneration Committee
Peter Whiting was appointed as a Non-Executive Director on 2 February 2012 and has been Chair of the Remuneration Committee since April 2016. Peter has over twenty years' experience as an investment analyst, specialising in the software and IT services sector. He joined UBS in 2000, led the UK small and mid-cap research team and was Chief Operating Officer of UBS European Equity Research from 2007 to 2011. Peter is currently Senior Independent Director and Chair of the Remuneration Committee of FDM Group (Holdings) plc, Senior Independent Director and Chair of the Audit Committee of Keystone Law Group plc, a Non-Executive Director and Chair of the Remuneration Committee of TruFin plc and a Non-Executive Director and Chair of the Renumeration Committee of D4T4 Solutions plc.

Barbara Moorhouse
Non-Executive Director / Chair of Audit Committee
Barbara Moorhouse was appointed as a Non-Executive Director on 1 April 2017. Barbara has extensive senior experience in operating and financial roles across the public and private sectors. Her most recent executive roles were as Chief Operating Officer at Westminster City Council, and Director General at Ministry of Justice and Department for Transport. Earlier in her career, she was CFO at two international listed software companies – Kewill Systems plc and Scala Business Solutions NV. Barbara is Chair of the Rail Safety Standards Board, a Non-Executive Director of Balfour Beatty plc and Agility Trains, and a Trustee at Guy's and St Thomas' Charity. Barbara also served as a Non-Executive Director of the Lending Standards Board until 28 February 2019 and IDOX plc until 29 March 2019.

Georgina Sharley
Company Secretary
Georgina Sharley was appointed as Company Secretary on 10 December 2018. She is a member of the Institute of Chartered Secretaries and Administrators and has 18 years' experience in supporting UK listed companies and groups with fulfilling their corporate governance and statutory compliance obligations.

Independent Auditors

PricewaterhouseCoopers LLP
Chartered Accountants
and Statutory Auditors
1 Embankment Place
London
WC2N 6RH

Financial Advisors and Stockbroker

Investec Bank plc
30 Gresham Street
London
EC2V 7QP

Financial Public Relations

FTI Consulting LLP
200 Aldersgate Street
London
EC1A 4HD

Registrars

Link Asset Services
The Registry
34 Beckenham Road
Beckenham
Kent
BR3 4TU

Registered Office

Old Change House
128 Queen Victoria Street
London
EC4V 4BJ

Contents

Chairman's Statement

The Group continued its progress in 2018 with an excellent new business performance from the Aptitude Software business supported by a solid performance from the Microgen Financial Systems business. A key highlight was the success achieved in 2018 with the recently launched Aptitude Insurance Calculation Engine, with sales in Asia, Europe and North America.

Aptitude Software overview

Aptitude Software's performance in 2018 benefitted from multiple sales of the Aptitude Insurance Calculation Engine together with an encouraging number of sales of Aptitude Software's growing suite of cloud-deployed applications, the Aptitude Lease Accounting Engine and Aptitude RevStream. Software revenue, the key focus of the Aptitude Software business, grew 37% to £24.8 million (2017: £18.1 million), Organic Growth of 23%. Overall revenue for the Aptitude Software business has grown by 17% to £52.3 million (2017: £44.7 million), Organic Growth of 7%. Overall revenue was impacted by the anticipated slowing of growth in services revenue principally due to the growing partner model. Adjusted Operating Profit increased by 21% to £10.4 million (2017: £8.6 million) representing an Adjusted Operating Margin of 20% (2017: 19%). Operating profit on a statutory basis was £9.4 million (2017: £7.8 million).

Microgen Financial Systems overview

Microgen Financial Systems delivered a solid performance in 2018 with an increased focus on Trust & Fund Administration following the disposal of the small non-core Payments software business on 2 July 2018. Microgen Financial Systems reported Ongoing Revenue of £17.3 million (2017: £16.9 million) with total revenue of £18.0 million (2017: £18.3 million). Microgen Financial Systems reported Ongoing Adjusted Operating Profit of £6.5 million (2017: £6.5 million) with operating profit on a statutory basis of £9.1 million (2017: £6.1 million).

Group overview

Overall the Group reported revenue growth of 12% to £70.3 million (2017: £63.0 million), Organic Growth of 6%. Group Adjusted Operating Profit increased by 9% to £15.7 million (2017: £14.5 million). Group operating profit on a statutory basis of £16.8 million (2017: £12.0 million) with 2018 benefitting from a gain from the disposal of the small non-core Payments business of £3.2 million.

Dividend

Having considered the Group's progress and financial performance in 2018 the Board proposes the payment of a final dividend of 4.40 pence per share (2017: 4.25 pence), making a total of 6.60 pence per share for the year (2017: 6.25 pence), an increase of 6%. The proposed final dividend will be paid on 30 May 2019, subject to shareholder approval, to shareholders on the register at 24 May 2019.

Demerger of Microgen Financial Systems

Following the change in leadership of Microgen Financial Systems in October 2018 the Board has been exploring a range of strategic options with the objective of delivering maximum value to shareholders.

The Board believes that greater value will be realised through a simpler and more focused business targeted at the specialised financial management software market served by Aptitude Software. The Board has therefore concluded that a demerger of Microgen Financial Systems on to AIM will enhance Microgen plc's ability to allocate capital and management attention on the higher growth Aptitude Software business whilst also providing Microgen Financial Systems with the best ownership environment for it to successfully focus on its specialist target market and service its international customer base.

Historically both businesses benefitted from the combined financial and organisational scale of the Group. Firstly, the Aptitude Software business leveraged the more established corporate credentials of the wider Group when securing new business contracts with prospects for whom the corporate strength of a key supplier is a material consideration. With the growth experienced by Aptitude Software in recent years this benefit has reduced materially as demonstrated by Aptitude Software's 2018 revenue of £52.3 million being significantly ahead of the Group's total revenue in earlier years (for example, in 2013 the Group's revenue was £29.8 million of which Aptitude Software represented £14.7 million). The second key historical benefit from the combined financial and organisational scale of the Group were the operational synergies focused principally on back office administration. In recent years these synergies have largely been reduced as the finance, legal and human resources functions have been embedded into each business unit separately, to provide greater and more tailored support for their growth.

In parallel with the reduction in synergies the Board implemented a number of changes which would facilitate the eventual demerger of Microgen Financial Systems in the future. These changes included the establishment of strong management teams into each of Microgen's two businesses, the separate branding adopted by the Aptitude Software business, the devolution to each business of the back-office administration functions, the recent disposal of the non-core Payments business and finally the signing in 2018 of material multi-year contract extensions with a number of Microgen Financial Systems' Application Management clients. As Microgen Financial Systems makes its final preparations for independence, further investment is now being made focusing on product development, business development and the further strengthening of its management team.

The demerger is subject to shareholder approval and it is expected that the demerged Microgen Financial Systems entity will apply to be admitted to AIM during the course of 2019. It is intended that shareholders of Microgen plc will have a direct shareholding in the demerged entity in proportion to their respective shareholding in Microgen plc. The Board will provide further information on the precise mechanics of the demerger and listing in due course.

Once demerged and admitted to AIM, the newly independent Microgen Financial Systems will become the total focus of its board and shareholders. This focus is expected to facilitate the ability to target acquisitions in Microgen Financial Systems' specialist market space whilst also allowing highly targeted and effective incentive schemes for its dedicated team.

It is expected that Peter Whiting, currently Senior Independent Non-Executive Director of Microgen plc, will chair the Board of the demerged Microgen Financial Systems. Peter's knowledge of the business and extensive public company experience will be a key asset for the business and its executive team. Shortly after demerger it is expected that Peter will step down from the Board of Microgen plc.

Robert Browning, currently leading Microgen Financial Systems' management team in his role of Chief Operating Officer, is expected to be appointed Chief Executive Officer of the demerged business upon admission to AIM. Philip Wood, currently Acting Chief Executive Officer of Microgen Financial Systems in addition to Chief Financial Officer of the Group will continue with Microgen plc in his longstanding role of Chief Financial Officer.

Change of Name of Microgen plc to Aptitude Software Group plc

With the Aptitude Software business expected to be the total focus of the Group in the near future, it is now considered appropriate to change the name of Microgen plc to Aptitude Software Group plc. The name change will be effective from early April 2019.

Outlook

After a solid performance in 2018 Microgen Financial Systems looks forward positively to the future with a number of investments either underway or planned to accelerate growth within Trust & Fund Administration as the business prepares for its future independence. The business continues to benefit from excellent revenue visibility arising from its strong Recurring Revenue Base and the signing in 2018 of material multi-year contract extensions with a number of its Application Management clients.

The opportunity for Aptitude Software is significant with the business benefitting from a number of new applications and services focussed across a number of different geographies and verticals. This increasingly well positioned suite of applications have enabled Aptitude Software, assisted by its growing partnership network, to establish a strong pipeline of opportunities allowing the business and the Group to look forward confidently to achieving continued success in 2019.

Ivan Martin

Chairman

Aptitude Software
Report

The Aptitude Software business provides a series of specialised financial management software applications which have the common capability of unifying, analysing and rapidly processing high volume, complex, business event-driven transactions, scenarios and calculations to deliver finance insight and control. Development continues to be performed principally at the Aptitude Technology Centre in Poland with sales, support and implementation services provided from Aptitude Software's London headquarters in addition to the North American and Singaporean offices. The business generates revenue from its software through a combination of licence fees (primarily annual recurring licences), software maintenance/support, software subscriptions for its cloud-based offerings and implementation and other support services.

Highlights and Financial Summary

Aptitude Software has made good progress in the year as the business transitions from its previous focus on the Aptitude Revenue Recognition Engine to the significant opportunity with its latest application, the Aptitude Insurance Calculation Engine ('AICE'). The business has now completed multiple sales of AICE across Asia, Europe and North America to both existing and new customers demonstrating Aptitude Software's increasing geographic reach and the complementary nature of the broadening suite of applications. The business also achieved an encouraging number of sales of Aptitude Software's growing suite of cloud-deployed applications, the Aptitude Lease Accounting Engine and Aptitude RevStream.

Software revenues recognised in 2018 have increased 37% to £24.8 million (2017: £18.1 million), Organic Growth of 23%. At 31 December 2018 the Recurring Revenue Base stood at £24.0 million (31 December 2017: £19.3 million), an increase of 24% during the year. The business continues to be focused on increasing its Recurring Revenue Base by promoting the Annual Licence Fee model, however, the Recurring Revenue Base also now includes software subscription income in respect of the cloud-deployed applications with such income included within the software revenue disclosed above.

Overall revenue for the Aptitude Software business has grown by 17% to £52.3 million (2017: £44.7 million), Organic Growth of 7%. Overall revenue was impacted by the anticipated slowing of growth in services revenue principally due to the growing partner model, with services revenue increasing by only 3% to £27.5 million (2017: £26.6 million), marginally below the prior year if the benefit of the 2017 RevStream acquisition is excluded.

Adjusted Operating Profit increased by 21% to £10.4 million (2017: £8.6 million) representing an Adjusted Operating Margin of 20% (2017: 19%). Operating profit on a statutory basis was £9.4 million (2017: £7.8 million).

Acceleration of Investment

Building on the recent sales successes and in anticipation of the proposed new structure of the Group, the Board has accelerated investment in the future growth of Aptitude Software to both maximise current opportunities and to ensure the continued long-term development of the business. Overall, these investments moderate margin growth expectations for 2019 only.

The focus of investment has been the strengthening of the product development, product management and subject matter expertise capability of the business with a number of new senior hires. Investment has especially been accelerated on AICE where the new business opportunity will be at its peak in the period leading up to the effective date for IFRS 17 (accounting periods commencing on or after 1 January 2022).

Investment has also been accelerated ahead of earlier expectations in establishing the new Solution Management Service and further strengthening Aptitude Software's cloud capability, with both services attracting new customers in 2018.

Our People

Aptitude Software's people are the key asset of the business, whether through their knowledge of the market and the complex accounting challenges our clients face or the technical know-how on the development and implementation of our market leading specialised financial management software applications. This knowledge and know-how is leveraged through the outstanding commitment of its exceptionally talented employees across the globe enabling the business to make the excellent progress it achieved in 2018. The Board continues to be grateful to the wider Aptitude Software team for their outstanding contribution to the business. To ensure we retain knowledge leadership it is important that career development and training remains a key focus for the business. A series of training courses aimed at developing functional, technical and managerial skills within the business continue to be rolled out with further initiatives planned for 2019.

It is considered that re-naming Microgen plc to Aptitude Software Group plc will be a positive contributor to employee engagement with the Group, with the proposed demerger of Microgen Financial Systems Limited likely to increase the effectiveness of future long-term incentive schemes for the Aptitude Software team.

Key Product Review

Aptitude Software has a growing suite of specialised financial management software applications which have the common capability of unifying, analysing and rapidly processing high volume, complex, business event-driven transactions, scenarios and calculations to deliver finance insight and control. During the year the business strengthened its product management capability highlighted by the appointment of a Chief Product Officer, a newly established role within Aptitude Software. The strengthened product management function ensures market driven insight remains at the heart of the decision-making process determining the focus of Aptitude Software's investment in both existing and new applications.

Aptitude Insurance Calculation Engine ('AICE')

Aptitude Software has made excellent progress in 2018 with its latest application, the Aptitude Insurance Calculation Engine. After completing the strategically important first sale to an Asian insurance group in February 2018, further contracts have now been signed with major insurers in three separate continents with a further material new business contract signed in the opening months of 2019 with an insurer in the UK. Success has been achieved with both insurers contracting for their first application with Aptitude Software as well as existing clients contracting for the application to build on their use of the Aptitude Accounting Hub ('AAH').

AICE allows insurers to address the requirements of IFRS 17, an accounting standard focused on insurance contracts. This new standard will require significant change by the insurance industry, a sector within which Aptitude Software has had a longstanding presence with a number of insurers using Aptitude Software's applications, a number of whom have now contracted for AICE. This new application leverages both Aptitude Software's existing technology and its experience of the insurance industry.

IFRS 17 will now be effective for accounting periods commencing on or after 1 January 2022, twelve months later than previously expected due to a recent extension in the effective date. Whilst this change has caused some delay to certain on-going sales processes, it is considered that in the medium term it will be beneficial to Aptitude Software as it provides insurers further time to select and implement more strategic and specialised software to address the requirement as opposed to short term tactical solutions.

There are a number of further global opportunities for AICE, the success of which will be a key part of the continued development of the business in both the short and medium term.

Aptitude Accounting Hub ('AAH')

AAH is a high volume operational accounting platform and sub-ledger that centralises control, improves reporting and generates a rich foundation of contract level finance and accounting data. Regulatory and industry change continues to be a driver of demand for AAH as complexity of contracts, products and services increases across a number of industries. AAH allows clients to simultaneously address the regulatory change and also leverage the detailed finance and accounting data within the system to drive commercial change within their business. AAH has clients within banking, healthcare, insurance and telecommunications with both new name business and account growth in 2018.

The opportunity for AAH remains significant. Whilst a number of target companies are currently prioritising regulatory requirements within their business (requirements addressed by a number of Aptitude Software's applications), AAH, regardless of regulation, is often the first element a client will licence to allow them to better control and manage the complexity of the finance transformation.

AAH is the cornerstone system in a number of client accounts and integrates with Aptitude Software's other leading applications. A number of sales of AICE or the Aptitude Revenue Recognition Engine have been made in recent years to existing users of AAH whilst sales of AICE to new customers will frequently be accompanied by a sale of AAH.

Aptitude Lease Accounting Engine ('ALAE')

The Aptitude Lease Accounting Engine has made good progress in 2018 with a number of new business sales building on the first contract for the application in December 2017 with a global technology firm. With the demand for ALAE expected to be sustained in the short term the business is satisfied with the Recurring Revenue Base already established for this application.

ALAE addresses the requirements of IFRS 16 / ASC 842, the leasing accounting standards effective for accounting periods commencing on or after 1 January 2019. Contracts have been secured across a number of different industries including insurance, logistics, facilities management and manufacturing. ALAE is a particularly compelling proposition when the accounting complexity is high and / or involving a multi-currency, multi-entity, multi-country dimension.

With ALAE well suited to cloud deployment the majority of the users of ALAE have subscribed for Aptitude Software's growing Software-as-a-Service offering, a capability accelerated by the addition of the 2017 RevStream acquisition.

Aptitude Revenue Recognition Engine ('ARRE')

ARRE addresses the requirements of IFRS 15 / ASC 606 the revenue accounting standards first effective for accounting periods commencing on or after 1 January 2018 (1 January 2019 in certain markets). Whilst providing capability applicable to many sectors the base is comprised of telecom clients where the capabilities of ARRE are well suited to the accounting complexity and data volumes experienced in this market.

The majority of users have now entered live use with the application with future growth anticipated to be generated from growth in existing accounts.

Aptitude RevStream

Aptitude RevStream continues to see a number of new business opportunities due to the broad revenue management capability of the software. In addition to a number of new clients secured in 2018, 2019 has started well for this application with a material new business contract secured at the start of the year. The software provides clients with business benefits in addition to regulatory compliance and Aptitude Software is committed to this revenue management market with ongoing investment. In addition to the positive financial contribution from the application, the contribution of the RevStream acquisition to the development of the cloud offering of Aptitude Software's other applications is material. The knowledge and references provided by RevStream has significantly accelerated the introduction of Aptitude Software's cloud offering for the Aptitude Lease Accounting Engine.

New Service Offerings

In addition to Aptitude Software's growing software-as-a-service revenues, the business completed the first sale of its Solution Management Service ('SMS'), a three year contract with a large North American telco client. The revenues for these services are disclosed within Aptitude Software's service revenues, however, they are fixed and recurring in nature.

The services, which are expected to further enhance the longevity of applications with clients, extend the responsibilities of Aptitude Software beyond traditional maintenance services to include services typically performed by the clients' own IT teams, for example monitoring of system performance, user administration and release management. Investment was made in both the proposition and the delivery capability of this new service in 2018, earlier than previously expected by the Board. The business is now targeting a number of opportunities within the client base to whom it can sell and deploy this new capability.

Research and Development

The Aptitude Technology Centre in Poland is responsible for the development of Aptitude Software's applications with the exception of Aptitude RevStream where development is augmented by teams in California. Modern development methodologies are followed with multi-discipline teams focused on specific applications. Benefitting from this approach the teams are able to rapidly and frequently release new functionality, a key requirement given the continuing and evolving requirements from Aptitude Software's client base. Research and development expenditure, including the cost of the growing product management function, in the year was £8.5 million (2017: £6.0 million) with all costs expensed as incurred with the increase in cost including £1.6 million in respect of the full year of Aptitude RevStream development costs.

Geographical Expansion

Aptitude Software's opportunity is worldwide with an established presence in Asia, Europe and its largest market, North America which represents 57% of the Recurring Revenue Base. Particularly pleasing is the material growth during the year in the value of the Recurring Revenue Base from Asia.

At the start of 2018 a Chief Revenue Officer for International (Asia and Europe) was appointed to lead business development across these two regions. Under his leadership an office in Singapore was established in the year with a multi-discipline team established to support this market and Aptitude Software's growing client base. In addition, Aptitude Software will be strengthening its presence in North America during 2019 with a senior appointment to lead the strategy and business in this key market, a market that has grown its Recurring Revenue Base from £1.6 million on 31 December 2013 to £13.1 million on 31 December 2018.

Whilst activities in Asia, North America and non-European Union European states are unlikely to be impacted by the United Kingdom's withdrawal from the European Union, Aptitude Software performs its development at the Aptitude Technology Centre in Poland and has a number of on-going implementation projects within European Union states (2018 revenue from European Union states excluding United Kingdom: £8.6 million). The business is continuing to monitor the developing situation, however, whilst there may be short term disruption it does not believe that there will be a long-term material impact given Aptitude Software's experience in deploying its highly skilled consultants across the world in addition to the flexibility provided by the partner network and the option of expanding the consulting capability of the Aptitude Technology Centre located in the European Union.

Partner Network

Aptitude Software's partner network is a very key influencer in our target markets where consultancies are frequently engaged to advise on technology selection. A significant number of partner resources have been training in Aptitude Software's applications providing partners with the capability to implement, or contribute to the implementation of, our applications. This capability augments the delivery capability for Aptitude Software's applications helping to accelerate their adoption.

Aptitude Software's partner network has continued to develop during 2018 with the majority of new business being partner influenced. A series of partnerships and alliances were publicly announced in 2018 with a number of different organisations including Deloitte, KPMG and Workday. In addition, Aptitude Software has hosted 25 partner events across 13 countries in 3 different continents.

Foreign Exchange

Aptitude Software is an increasingly international business with 54% of its revenues invoiced in US Dollars to North American clients (2017: 57%). Aptitude Software's 2018 revenue would have been reported higher at £52.7 million on a constant currency basis (compared to actual result of £52.3 million). On a constant currency basis adjusted operating profit in 2018 would be unchanged to that reported at £10.4 million. Constant currency is calculated by comparing the 2017 results with 2018 results retranslated at the rates of exchange prevailing during 2017.

Summary

In summary, the business has achieved excellent early success with the Aptitude Insurance Calculation Engine establishing an already valuable Recurring Revenue Base for this application. Good progress has also been made to develop new service offerings with the launch of its Solution Management Service and it is particularly pleasing to see a number of sales of the cloud-enabled Aptitude Lease Accounting Engine. Early success has also been achieved in the opening months of 2019 with material new business contracts secured for each of the Aptitude Insurance Calculation Engine and Aptitude RevStream applications.

The opportunity for Aptitude Software remains significant. With a growing suite of products and services focused across a number of different geographies and verticals the business looks forward confidently to achieving continued success in 2019.

Tom Crawford

Chief Executive Officer, Aptitude Software

Microgen Financial Systems
Report

In 2018 the Microgen Financial Systems business made good progress in increasing the proportion of its revenues from the Trust & Fund Administration ('T&FA') sector, both through organic growth and the disposal of the non-core Payments software business. Microgen Financial Systems' key product in this sector is Microgen 5Series which addresses the core operational and regulatory requirements of a number of organisations including Trust Administrators, Fiduciary Companies, Corporate Services Providers and Fund Administrators. In addition to Microgen Financial Systems' T&FA operations, revenue is generated from an Application Management business covering a range of Microgen-owned and third party systems principally focused on the financial services industry. Until 2 July 2018 revenue was also generated by a Payments software business at which time this business was disposed. Revenues are generated through a combination of software licence fees (primarily annual recurring licences), software maintenance/support fees and professional services.

Highlights and Financial Summary

Microgen Financial Systems' Ongoing Revenue for the year ended 31 December 2018 increased to £17.3 million (2017: £16.9 million) of which 75% (2017: 75%) is recurring in nature. Total revenue, impacted by the disposal of the Payments software business on 2 July 2018, of £18.0 million (2017: £18.3 million).

The key highlight in 2018 was the disposal of the Payments software business for cash consideration of £6.9 million. In 2018 this non-core part of Microgen Financial Systems contributed revenue of £0.8 million (2017: £1.4 million) and operating profit (before non-underlying items) of £0.5 million (2017: £1.0 million). Following the disposal of this non-core part of Microgen Financial Systems the 2018 Ongoing Revenue generated by T&FA increased to 70% (2017: 62%).

Adjusted Ongoing Operating Profit is reported at £6.5 million (2017: £6.5 million) representing an Adjusted Ongoing Operating Margin of 38% (2017: 38%). Operating profit on a statutory profit basis is reported at £9.1 million (2017: £6.1 million) with 2018 benefitting from a £3.2 million gain from the disposal of the non-core Payments business.

Trust and Fund Administration

T&FA saw solid progress with revenue growing by 7% to £12.1 million (2017: £11.3 million), Organic Growth of 7%. T&FA recurring revenue in 2018 increased by 7% to £8.7 million (2017: £8.1 million), Organic Growth of 7%.

The T&FA Recurring Revenue Base increased during the year by 5% to £9.0 million at 31 December 2018 (31 December 2017: £8.8 million). Within the T&FA Recurring Revenue Base of £9.0 million at 31 December 2018 is £5.0 million (2017: £4.5 million) relating to the Microgen 5Series product with the Recurring Revenue Base on acquired and legacy T&FA products of £4.0 million (2017: £4.3 million).

In preparation for being an independent business a number of investments are being made to accelerate the growth of Microgen Financial Systems' T&FA revenues. In addition to further strengthening of the management team, investment has increased in particular within product and business development with profitability expected to be impacted in the short term.

Application Management

The Application Management business comprises a number of Microgen-owned and third party systems focused principally on financial services. The Application Management business reported revenue in line with management expectations at £5.2 million (2017: £5.6 million) with a number of long-term contract extensions secured in the year to provide the business with increased visibility and resilience in coming years.

Our People and Leadership

Following the departure of Microgen Financial Systems' Chief Executive Officer in October 2018 Philip Wood has been leading the business and providing support to the management team headed by Robert Browning. It is now confirmed that Robert will lead the business through its proposed demerger at which time it is expected he will be appointed Chief Executive Officer of Microgen Financial Systems.

The wider Microgen Financial Systems team are a key strength of the business and the Board are grateful for their excellent contribution in the year. Since the start of 2018 the team have successfully embraced several changes, whether the adoption of new modern development methodologies, enhanced approaches to implementation or refined go-to-market strategies. It is particularly pleasing to see individuals flourish in their new roles or responsibilities as part of these changes.

Summary

Microgen Financial Systems made solid progress in 2018 and enters 2019 with an increased focus on T&FA following the disposal of the non-core Payments business in July 2018. Microgen Financial Systems is now looking to accelerate its growth within T&FA through investment in several different areas of the business. Benefiting from these investments, high levels of recurring revenue and the material multi-year contract extensions with a number of Application Management clients, the business looks forward to being an independent software business focused on its core market and further improving its competitive position.

Philip Wood
Acting Chief Executive Officer, Microgen Financial Systems

Group Financial Performance and

Chief Financial Officer's Report

Throughout this report:

- The FY 2017 comparatives have been restated as a result of changes in accounting policies, see note 33 for further information
- Recurring Revenue Base includes recurring revenues contracted but yet to commence and excludes recurring revenues which are currently being received but are known to be terminating in the future
- Organic Growth percentages have been provided with the benefit of the acquisitions completed in 2017 and the impact of the 2018 small disposal removed, see note 1(e) for further information
- Adjusted Operating Profit, Adjusted Operating Margin and Adjusted Basic Earnings per Share excludes non-underlying operating items, unless stated to the contrary. Further detail in respect of the non-underlying operating items can be found within note 3.
- Ongoing Revenue, Ongoing Adjusted Operating Profit and Ongoing Operating Margin are calculated to exclude the contribution from the Payments software business, a non-core part of Microgen Financial Systems, disposed on 2 July 2018. See 1(f) for further information.

Revenue for the year ended 31 December 2018 was £70.3 million (2017: £63.0 million) resulting in an Adjusted Operating Profit of £15.7 million (2017: £14.5 million) representing growth of 12% and 9% respectively. Organic Growth in revenue was 6%. Operating profit on a statutory basis was £16.8 million (2017: £12.0 million) benefitting from non-underlying costs of £2.2 million (2017: £2.5 million) and a £3.2 million gain on disposal of the small non-core Payments software business (2017: nil). Group overhead costs were £1.6 million (2017: £1.7 million). The Group reported a profit for the year attributable to shareholders of £13.8 million (2017: £10.5 million). In accordance with IFRS, the Board has continued to conclude that all internal research and development costs are expensed as incurred and therefore the Group has no capitalisation of development expenditure.

Non-underlying operating costs in 2018 of £2.2 million (2017: £2.5 million) includes a £1.9 million (2017: £1.3 million) amortisation charge in respect of acquired intangible assets.

The total tax charge for the year is £1.6 million (2017: £1.1 million). After adjusting for the effect of non-underlying and other items, the Group's tax charge represents 22.93% of the Group's adjusted profit before tax (2017: 21.90%) which is the tax rate used for calculating the adjusted earnings per share. Adjusted basic earnings per share for the year ended 31 December 2018 was 19.4 pence (2017: 18.0 pence). Basic earnings per share for the year was 22.6 pence (2017: 17.3 pence).

The Group has a strong balance sheet with net assets at 31 December 2018 of £64.8 million (2017: £54.4 million), including cash at 31 December 2018 of £29.2 million (2017: £19.1 million), and net funds at 31 December 2018 of £17.3 million (2017: £4.9 million). During the year there were corporate cash inflows of £2.9 million comprising £6.8 million net proceeds from the disposal of the non-core Payments business less £3.9 million dividends. The net loan balance outstanding was £7.9 million at 31 December 2018 (2017: £9.8 million) with a further £4.0 million of capital lease obligations pursuant to the adoption of IFRS 16 (2017: £4.2 million). Trade and other receivables outstanding at 31 December 2018 were £14.7 million (2017: £13.6 million) with the growth in the Group's revenues also resulting in deferred income increasing to £28.3 million at 31 December 2018 (2017: £26.7 million).

Continuing to be a focus of the Group, cash conversion (measured by cash generated from operations as a percentage of operating profit adjusted for the non-underlying items with no cash effect) was once again excellent in 2018 at 97% (2017: 113%) with the Group continuing to benefit from a growing Recurring Revenue Base with customers typically paying annually in advance.

Philip Wood
Chief Financial Officer

Report of the Directors

The Directors of Microgen plc (the "Company") present their report and the audited consolidated financial statements of the Company for the year ended 31 December 2018.

Results and Dividends

The results for the year are set out in the financial statements and notes that appear on pages 67 to 136. As explained in the Chairman's Statement, the Directors propose the payment of a final dividend of 4.40 pence per share, making a total of 6.60 pence per share for the year (2017 total: 6.25 pence). Subject to shareholder approval, the proposed final dividend will be paid on 30 May 2019 to shareholders on the register at close of business on 24 May 2019.

The ordinary dividends paid in 2018 totalled £3.9 million (2017: £3.3 million).

Principal Activities

As at 22 March 2019, the Company is the corporate parent of two information technology businesses, operated as independent business units, which provide business critical software and services. The Company and its subsidiaries together are referred to in this Annual Report as "the Group". The Group's products and services are detailed within the reports on pages 4 and 8.

As detailed within the Chairman's Statement, the Group proposes to demerge the Microgen Financial Systems business onto AIM. It is also intended to change the name of Microgen plc to Aptitude Software Group plc in early April 2019.

Key Performance Indicators

Key Performance Indicators are set for each of the Group's two operating businesses and can be found in the reports on pages 4 and 8. The Key Performance Indicators for the Microgen Financial Systems business are Operating Profit before Non-Underlying Items, Recurring Revenue, and growth in the Trust and Fund Administration sector revenues. The Key Performance Indicators for the Aptitude Software business are Revenue Growth, Operating Profit (before Non-Underlying Items) Growth and Recurring Software-based Revenue Growth.

Principal Risks and Uncertainties

The management of the business and the execution of the Group's strategy are subject to several risks. As detailed on page 25 risks are formally reviewed by the Board and appropriate processes put in place to monitor and mitigate such risks where feasible. The key business risks for the Group, as structured on 22 March 2019, are set out in the table on pages 14 and 15.

United Kingdom vote to leave the European Union

The potential longer-term political and economic consequences arising from the United Kingdom's vote to leave the European Union ("EU") remain uncertain. The Board has continued to assess the likely impact of exiting the EU on the Group's business.

The Group is engaged in a number of projects to implement its products with clients based in EU countries, and the Group's consultants and other staff are currently able to travel freely to those countries to participate in those projects without the need to obtain visas. In addition, development work on the products of the Aptitude Software business is carried out principally in Poland, and personnel therefore regularly travel between Poland and the United Kingdom.

A change to the status of the United Kingdom may result in increased restriction on movement of the Group's employees between the United Kingdom, Poland and other EU countries and could lead to additional administrative costs, and other regulatory changes could adversely impact the administration of the Group's operation in Poland. For information, Group revenue from EU countries (excluding the United Kingdom) in 2018 was £9.3 million.

Regulatory changes and macro-economic risks are outside the Group's control, but the Board will continue to monitor the position and believes that the Group is well-placed to identify and react quickly to changes in the operating conditions.

Statement of Directors' responsibilities

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

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

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

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

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

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

Directors' confirmations

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

Each of the Directors, whose names and functions are listed at the start of this report confirm that, to the best of their knowledge:

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

In the case of each Director in office at the date the Directors' Report is approved:

- so far as the Director is aware, there is no relevant audit information of which the Group and Company's auditors are unaware; and
- they have taken all the steps that they ought to have taken as a Director in order to make themselves aware of any relevant audit information and to establish that the Group and Company's auditors are aware of that information.

Table detailing Principal Risks and Uncertainties

Major Risks and Uncertainties	Explanation	Mitigating Action
Demand for the Group's products may be adversely affected if economic and market conditions are unfavourable.	Adverse economic conditions worldwide can contribute to slowdowns in the Information Technology spending environment and may impact the Group's business, resulting in reduced demand for its products as a result of decreased spending by customers and increased price competition for the Group's products. This reduced demand could be attributable to a reduction in the number and impact of accounting and/or regulatory changes that have contributed to recent demand within both businesses for their products. Additionally, there is potential for adverse regulatory change in the end market for the Microgen 5Series product, software which is focused on international financial centres. The Group's revenues, expenses and operating results could vary significantly from period to period as a result of a variety of factors, some of which are outside the Directors' control.	The Group's preferred annual licence fee or subscription model generates recurring revenue which provides some resilience against the full effects of market deterioration. Additionally, the Group operates in multiple geographic regions and, while it has a material exposure to the financial services sector, operates in a number of business sectors.
If the Group does not successfully expand or enhance its product offerings or respond effectively to technological change, the business may be negatively affected.	The Group's future performance will depend on the successful development, introduction and market acceptance of new and enhanced products that address customer requirements in a cost-effective manner. If the Group does not expand or enhance its product offerings or respond effectively to technological change, its business may be negatively affected. Additionally, there is a risk that the Group's technological approach will not achieve broad market acceptance or that other technologies or solutions will supplant the Group's approach. Some of the Group's markets are characterised by rapid technological change, frequent introduction of new products, changes in customer requirements and evolving industry standards.	The Group has well-developed product roadmaps for its key software products. The development of the product roadmaps is a result of close liaison with prospects, customers, partners and other organisations. In addition, there is proactive monitoring of forthcoming regulations to identify required changes to existing products and opportunities for the development of new products.
There is substantial competition in the Group's markets which could adversely affect the Group.	Some of the markets for the Group's products are competitive, rapidly evolving and subject to rapid technological change. As a result, the Group expects competition to persist, intensify and increase in the future. There are no substantial barriers to entry into these markets and some of the Group's competitors are large organisations with far greater financial resources than Microgen. The Group's ability to compete is dependent upon many factors within and beyond the Group's control, including: (a) timing and market acceptance of new solutions and enhancements to existing solutions developed by the Group and its competitors; (b) performance, ease of use and reliability of the Group's products; (c) price; (d) customer service and support; and (e) sales and marketing efforts.	The Group maintains and enhances its competitive position by retaining highly specialised domain knowledge within its chosen markets enabling it to develop, implement and support its market-leading products. The Group constantly seeks to improve the implementation and support services provided to its customers, whilst the Aptitude Technology Centre located in Poland provides the Aptitude Software business with a cost-efficient and highly performing development centre. Market trends are carefully monitored to ensure any threats to the Group's competitive position are identified at the earliest opportunity.
Potential future acquisitions by the Group may have unexpected material adverse consequences.	Acquisitions are part of the strategy for the Group as a whole and the Microgen Financial Systems business in particular. Acquisitions involve numerous risks which may have unexpected adverse material consequences.	Acquisitions are carefully assessed by the Board in respect of their alignment with the Group's acquisition strategy. The Group benefits from significant acquisition experience following the completion of six acquisitions since 2014 and seeks to perform thorough due diligence, supported by the appropriate use of external advisers, to help identify any unexpected material adverse consequences.
If the Group loses its key personnel or cannot recruit additional personnel, the Group's business may suffer.	The Group's success greatly depends on its ability to hire, train, retain and motivate qualified personnel, particularly in sales, marketing, research and development, consultancy services and support. The Group faces significant competition for individuals with the skills required to perform the services the Group will offer. If the Group is unable to attract and retain qualified personnel it could be prevented from effectively managing and expanding its business. In addition, if the Group is unable to assign suitably qualified staff to its implementation projects there is increased risk of project failure with the consequences as outlined in the relevant following section.	The Group makes ongoing investments in its employees, including the provision of Group-wide share option schemes, regularly updated Company-wide communication programmes and staff surveys, as well as a focus on strengthening the culture of both businesses through a number of initiatives.

Table detailing Principal Risks and Uncertainties (continued)

Major Risks and Uncertainties	Explanation	Mitigating Action
Claims by others that the Group's products or brands infringe their intellectual property rights could be costly to defend and could harm the Group's business.	The Group may be subject to claims by others that the Group's products or brands infringe or misappropriate their intellectual property or other property rights. These claims, whether or not valid, could require the Group to spend significant sums in litigation, distract management attention from the business, pay damages, delay or cancel product shipments, rebrand or re-engineer the Group's products or acquire licences to third party intellectual property. In the event that the Group needs to acquire a third-party licence, the Group may not be able to secure it on commercially reasonable terms, or at all.	The Group's legal function regularly reviews methods by which it can protect its own intellectual property rights and avoid infringing the intellectual property rights of third parties. This has resulted in both the registration of trade-marks and patent applications where considered appropriate.
The Group's reputation as a quality professional service provider may be adversely affected by any failure to optimise its deployed products or meet its contractual obligations, customer expectations or agreed service levels.	The Group's ability to attract new customers or retain existing customers is largely dependent on its ability to provide reliable high-quality products and services to them and to maintain a good reputation. Because many of the engagements of the Group involve projects that are critical to the business operations and information systems of clients, the failure or inability of the Group to meet a client's expectations could have an adverse effect on the client's operations and could result in damage to the reputation of the Group. Certain contracts may provide for a reduction in fees payable by the client if service levels fall below certain specified thresholds, thus potentially reducing or eliminating the profit margin on any particular contract. If the Group fails to meet its contractual obligations or perform to client expectations, it could be subject to legal liability or damage to its reputation and the client may ultimately be entitled to terminate the contract.	The Group employs highly-skilled personnel and has business processes in place to endeavour to ensure that any lapse is quickly identified and addressed. In addition, significant issues are reported to senior managers and, if appropriate, the Board.
The Group's software products may contain undetected errors producing incorrect results or otherwise fail to process data at sufficient speed.	The Group's products involve sophisticated technology that performs critical functions to highly demanding standards. Software products as complex as those offered by the Group might contain undetected errors or failures. If flaws in design, production, assembly or testing of the Group's products (by the Group or the Group's suppliers) were to occur, the Group could experience a rate of failure in its products that would result in substantial repair, replacement or service costs and potential liability and damage to the Group's reputation. The Group will not be able to be certain that, despite testing by the Group and by current and prospective customers, flaws will not be found in products or product enhancements. Any flaws found may cause substantial harm to the Group's reputation and result in additional unplanned expenses to remedy any defects, and liability stemming from such defects, as well as a loss in revenue and profit.	Development activities including software quality are reviewed in regular meetings with senior managers. The Group has established robust development and testing processes and has made a number of recent investments to further strengthen this area of the business.
The Group's activities may result in the loss or disclosure of client data.	The Group is implementing its products and services at a number of customers where the Group's employees potentially have access to sensitive client data and sensitive data of clients' own customers. There is a risk that there could be unauthorised access to, or disclosure or loss of, such data, whether inadvertently or maliciously. In such circumstances the Group is likely to be subject to legal liability and/or material damage to its reputation and the client may ultimately be entitled to terminate the contract.	Employees are trained in the importance of data security with background checks performed at recruitment and for certain other roles at regular intervals.

Going Concern and Long-Term Viability Statement

In accordance with provision C.2.2 of the 2016 revision of the UK Corporate Governance Code ("the Code"), the Directors have assessed the prospects of the Group over a longer period than the 12 months required by the "Going Concern" provision. The Board determined that it would be reasonable to perform this review for a period of three years and considered the Group's cash flows, loan compliance and other key financial indicators over the period. Sensitivity analysis was then performed with a number of the main assumptions underlying the forecast flexed both individually and in aggregate. Where appropriate, this analysis was carried out to evaluate the potential impacts of the Group's principal risks actually occurring.

Based on the results of the review the Directors confirm that they have a reasonable expectation that the Group will continue to operate and meet its liabilities, as they fall due, for the next three years. The Directors' assessment has been made with reference to the Group's current position and prospects, the Group's current strategy, which includes the proposed demerger of Microgen Financial Systems, the Board's current risk appetite and the Group's principal risks and how these are managed. The Group retains significant cash balances benefitting from its Annual Licence Fee model in which the overwhelming majority of its customers pay annually in advance, furthermore the Group has access to a revolving credit facility of £10 million which, at 31 December 2018 was not being utilised.

Employment Policies and Gender Diversity

The Group is committed to offering equal employment opportunities and its policies are designed to attract, retain and motivate the best staff regardless of gender, race, colour, religion, ethnic or national origin, age, marital status, disability, sexual orientation or any other conditions not relevant to the performance of the job, who can demonstrate that they have the necessary skills and abilities. The Group gives proper consideration to applications for employment when these are received from disabled persons and will employ them in posts whenever suitable vacancies arise. Staff who become disabled will be retained whenever possible through retraining, use of appropriate technology and making available suitable alternative employment.

The following table reports on the gender diversity of the Group's employees at 31 December 2018:

	Board Diversity		**Top Leadership Diversity**		**Total Workforce Diversity**	
	2018	2017	**2018**	2017	**2018**	2017
Men	**4**	5	**12**	11	**304**	297
Women	**1**	1	**4**	2	**101**	99
Men %	**80%**	83%	**75%**	85%	**75%**	75%
Women %	**20%**	17%	**25%**	15%	**25%**	25%

The Group encourages the participation of all employees in the operation and development of the business and has a policy of regular communications including overviews of the Group's financial performance. The Group from time to time provides employees with information on matters of concern to them, consulting them or their representatives regularly, so that their views can be taken into account when decisions are made that are likely to affect their interests. The Group incentivises employees and senior management through the payment of bonuses linked to performance objectives, together with the other components of remuneration detailed in the Directors' Remuneration Report. Following the resignation of Simon Baines on 29 October 2018, the Board now comprises four male Directors (80%) and one female Director (20%), and the Group's top leadership consists of twelve men (75%) and four women (25%). The Group is taking steps to further improve gender diversity among its employee base, including enhanced flexibility of workplace location and working hours, educating and supporting hiring managers with recruitment activities, driving cultural change within the organisation and the ongoing review of internal policies and communications, including the corporate website. The Group's policies remain consistent with the requirements of the Universal Declaration on Human Rights and the spirit of the International Labour Organisation core labour standards.

The Group operates a Save As You Earn Scheme and International Share Save Scheme to a significant majority of employees across the Group. These schemes encourage the involvement of employees in the Group's performance, and (together with the regular communications referred to above) this assists in achieving a common awareness on the part of employees of the financial and economic factors that affect the Group's performance. The Board has issued annual invitations to employees to join these schemes and continues to be very encouraged by the high levels of participation amongst employees across the Group.

Corporate Social Responsibility

The Directors recognise that the success of the business is dependent on maintaining a positive corporate culture at all levels of the organisation, and regularly consider the Group's impact on its stakeholders including employees, contractors, customers, suppliers, investors and the wider community. The Board ensures that the decisions made are responsible and ethical by taking into consideration the wider society external to the organisation. The Group is committed to contributing towards creating a sustainable environment and community in which it operates as a business.

During 2018, the Group held a variety of activities and events to increase awareness and raise funds for its chosen charities both in the UK and internationally, including Samaritans, Save the Children and Children in Need, as well as local hospices and organisations supporting those living in poverty. The Group also participated in the JP Morgan Corporate Challenge in London and Boston, which in turn raises funds for charitable organisations and good causes. The Group's charitable activities are organised by its regional social committees and employees are actively encouraged to partake in them at a regional level.

In addition, for the last two years the Group has been working on a charitable initiative known as "Operation Kanchenjunga", which has built a school in the remote Himalayan village of Hangdewa, Nepal. The Group has provided computers, networking equipment, servers and satellite internet connectivity to the project which aims to bring life-changing technology and IT skills to the 175 children who attend the school. During this project, representatives of the Group travelled to Nepal to provide support and mentoring to teachers and students at the school to enable them to make the most of the new equipment, to improve the education of the pupils and thereby to change their life chances.

Environmental Policy

As a supplier of software solutions the Group's operations do not have a significant impact on the environment. The Group has no manufacturing facilities and its premises exclusively comprise offices. Any obsolete office equipment and computers are resold or recycled to the extent practicable. The Group has recycling facilities in all its offices and use of waste paper is minimised by promoting a paperless process and downloadable software products. However, the Group recognises that its activities should be carried out in an environmentally friendly manner and therefore aims to:

- comply with relevant environmental legislation;
- reduce waste and, where practicable, re-use and recycle consumables;
- dispose of non-recyclable items in an environmentally friendly manner;
- minimise the consumption of energy and resources in the Group's operations; and

- reduce the environmental impact of the Group's activities and where possible increase the procurement of environmentally friendly products.

Greenhouse Gas Emissions

The Group complies with the greenhouse gas (GHG) emissions reporting requirements of The Companies Act 2006 (Strategic and Directors' Reports) Regulations 2013. The Group reports all material GHG emissions, wherever possible using 'tonnes of CO_2-equivalent' (tCO_2e) as the unit, to account for all GHGs which are attributable to human activity, as defined in section 92 of the Climate Change Act 2008(a). Emissions data is reported for the Group's operations in the UK, Poland, Guernsey, the USA, Canada, Cyprus and Singapore, together with the emissions data for the Group's former offices in Jersey and Serbia whilst in operation. The methodology used to compile this data is in accordance with the requirements of the following standards: the World Resources Institute's (WRI) Greenhouse Gas Protocol (revised version); Defra's Environmental Reporting Guidelines: Including mandatory greenhouse gas emissions reporting guidance (June 2013) and ISO 14064 – part 1.

Material GHG emissions from business activities in 2018 totalled 484 tCO_2e (2017: 554 tCO_2e), consisting of:

- 79 tCO_2e from the combustion of fuel and the operation of any facilities; and
- 405 tCO_2e from the purchase of electricity, heat, steam or cooling by the Group for its own use.

	Emissions source	**Tonnes of CO_2e 2016**	**Tonnes of CO_2e 2017**	**Tonnes of CO_2e 2018**	**Percentage change to 2017 (%)**
CO_2e from the combustion of fuel and the operation of any facilities	Natural gas	111	91	74	-19
	Refrigerant	6	2	3	50
	Owned vehicles	2	3	2	-33
CO_2e from the purchase of electricity, heat, steam or cooling by the Group for its own use	Purchased electricity[1]	545	458	405	-12
	Total	**664**	**554**	**484**	**-13**

[1] This work is partially based on the country-specific CO2 emission factors developed by the International Energy Agency, © OECD/IEA 2018 but the resulting work has been prepared by Microgen and Carbon Smart and does not necessarily reflect the views of the International Energy Agency

Carbon intensity ratio for this reporting period was 6.9 tCO_2e (2017: 8.8 tCO_2e) per £1,000,000 turnover.

This is the sixth year that carbon footprint data has been gathered and the Group has seen a continued decrease in emissions, with a 13% reduction in total material emissions between 2017 and 2018. The primary reason for this is the reduction in emissions from electricity due to the decarbonisation of electricity grids. Other contributing factors included a decrease in electricity consumption by the Group and a decrease in natural gas consumption by the Group.

In 2015 the WRI introduced updates to the Greenhouse Gas Protocol stating that organisations should provide two numbers to reflect the emissions from the purchase of electricity, heat, steam or cooling. The location based method reflects average emissions intensity of grids where energy consumption occurs. The market based method reflects emissions from energy that companies have chosen or their lack of choice.

Country	Electricity generation (location based) tCO_2e	Electricity generation (market based) tCO_2e	Instrument types
UK & Channel Islands	94	108	Mix of supplier fuel mix disclosure emission rate and residual mix factor
Poland	252	293	Residual mix factor
USA	29	29	Average national emissions factor
Canada	5	5	Average national emissions factor
Cyprus	17	18	Supplier fuel mix disclosure
Serbia	1	1	Average national emissions factor
Singapore	7	7	Average national emissions factor
Total	**405**	**461**	

Where it has not been practical to gather data on energy use for the Group's smaller offices, or those newly occupied, benchmark energy consumption figures have been used. Residential accommodation for employees is not included in our GHG emission statement.

The Group's financial reporting year is the calendar year; however, the Group has set its GHG reporting period back by a quarter to facilitate data collection. Therefore, the reporting period for greenhouse gas emissions is 1 October 2017 to 30 September 2018. The Company reports on GHG sources over which operational control is held and which are associated with the business activities covered in this Report of the Directors.

Political Donations

The Group made no political donations in the year (2017: £nil).

Substantial Shareholdings

In accordance with the Disclosure and Transparency Rules of the Financial Conduct Authority. As at 21 March 2019, the Company had been advised of the following notifiable interests in its voting rights:

	Number of Shares	% Issued Share Capital*
Merian Global Investors (Previously Old Mutual Plc)	8,438,360	13.79%
Schroders Plc	8,417,087	13.76%
Cannacord Genuity Group Inc.	5,881,692	9.61%
Mrs C Barbour, Mr B Barbour & Bank of New York Mellon (Brussels (Pooled))	4,409,689	7.21%
BlackRock Investment Mgt	3,675,877	6.01%
Invesco Limited	3,104,058	5.01%
Mr LG Crisp and Mrs H Crisp	2,726,602	4.46%
Herald Investment Mgt	1,963,889	3.21%

* Calculated by reference to the number of shares in issue at 21 March 2019, being 61,177,137.

The number of shares provided in the table above reflect the amounts notified to the Group by each shareholder at the time of the TR1 announcements.

Share Capital

At 21 March 2019 the Company had a single class of share capital which is divided into ordinary shares of 6 3/7 pence each.

Rights and Obligations Attaching to Shares

Voting in Meetings of the Company

Voting at a general meeting shall be on a show of hands unless a poll is demanded. On a show of hands, every shareholder present in person and every proxy duly appointed by a shareholder shall have one vote. On a poll, every shareholder who is present in person or by proxy shall have one vote for every share of which he or she is the holder.

No shareholder shall be entitled to vote at any general meeting or class meeting in respect of shares held by him or her if any call or other sum then payable by him or her in respect of that share remains unpaid. Currently, all issued shares are fully paid.

Deadlines for Voting Rights

Full details of the deadlines for exercising voting rights in respect of the resolutions to be considered at the Annual General Meeting to be held on 21 May 2019 are set out in the Notice of Meeting which accompanies this report.

Dividends and Distributions

Subject to the provisions of the Companies Act 2006, the Company may, by ordinary resolution, declare a dividend to be paid to shareholders but no dividend shall exceed the amount recommended by the Board. The Board may pay interim dividends or special dividends of such amounts, on such dates and in respect of such periods as the Board think fit. If in the opinion of the Board the profits available for distribution justify such payments, the Board may declare and pay the fixed dividends on any class of shares carrying a fixed dividend (if any). All dividends shall be apportioned and paid pro-rata according to the amounts paid up on the shares.

Transfer of shares

Subject to the Articles, any shareholder may transfer all or any of his or her certified shares in writing by an instrument of transfer in any usual form or in any other form which the Board may approve. The Board may, in its absolute discretion and without giving any reasons, decline to register any instrument of transfer of a certified share which is not a fully paid share provided that, where any such shares are admitted to the Official List maintained by the UK Listing Authority, such discretion may not be exercised in such a way as to prevent dealings in the shares of that class from taking place on an open and proper basis. The Board may decline to recognise any instrument of transfer relating to shares in certificated form unless it is in respect of only one class of share and is lodged (duly stamped) at the Company's registered office or such other place as the Board have appointed accompanied by the relevant share certificate(s) and such other evidence as the Board may reasonably require to show the right of the transfer or to make the transfer (and, if the instrument of transfer is executed by some other person on his behalf, the authority of that person so to do). In the case of a transfer of shares in certificated form a recognised clearing house or a nominee of a recognised clearing house or of a recognised investment exchange the lodgement of share certificates will only be necessary if and to the extent that certificates have been issued in respect of the shares in question. The Directors may also refuse to register an allotment or transfer of shares (whether fully paid or not) in favour of more than four transferees. Subject to the Articles and the CREST Rules (as defined in the Uncertificated Securities Regulations, as amended), and apart from any class of wholly dematerialised security, the Board may permit any class of shares in the Company to be held in uncertificated form and, subject to the Articles, title to uncertificated shares to be transferred by means of a relevant system.

Change of Control

Under the terms of the Company's share option schemes, upon a change of control of the Company following a takeover bid, an option holder shall be entitled to exercise the relevant option within a time period of not more than six (6) months. This would allow the exercise of awards subject to the discretion of the Remuneration Committee as to whether relevant performance conditions have been sufficiently satisfied. There are a small number of customer contracts which include a change of control clause in relation to the Group.

Amendment to the Articles

Amendments to the Articles may be made in accordance with the provisions of the Companies Act 2006 by way of a special resolution in general meeting.

Appointment and Replacement of Directors

Unless and until otherwise determined by ordinary resolution of the Company, Directors shall be no less than two (2) and no more than ten (10) in number. Directors may be appointed by the Company by ordinary resolution or by the Board. A Director appointed by the Board holds office only until the next Annual General Meeting and then shall be eligible for re-election by the shareholders.

The Board may from time to time appoint one or more Directors to undertake such services for the Company that the Board may decide and such persons (other than those who hold an executive office or are employees of the Company or any subsidiary) will be entitled to be paid such fees as the Board will determine for their services to the Company as Directors but will not exceed in aggregate the sum of £1,000,000 per annum (excluding bonus arrangements and incentive schemes of the Company) or such greater sum as the Company in general meeting may determine.

The Company by ordinary resolution, of which special notice has been given, may remove any Director before the expiration of his or her term of office and the Company may elect another person in place of a Director so removed from office.

The office of Director shall be vacated if:

(i) he or she in writing resigns or offers to resign and the Directors accept such offer;

(ii) an order is made by any court claiming that he or she is or may be suffering from a mental disorder;

(iii) he or she is absent without permission of the Board from meetings for six months and the Board resolves that his or her office is vacated;

(iv) he or she becomes bankrupt or compounds with his or her creditors generally;

(v) he or she is prohibited by law from being a Director;

(vi) he or she is removed from office pursuant to the Articles;

(vii) a registered medical practitioner who is treating that person gives a written opinion to the Company stating that the Director has become physically or mentally incapable of acting as a Director and may remain so for more than three (3) months.

Repurchase of Own Shares

At the Annual General Meeting held on 23 April 2018 members renewed the authority under section 701 of the Companies Act 2006 to make market purchases on the London Stock Exchange of up to 6,089,022 ordinary shares of 6 3/7 pence each.

The minimum price which could be paid for each share was 6 3/7 pence.

The maximum price which could be paid for each share was an amount equal to:

(a) 105% of the average of the middle market quotations for a share as derived from the London Stock Exchange Daily Official List for the five business days immediately preceding the day on which the Company agrees to buy the shares concerned; or

(b) the higher of the price of the last independent trade of any share and the highest current bid for a share as stipulated by Article 5(1) of Commission Regulation (EC) 22 December 2003 implementing the Market Abuse Directive as regards exemptions for buyback programmes and stabilisation of financial instruments (2273/2003).

No shares have been purchased under this renewed authority. A resolution to give the Directors further authority for the Company to purchase its own shares is to be proposed at the forthcoming Annual General Meeting on 21 May 2019.

Significant Contracts

There did not exist at any time during the year any contract involving the Company or any of its subsidiaries in which a Director of the Company was or is materially interested or any contract which was either a contract of significance with a controlling shareholder or a contract for the provision of service by a controlling shareholder. Related party transactions are disclosed on page 125.

Directors

Details of Directors who have held office during the year and up to the date of signing these financial statements are given below:

Ivan Martin (Chair)
Simon Baines (resigned 29 October 2018)
Tom Crawford
Barbara Moorhouse
Peter Whiting
Philip Wood

Biographical details of the current Directors are given on the inside front cover of this Annual Report. The Company's Articles of Association require Directors to retire and offer themselves for re-election at least every three years, however, the Board has taken the decision to introduce annual re-election for all Directors with effect from the 2019 Annual General Meeting, in accordance with the recommendation of the 2018 Corporate Governance Code.

The Company has purchased and maintained throughout the year Directors' and Officers' liability insurance in respect of itself and its Directors. The Directors also have the benefit of the indemnity provision contained at Article 138 of the

Company's Articles of Association. Pursuant to this article 138, the Company has granted indemnities for the benefit of current and future Directors of, and the Company Secretary of, the Company in respect of liabilities which may attach to them in their capacity as Directors of, or Company Secretary of, the Company to the extent permitted by law and also committed to maintain Directors' and officers' insurance cover. Qualifying third party indemnity provisions (as defined by section 234 of the Companies Act 2006) were in force during the year ended 31 December 2018 and continue in force, in relation to certain losses and liabilities which the Directors (or Company Secretary) may incur to third parties in the course of acting as Directors (or Company Secretary).

Treasury and Foreign Exchange

The Group has in place appropriate treasury policies and procedures, which are approved by the Board. The treasury function manages interest rates for both borrowings and cash deposits for the Group and is also responsible for ensuring there is sufficient headroom against any banking covenants contained within its credit facilities, and for ensuring there are appropriate facilities available to meet the Group's strategic plans.

In order to mitigate and manage exchange rate risk arising in respect of the Group's Polish development organisation, the Group routinely enters into forward contracts in respect of monthly transactions with that part of the Group's business. The Group also has exposure to exchange rate risks arising in respect of US Dollar revenue and costs in the Group's Aptitude Software business, and the Group implemented in February 2017 a hedging policy involving the entry into forward contracts in respect of these US Dollar denominated transactions. In the meantime, the Group continues to monitor exchange rate risk generally in respect of other foreign currency exposures.

In order to mitigate and manage interest rate risk the Group has in place an effective interest rate hedge to manage exposure on borrowings. Interest rate swaps are used as cash flow hedges of future interest payments, which have the effect of increasing the proportion of fixed interest debt.

These treasury policies and procedures are regularly monitored and reviewed. It is the Group's policy not to undertake speculative transactions which create additional exposures over and above those arising from normal trading activity.

See page 83 for further information on the Group's management of financial risk.

Overseas subsidiaries and branches

Details of the Group's subsidiaries, including those in overseas jurisdictions, are disclosed in Note 12 to the financial statements on page 107. The Group also currently operates overseas branches in the following countries; Australia, Hong Kong, Singapore, Sweden and Switzerland.

Auditors and Disclosure of Information to Auditors

As far as the Directors are aware, there is no relevant audit information (as defined by section 418(3) of the Companies Act 2006) of which the Company's auditors are unaware and each of the Directors has taken the steps that they ought to have taken as Directors in order to make themselves aware of any relevant audit information and to establish that the Company's auditors are aware of that information.

The auditors, PricewaterhouseCoopers LLP, have indicated their willingness to continue in office, and a resolution that they be re-appointed will be proposed at the Annual General Meeting.

Report of the Directors

Corporate Governance

The Group's statement on corporate governance is included in the Corporate Governance Statement on pages 25 to 34 is incorporated into this Report of the Directors by reference.

Annual General Meeting

The forthcoming Annual General Meeting will be held at 9.00 am on Tuesday, 21 May 2019 at the Company's offices at Old Change House, 128 Queen Victoria Street, London EC4V 4BJ. The notice of the Annual General Meeting contains the full text of resolutions to be proposed.

By Order of the Board

Georgina Sharley
Company Secretary

22 March 2019

Corporate Governance Statement

Statement of Compliance

The Group has applied the main principles set out in the April 2016 edition of the UK Corporate Governance Code ("Code"), which is available to view on the website of the Financial Reporting Council (www.frc.org.uk).

The Group has complied with the Code throughout the year ended 31 December 2018 and a full statement of compliance with the main principles of the Code is on pages 33 and 34.

In July 2018 the Financial Reporting Council published an updated version of the UK Corporate Governance Code, which applies to accounting periods beginning on or after 1 January 2019. The Directors will report in full on the Group's full compliance with the new Code in its Annual Report for the year ended 31 December 2019, however, careful consideration has already been given to the updated principles and provisions of the new Code, and it is the Board's intention to apply these as far as is proportionate and appropriate for the Group.

Board of Directors

The Board of Directors meets regularly to review strategic, operational and financial matters, including proposed acquisitions and divestments, and has a formal schedule of matters reserved to it for decision. It approves the interim and preliminary financial statements, the annual financial plan, significant contracts and capital investment in addition to reviewing the effectiveness of the internal control systems and business risks faced by the Group. Where appropriate, it has delegated authority to committees of Directors. Information is supplied to the Board in advance of meetings and the Chairman ensures that all Directors are properly briefed on the matters being discussed. The Board also benefits from a rolling series of presentations by senior managers within different areas of the Group's business.

The Chairman is primarily responsible for management of the Board, corporate strategy and development and ensuring effective communication with shareholders. The Chief Executive Officers of each operating business are responsible for managing their respective businesses.

Non-Executive Directors are appointed for specified terms, up to a maximum of three years, and reappointment is not automatic. There is a formal selection process to appoint Non-Executive Directors which is led by a separate Nomination Committee. Peter Whiting is the Senior Independent Non-Executive Director. In performing this role, Peter provides shareholders with someone to whom they can turn if ever they have concerns which they cannot address through the normal channels, for example with the Chairman or Executive Directors. Peter is also available as an intermediary between his fellow Directors and the Chairman. Whilst there were no requests from Directors or shareholders for access to the Senior Independent Director during the year, the role serves as an important check and balance in the Company's governance process. In the fulfilment of his role Peter ensures that he maintains an appropriate level of understanding of the views of the Company's shareholders.

The Board considers that all of the current Non-Executive Directors are independent in character and judgement from the management of the Company and free from any business or other relationship which could materially interfere with the exercise of their independent judgement. All of the Non-Executive Directors have extensive recent and relevant business experience.

All Directors have access to the advice and services of the Company Secretary or a suitably qualified alternative, and all the Directors are able to take independent professional advice, if necessary, at the Company's expense.

To date, Directors have offered themselves for re-election at the Annual General Meeting following their appointment by the Board and offered themselves for reappointment by shareholders if they were not appointed or reappointed at one of the preceding two Annual General Meetings, as required by the Company's Articles of Association. With effect from the 2019 Annual General Meeting, notwithstanding these provisions, all Directors will voluntarily offer themselves for annual re-appointment by shareholders, in accordance with the recommendations of the 2018 Corporate Governance Code.

Board Committees

Throughout 2018 each of Ivan Martin, Peter Whiting and Barbara Moorhouse served on the Nomination, Remuneration and Audit Committees. Ivan Martin resigned from the Audit Committee with effect from 1 January 2019 (see page 27 for further details). The Committees have written terms of reference which clearly specify their authority and duties and those terms of reference are available upon written request to the Company.

<u>Nomination Committee</u>

Ivan Martin is Chair of the Nomination Committee. During the year, the Committee also comprised Peter Whiting and Barbara Moorhouse.

The Nomination Committee meets at least once a year and its main responsibilities are to:

- Review the structure, size and composition of the Board and its Committees including its balance of skills and experience and make recommendations to the Board with regard to any changes;
- Lead the process for Board appointments and recommend new appointments to the Board for approval; and
- Consider succession for Directors and other senior executives, including the identification and assessment of potential candidates and making recommendations to the Board for its approval.

During the year, the Committee met three times, with all members present.

The Board and the Committee recognises the importance of promoting all aspects of diversity, including gender, throughout the Group. When considering any new appointments to the Board, candidates will be chosen against criteria, including their balance of skills, business experience, independence, qualifications, knowledge, diversity and other factors relevant to the Board operating effectively. Successful candidates are chosen on merit against these criteria, regardless of race, gender or religious beliefs.

Following the resignation of Simon Baines on 29 October 2018, the Committee has considered the current composition of the Board and determined that it is not necessary to appoint a replacement Executive Director at present with Phillip Wood performing the role of Acting Chief Executive Officer of the Microgen Financial Systems business. However, the composition of the Board will be kept under ongoing review by the Committee according to the current and future requirements of the Group.

During the year the Committee also:

- reviewed succession planning, considering both short term emergency and long-term planning scenarios, and executive talent management;

- carried out the annual evaluation of the effectiveness of the Committee (following which the Committee concluded that it continued to operate effectively); and
- carried out a review of the skills of each of the Directors and the independence of each of the independent Non-Executive Directors prior to the 2018 AGM and recommended Directors for re-election at the 2018 AGM.

The Committee's priority for 2019 will be to continue its work in relation to succession planning and executive talent management.

Peter Whiting is Chair of the Remuneration Committee. During the year, the Committee also comprised Ivan Martin and Barbara Moorhouse. The Directors' Remuneration Report appears on pages 35 to 59.

<u>Audit Committee</u>
Barbara Moorhouse, a Fellow of the Chartered Institute of Management Accountants (CIMA), is Chair of the Audit Committee. During the year the Committee also comprised Ivan Martin and Peter Whiting. The 2018 Corporate Governance Code contains a new recommendation that the Chair of the Board should not also be a member of the Audit Committee. In view of this recommendation, it was agreed that Ivan Martin would resign from the Audit Committee with effect from 1 January 2019, albeit that he will continue to attend future meetings of the Committee in the capacity of an observer.

This year's Audit Committee Report outlines our activities and areas of focus during the year.

The Committee provides support to the Board in meeting its statutory responsibilities as set out in the UK Corporate Governance Code, which requires that Audit Committees have competence relevant to the sector in which the Company operates. The Board's view is that the skills and experience of the Audit Committee members are very much relevant to the Group's business, as evidenced by the biographies within the Directors, Officers and Advisors page at the front of this report.

The Audit Committee also monitors the integrity of the financial statements of the Company and meets regularly with management and PricewaterhouseCoopers LLP (the Company's external auditors) to review and monitor the financial reporting process, the statutory audit of the consolidated financial statements, audit procedures, risk management, internal controls and financial matters.

External audit partners are rotated every five years (seven years for subsidiary companies). The current external audit partner is Sam Taylor, who was appointed to the role during the current financial year, as successor to John Maitland, the previous external audit partner.

The external auditors present in advance of the year end their approach to the forthcoming audit together with their findings from the audit following the completion of their work. The Audit Committee assesses the performance of the external auditors on an annual basis and based on this review the Audit Committee recommends the appointment, reappointment or removal of the Company's external auditors to the Board. This review resulted in the Audit Committee determining to retain PricewaterhouseCoopers LLP as auditors for the Group's 2018 financial statements, however, following the initial appointment of PricewaterhouseCoopers LLP in 1996, under the Competition and Markets Authority regulation a replacement auditor will need to be appointed to report on the 2023 financial statements.

The number of meetings of the Committee and the details of attendance by Committee members are set out at page 30. The Executive Directors attended the Audit Committee meetings throughout 2018 by invitation. The Audit Committee meets at least annually with the Company's external auditors without the other Directors present. The external auditors have unrestricted access to the Audit Committee.

The Audit Committee considers that, in some circumstances, the external auditors' understanding of the business can be beneficial in improving the efficiency and effectiveness of advisory work and, therefore, it has been considered appropriate that the external auditors be engaged for non-audit services related to certain financial matters. Both the Committee and the Board keep the external auditor's independence under close scrutiny. The Committee also continues to keep under review the nature of the work and level of fees paid to the external auditors for non-audit work and considers that this has not affected the auditors' objectivity and independence. The Committee delegates the authority for approval of such work to the Chief Financial Officer where the level of fees involved is clearly trivial. The Group also receives a formal statement of independence and objectivity from the external auditors each year.

The Audit Committee reports to the Board on how it has discharged its responsibilities. This includes identifying the significant issues that it has considered in relation to the financial statements and how these issues were addressed, its assessment of the effectiveness of the external audit process and its recommendation on the reappointment of the Company's external auditors together with any other issues on which the Board has asked the Audit Committee's opinion.

Significant Judgements

The significant judgements considered by the Audit Committee in its review of the financial statements were:-

Revenue Recognition

A key area of judgement in respect of recognising revenue is the timing of recognition where management assumptions and estimates are necessary. The Audit Committee receives an overview of significant contracts entered into during the course of the year which provides the opportunity to discuss the impact of contractual terms on revenue recognition.

Whilst the Group continues to promote its preferred Annual Licence Fee model, a small number of material contracts were secured in prior periods on an Initial or Perpetual Licence Fee basis with accompanying significant ongoing maintenance. The Audit Committee carefully considered and discussed with the external auditors the revenue recognition on both these contracts and its annual licence fee contracts in light of the Group's adoption of IFRS 15 "Revenue from contracts with customers" which has resulted in the drafting of a new accounting policy note detailed on pages 74 to 76 in respect of the revenue recognition on software licence revenue. The Audit Committee has concluded that they are satisfied with the accounting treatment of these agreements.

In addition, the Group has a material contract which includes the provision of implementation services on a fixed price basis with fees totalling approximately £1.9 million. This project has continued throughout 2018 and the Audit Committee is satisfied with the accounting treatment.

As part of the Audit Committee's normal activities the Committee was provided with an overview of significant balances, including deferred income, together with the movement on those balances since the previous year end.

The Committee concluded that the timing of recognition continues to be in line with the Group's accounting policy on revenue recognition.

Annual Goodwill Impairment Review
Goodwill is a material asset on the Group's balance sheet and it is the Group's policy to annually test the asset for impairment. The judgements in relation to goodwill impairment testing relate to the assumptions applied in calculating the value in use of the operating businesses. The key assumptions applied in the calculation relate to the future performance expectations of the businesses. Plans prepared by senior management supporting the future performance expectations used in the calculation were reviewed and approved by the Board. The Audit Committee received a presentation on the outcome of the impairment review performed by senior management. The Audit Committee concluded that there was no requirement to impair the carrying value of goodwill at the year end.

The Audit Committee has also reviewed the underlying calculation behind the amount of goodwill allocated to Microgen Banking Systems Limited on disposal and concluded that this treatment is appropriate. See note 28 for details.

Tax
Each of the Aptitude Software and Microgen Financial Systems businesses operate in a number of territories which increases the complexity of the Group's tax affairs. Senior Management provide regular updates of the Group's tax status to the Board and Audit Committee for consideration. The Audit Committee is currently satisfied with the tax position of the Group.

Establishment of Internal Audit / Assurance Programme
The growth of the Group has continued in 2018, including an increase in the international activities of both Aptitude Software and Microgen Financial Systems. The Board's focus on monitoring and mitigating risks continues and, following the Group's increase in size and complexity, is now being strengthened by the early stages of an internal audit / assurance process to focus on key areas of risk, both financial and operational. The programme is known within each of the two operating businesses as the "Aptitude Software Process Improvement Programme" and the "Microgen Financial Systems Process Improvement Programme", reflecting the benefits the Group expects to receive from the programme.

The Audit Committee has engaged with the management of the operating businesses to determine both the approach and areas of focus for the programmes. The programmes include the review of business processes for key areas of risk in addition to improving and testing of the operation of controls. The management teams will be supported and complemented by experienced external resources on a part-time project basis. The results of all work undertaken under the programme will be presented to the Audit Committee.

Adoption of new Accounting Standards
A number of new standards became applicable for the Group in the current reporting period. Both IFRS 15 "Revenue from Contracts with Customers" which deals with the nature, amount and timing of revenue recognition on the Group's customer contracts and IFRS 9 "Financial Instruments" which considers the classification and measurement of financial assets, impairment and hedging, were effective for annual periods beginning on or after 1 January 2018. In addition to this, the Group took the decision to early adopt the IFRS 16 "Leasing" standard with the equivalent effective date.

The Audit Committee has provided oversight on each of the projects calculating the impact and formulating the underlying principles of the standards application on the Group. Throughout the process, detailed discussions with the auditors have taken place and, in the case of IFRS 15, the project included the support of a third-party adviser in determining the detailed application. The Audit Committee has reviewed the work undertaken at regular intervals with the treatment and impact of adoption provided within note 33 to this report.

Audit Committee Evaluation

During the year the Committee carried out an evaluation of its effectiveness, and concluded that it continued to carry out its role effectively.

Board Attendance

Details of the number of meetings of the Board and its Committees (at which only certain Directors are required to attend) and individual attendances by Directors are set out in the table below.

	Board Meetings	Audit Committee	Remuneration Committee	Nomination Committee
Number of Meetings held in 2018	9	4	8	3
Ivan Martin	9/9	4/4	8/8	3/3
Simon Baines (resigned 29 October 2018)	8/8	3/3	7/7	3/3
Tom Crawford	9/9	4/4	8/8	3/3
Philip Wood	9/9	4/4	8/8	3/3
Peter Whiting	9/9	4/4	8/8	3/3
Barbara Moorhouse	9/9	4/4	8/8	3/3

Executive Directors attended some committee meetings by invitation. In the case of meetings of the Remuneration Committee, attendance was for only part of the meetings in question, and the Executive Directors left the meetings when discussions about their remuneration were taking place.

The above table details attendance at scheduled meetings as a proportion of the total number of meetings held. Simon Baines resigned during the year and accordingly, his attendance is indicated as a proportion of the total number of meetings held during the period until his retirement.

In addition, a number of ad hoc meetings were held, including 7 meetings of a sub-committee relating to the exercise of options under the Company's share option schemes.

Management Meetings of the Operating Businesses

Each of the Group's two operating businesses hold management meetings on a monthly basis chaired by the Chief Executive Officer responsible for that business. Following Simon's Baines' resignation on 29 October 2018, Philip Wood has been acting as chair of the management meetings of Microgen Financial Systems.

Relations with Shareholders

In order to maintain dialogue with institutional shareholders the Chairman and/or Executive Directors meet with key shareholders. Other Directors are available to meet key shareholders on request. The Annual Report is sent to shareholders at least 20 working days before the Annual General Meeting and each issue for consideration at the Annual General Meeting is proposed as a separate resolution. All continuing Directors generally attend the Annual General Meeting.

Capital Structure

The information required pursuant to the Disclosure Guidance and Transparency Rules is detailed on pages 20 to 22.

Social, Ethical and Environmental Risks

The Board takes regular account of the significance of social, environmental and ethical ("SEE") matters to the Group's business of providing business-critical software and services.

The Board considers that it has received adequate information to enable it to assess any significant risks to the Company's short-term and long-term value arising from SEE matters and has concluded that the risks associated with SEE matters are minimal. The Board will continue to monitor those risks on an ongoing basis and will implement appropriate policies and procedures if those risks become significant.

Internal Control

The Group maintains an ongoing process in respect of internal control to safeguard shareholders' investments and the Group's assets and to facilitate the effective and efficient operation of the Group.

These processes enable the Group to respond appropriately, and in a timely fashion, to significant business, operational, financial, compliance and other risks, (in accordance with the Code), which may otherwise prevent the achievement of the Group's objectives.

The Group recognises that it operates in a competitive market that can be affected by factors and events outside its control. Details of the major risks identified by the Group are set out in the table on pages 14 and 15. The Group is committed to mitigating risks arising wherever possible and during the year has engaged in a significant review and update to the Group Risk Register. The Board consider that internal controls, rigorously applied and monitored, are an essential tool in mitigating risks.

The key elements of Group internal control, which have been effective during 2018 and up to the date of approval of these financial statements, are set out below:

- The existence of a clear organisational structure with defined lines of responsibility and delegation of authority from the Board to its Executive Directors and operating businesses;
- A procedure for the regular review of business issues and risks by the operating businesses;
- A planning and management reporting system operated by each operating business and the Executive Directors; and
- The establishment of prudent operating and financial policies.

The Directors have overall responsibility for establishing financial and other reporting procedures to provide them with a reasonable basis on which to make proper judgements as to the financial position and prospects of the Group, and have responsibility for establishing the Group's system of internal control and for monitoring its effectiveness.

The Group's systems are designed to provide Directors with reasonable assurance that physical and financial assets are safeguarded, transactions are authorised and properly recorded, and material errors and irregularities are either prevented or detected with the minimum delay. However, systems of internal financial control can provide only reasonable and not absolute assurance against material misstatement or loss.

The key features of the systems of internal financial control include:

- Financial planning process with an annual financial plan approved by the Board. The plan is regularly updated providing an updated forecast for the year;
- Monthly comparison of actual results against plan;
- Written procedures detailing operational and financial internal control policies which are reviewed on a regular basis;
- Regular reporting to the Board on tax, treasury and legal matters;
- Defined investment control guidelines and procedures; and
- Periodic reviews by the Audit Committee of the Group's systems and procedures.

Most of the Group's financial and management information is processed and stored on computer systems. The Group is dependent on systems that require sophisticated computer networks. The Group has established controls and procedures over the security of data held on such systems, including business continuity arrangements.

On behalf of the Board, the Audit Committee has reviewed the updated Group Risk Register, and the operation and effectiveness of this framework of internal control for the year ended 31 December 2018, and up to the date of approval of the Annual Report.

Internal Audit

During the year the Group established an outsourced internal audit function, further details of which are set out on page 29.

COMPLIANCE WITH THE UK CORPORATE GOVERNANCE CODE (April 2016 Version)		
	Main Principles	**Group Compliance Statement**
A	**LEADERSHIP**	
1	**The Role of the Board** Every Company should be headed by an effective board, which is collectively responsible for the long-term success of the Company.	The Directors' responsibilities are outlined in the Report of the Directors. The Board meets regularly on a formal basis and for additional ad hoc meetings as necessary.
2	**Division of Responsibilities** There should be a clear division of responsibilities at the head of the Company between the running of the board and the executive responsibility for the running of the Company's business. No one individual should have unfettered powers of decision.	The Board has an independent Non-Executive Chairman and Executive Directors are responsible for the running of the Group's two operating businesses.
3	**The Chairman** The Chairman is responsible for leadership of the board and ensuring its effectiveness on all aspects of its role.	The Chairman is responsible for setting the Board's agenda and ensuring that adequate time is available for discussion of all agenda items, including strategic issues. He promotes a culture of openness and debate by facilitating the effective contribution of Non-Executive Directors in particular, and ensuring constructive relations between Executive and Non-Executive Directors. In addition, he ensures that the Directors receive accurate, timely and clear information.
4	**Non-Executive Directors** As part of their role as members of a unitary board, non-executive Directors should constructively challenge and help develop proposals on strategy.	The Board has appointed Peter Whiting to be the Senior Independent Non-Executive Director, to provide a sounding board for the Chairman and to serve as an intermediary for the other Directors when necessary. The Senior Independent Non-Executive Director is available to shareholders if they have concerns which contact through the normal channels of the Chairman, Chief Executive Officer or Chief Financial Officer fails to resolve or for which such contact is inappropriate. The Chairman holds meetings with the Non-Executive Directors without the Executive Directors being present. Led by the Senior Independent Non-Executive Director, the Non-Executive Directors meet without the Chairman at least annually to appraise the Chairman's performance and on such other occasions as are deemed appropriate. If the Directors have concerns which cannot be resolved about the running of the Company or a proposed action, then they ensure that their concerns are recorded in the Board minutes. On their resignation, a Non-Executive Director must provide a written statement to the Chairman, for circulation to the Board, if they have any such concerns.
B	**EFFECTIVENESS**	
1	**The Composition of the Board** The board and its committees should have the appropriate balance of skills, experience, independence and knowledge of the Company to enable them to discharge their respective duties and responsibilities effectively.	All of the Non-Executive Directors are considered by the Board to be independent of the management of the Company and free from any business or other relationship which could materially interfere with the exercise of their independent judgment. The Board has included three independent Non-Executive Directors (including the Non-Executive Chairman) at all times during 2018.
2	**Appointments to the Board** There should be a formal, rigorous and transparent procedure for the appointment of new Directors to the board.	A separate Nomination Committee, comprising all the Non-Executive Directors (including the Non-Executive Chairman), is responsible for identifying and nominating candidates to fill Board vacancies. A disclosure in relation to the composition of the Nomination Committee under Code Provision B.2.1 is set out on page 26.
3	**Commitment** All Directors should be able to allocate sufficient time to the Company to discharge their responsibilities effectively.	The other significant commitments of the Chairman and the Non-Executive Directors are disclosed in the Annual Report. Any changes to such commitments are reported to the Board as they arise, and their impact explained in the next Annual Report. Executive Directors will not be given permission by the Board to take on more than one Directorship in another Company. None of the Executive Directors currently holds any other such role. The terms and conditions of appointment of Non-Executive Directors are made available for inspection. The letter of appointment sets out the expected time commitment. The appointed Non-Executive Directors have undertaken that they will have sufficient time to meet what is expected of them.
4	**Development** All Directors should receive induction on joining the board and should regularly update and refresh their skills and knowledge.	The Chairman ensures that new Directors receive an induction on joining the Board. Any training needs required by the Directors will be discussed with the Chairman.

COMPLIANCE WITH THE UK CORPORATE GOVERNANCE CODE (continued)		
	Code of Best Practice – Principles	**Group Compliance Statement**
B	**EFFECTIVENESS**	
5	**Information and Support** The board should be supplied in a timely manner with information in a form and of a quality appropriate to enable it to discharge its duties.	The Board is supplied with management accounts and operational reviews prior to each meeting. All Non-Executive Directors have extensive business experience and possess relevant and updated skills and knowledge to perform their duties. The Board ensures that Directors, especially Non-Executive Directors, have access to independent professional advice at the Company's expense where they judge it necessary to discharge their responsibility as Directors. All Directors have access to the advice and services of the Company Secretary, who is responsible to the Board for ensuring that Board procedures are complied with. The appointment and removal of the Company Secretary is a matter for the Board as a whole.
6	**Evaluation** The board should undertake a formal and rigorous annual evaluation of its own performance and that of its committees and individual Directors.	Given the Group's size and Board structure, performance evaluation is an ongoing process. A performance evaluation is undertaken for all Directors at the time of their proposed reappointment. The Executive Directors receive an annual performance appraisal as part of the Management Bonus Scheme. The performance of each Board Committee is reviewed on an annual basis.
7	**Re-election** All Directors should be submitted for re-election at regular intervals, subject to continued satisfactory performance.	Non-Executive Directors are appointed for specific terms, up to a maximum of three years and re-appointment is not automatic. The Articles of Association require one-third of Directors to retire in rotation at each Annual General Meeting, but with effect from 2019 all Directors will voluntarily offer themselves for annual re-election by shareholders. The Board sets out to shareholders in papers accompanying a resolution to elect a Non-Executive Director the reasons why they believe an individual should be elected. The Chairman confirms to shareholders when proposing re-election that the Non-Executive Director's performance remains effective.
C	**ACCOUNTABILITY**	
1	**Financial and Business Reporting** The board should present a fair, balanced and understandable assessment of the Company's position and prospects.	The Board considers it is compliant with this requirement.
2	**Risk Management and Internal Control** The board is responsible for determining the nature and extent of the principal risks it is willing to take in achieving its strategic objectives. The board should maintain a sound risk management and internal control systems.	The Company operates a detailed internal control process which is reviewed at least on an annual basis by the Audit Committee and endorsed by the Board. A detailed review of the Group Risk Register is being undertaken as part of the new internal audit programme.
3	**Audit Committee and Auditors** The board should establish formal and transparent arrangements for considering how they should apply the financial reporting and risk management and internal control principles and for maintaining an appropriate relationship with the Company's auditors.	Throughout the year ended 31 December 2018, the Audit Committee consisted of all Non-Executive Directors. With effect from 1 January 2019, Ivan Martin stepped down from the Audit Committee, in accordance with the recommendations of the 2018 Corporate Governance Code. The Audit Committee meets at least three times a year. Executive Directors were invited to attend in 2018 but the Audit Committee meets at least annually with the Company's auditors without the other Directors present. The Board ensures that at least one member of the Audit Committee has recent and relevant financial experience and that all members have competence and experience relevant to the sector in which the Company operates.
D	**REMUNERATION**	
1	**The Level and Components of Remuneration** Executive Directors' remuneration should be designed to promote the long-term success of the Company. Performance-related elements should be transparent, stretching and rigorously applied.	The Directors' Remuneration Report provides details of the Executive Directors' remuneration.
2	**Procedure** There should be a formal and transparent procedure for developing policy on remuneration and for fixing the remuneration packages of individual Directors. No Director should be involved in deciding his or her own remuneration.	Remuneration packages for individual Directors are set by the Remuneration Committee after receiving information from independent sources and if required the Company's Human Resources function. Executive Directors were invited to attend parts of the Committee's meetings in 2018. However, no Director was present during a discussion of his remuneration. A disclosure in relation to the composition of the Committee under Code Provision D.2.1 is set out on page 26.
E	**RELATIONS WITH SHAREHOLDERS**	
1	**Dialogue with Shareholders** There should be a dialogue with shareholders based on the mutual understanding of objectives. The board as a whole has responsibility for ensuring that a satisfactory dialogue with shareholders takes place.	The Chairman and/or the Executive Directors meet with key shareholders. After the release of the 2018 results the Chairman and/or the Executive Directors will meet key shareholders as appropriate. Non-Executive Directors are available to meet institutional shareholders if requested.
2	**Constructive Use of General Meetings** The board should use the general meetings to communicate with investors and to encourage their participation.	The Company arranges for the Notice of the Annual General Meeting and related papers to be sent to shareholders at least 20 working days before the meeting and for other general meetings at least 14 clear days before the meeting. All continuing Directors make themselves available at the Annual General Meeting to respond to any questions raised by the investors in attendance.

Directors' Remuneration
Report

Introduction
On behalf of the Board, I am pleased to present the Remuneration Committee's ("Committee") report of the Directors' remuneration for the year ended 31 December 2018. This report summarises the Committee's decisions in relation to Directors' remuneration in 2018 and how the Committee proposes to implement the Directors' Remuneration Policy in 2019.

Our Directors' Remuneration Policy
Our Directors' Remuneration Policy (which is set out below at Part A of this report) was approved by shareholders at the 2017 AGM with 95.25% of the votes cast in favour of it. We were also pleased to see strong support for the Annual Report on Remuneration at the 2018 AGM, with 99.99% of the votes being in favour of it. The Committee has considered the policy during 2018 and concluded that it remains appropriate. Therefore, that policy will continue to apply in 2019, during which time we will review the policy in advance of the next shareholder vote in respect of it, which is scheduled for the 2020 AGM, including updates to take account of the new Corporate Governance Code.

Executive Director Remuneration in 2018
Salaries

On 1 January 2018, the Executive Director salaries were increased by 3%, in line with the range of increases awarded to the wider workforce.

With effect from 29 October 2018, a salary supplement of £2,000 per month has been paid to Philip Wood, in recognition of the additional responsibilities and time commitment involved in his appointment as Acting Chief Executive Officer of Microgen Financial Systems. This arrangement will continue for the duration of this interim appointment.

Variable remuneration outcomes

The overall performance of the Group in 2018 is discussed in the Strategic Report on pages 2 to 10. Tom Crawford and Philip Wood performed strongly in respect of the non-financial measures attaching to the 2018 annual bonus scheme. However, recognising that the threshold financial performance measures were not achieved, no bonuses were earned. Simon Baines stepped down from the Board with effect from 29 October 2018 and, accordingly, was not eligible to earn a bonus in respect of 2018. Further information is given on page 49.

In 2015 each Executive Director was granted an award over 150,000 shares under the 2006 Performance Share Plan which vested by reference to TSR performance assessed to October 2018. Each award vested in respect of all of the shares subject to it, and further information can be found on page 48.

Executive Director changes
Simon Baines stepped down from the board with effect from 29 October 2018 and will leave the Group in April 2019. Details of the remuneration arrangements relating to Simon leaving the business, which were determined in accordance with the shareholder approved Directors' Remuneration Policy, are set out on page 52.

Our approach to Executive Director remuneration in 2019
Executive Director salaries have been increased with effect from 1 January 2019 by 4%, in line with wider workforce increases.

Philip Wood will continue to receive a salary supplement of £2,000 per month in recognition of the additional responsibilities and time commitment involved in his appointment as Acting Chief Executive Officer of Microgen

Financial Systems. This arrangement will continue for the duration of this interim appointment. Philip's bonus and performance share plan award for 2019 will both be calculated by reference to his "ordinary" salary attributable to his role as Chief Financial Officer of the Group, his salary supplement will not be taken into account for these variable remuneration purposes.

The overall maximum bonus opportunity will remain at 100% of salary, reflecting the policy which was approved at the 2017 AGM. 75% of the opportunity will be based on financial performance measures and 25% on non-financial measures linked to the delivery of the Group's key strategic goals. The payment of any bonus in respect of non-financial measures will be conditional on the achievement of a financial underpin.

Awards are proposed to be granted under the performance share plan at the level of up to 100% of salary. The vesting of awards will be subject to the achievement of stretching performance conditions based on EPS and TSR; further information is included on page 51.

The Group's Directors' Remuneration Policy is next scheduled to be submitted for shareholder approval at the 2020 AGM. During the course of 2019, the Group will review the policy to ensure it remains fit for purpose and supports the Company's strategy. This will include taking into account the new Corporate Governance Code, including developing a policy for post cessation shareholdings for Executive Directors.

Reporting and policy requirements

This report comprises:

- Part A being the Directors' Remuneration Policy which was approved by shareholders at the 2017 Annual General Meeting, amended as noted in the introduction to the Policy; and
- Part B being the Annual Report on Remuneration, which provides details of the amounts earned by Directors in respect of the year ended 31 December 2018 and how the Directors' Remuneration Policy will be operated for the year commencing 1 January 2019. This will be subject to an advisory vote at the 2019 Annual General Meeting.

Compliance

This report (comprising this introduction and Parts A and B) has been prepared in accordance with the Companies Act 2006 and The Large and Medium Sized Companies and Groups (Accounts and Reports) Regulations 2008 (as amended in 2013). It also meets the requirements of the UK Listing Authority's Listing Rules and the Disclosure and Transparency Rules. The Committee has further adopted the principles of good governance as set out in the 2016 version of the UK Corporate Governance Code, in respect of the year ended 31 December 2018.

THIS PART OF THE REPORT SETS OUT THE COMPANY'S DIRECTORS' REMUNERATION POLICY WHICH WAS APPROVED BY SHAREHOLDERS AT THE ANNUAL GENERAL MEETING HELD ON 24 APRIL 2017, AND WHICH IS PROVIDED FOR INFORMATION ONLY. THE POLICY AS IT APPEARS IN SECTION A HAS BEEN UPDATED FOR EASE OF READING ONLY, AND THE CHARTS ILLUSTRATING THE APPLICATION OF THE POLICY IN 2018 HAVE BEEN UPDATED TO PROVIDE AN ESTIMATE OF POTENTIAL REMUNERATION FOR EXECUTIVE DIRECTORS IN 2019. A VERSION OF THE ORIGINAL TEXT AND CHARTS CAN BE FOUND IN THE ANNUAL REPORT 2016 AT WWW.MICROGEN.COM. THIS DIRECTORS' REMUNERATION POLICY IS NOT SUBJECT TO A VOTE AT THE ANNUAL GENERAL MEETING TO BE HELD ON 21 MAY 2019.

A. DIRECTORS' REMUNERATION POLICY ("POLICY")

This part of the Report sets out the Company's Directors' Remuneration Policy, which was approved by shareholders at the 2017 Annual General Meeting, and took binding effect from the close of that meeting. This part of the Report is unaudited.

Remuneration Policy for Executive Directors

The Policy for the Executive Directors and other senior executives is based on the following principles, and takes into account prevailing best practice, shareholder expectations, and the remuneration of the wider employee population:

- Ensure remuneration arrangements support the Group's business strategy;
- Align interests of Directors and senior executives with those of the shareholders;
- Determine remuneration by reference to individual performance, experience and prevailing market conditions, with a view to providing a package appropriate to the responsibilities involved;
- Encourage behaviours which will enhance the performance of the Group and reward achievement of the Group's strategic and financial goals; and
- Ensure that an appropriate proportion of the overall remuneration package is incentive pay, which is earned for the delivery of stretching performance conditions.

Executive Directors' Policy Table

The following policy applies to any remuneration payment or loss of office payment made to an Executive Director following the Company's Annual General Meeting on 24 April 2017.

Purpose and link to strategy	Operation	Maximum opportunity	Performance metrics
Basic salary To pay competitive basic salary to attract, retain and motivate the talent required to operate and develop the Group's businesses and to develop and deliver the Group's strategy	Basic salaries are ordinarily reviewed on an annual basis with reference to (i) scope of the role, (ii) performance and experience of the individual, (iii) pay levels at comparable companies, and (iv) pay and conditions elsewhere in the Group. Basic salaries are reviewed when an individual changes roles or responsibilities.	While no maximum salary level has been set, salary increases will typically be in line with the increases awarded to other employees in the Group (in percentage of salary terms). In appropriate circumstances, increases of a higher amount may be made taking into account individual circumstances such as: • an increase in scope or responsibility of the individual's role; • development of the individual within the role (including enhanced performance); • alignment to market level; and • a change in the size or complexity of the business.	None, although overall performance of the individual will be taken into consideration by the Committee when setting and reviewing salary levels.
Retirement benefits To provide an opportunity for executives to build up income on retirement	All Executive Directors are eligible to participate in the Group Personal Pension Scheme. In appropriate circumstances, Executive Directors may receive a cash allowance in lieu of a pension contribution, or a combination of a pension contribution and a cash allowance.	*Pension contribution* The Group matches employee contributions on a 2:1 basis with employer contributions not exceeding 6% of basic salary. No element other than basic salary is pensionable. *Cash allowance* The maximum cash allowance (after deducting any employer pension contribution) is 6% of basic salary.	None. Not performance related.
Benefits To provide market-competitive benefits	Executive Directors receive benefits which consist primarily of income protection in the event of long-term ill health, private healthcare insurance and death-in-service benefits. Other benefits may be provided based on individual circumstances, such as relocation and travel expenses.	No maximum value of benefits has been set as benefits vary by role. However, the level of benefits provided is set at a level which the Committee considers to be sufficient based on the role and individual circumstances.	None. Not performance related.
Management Bonus Scheme To incentivise and reward strong performance against financial and non-financial annual targets, thus delivering value to shareholders	The Committee assesses actual performance compared to the performance targets following the completion of the financial year and determines the bonus payable to each individual. The Committee has discretion to amend the pay- out should any formulaic output not reflect the Committee's assessment of overall business performance. Bonuses are payable in cash. Bonuses are subject to clawback provisions as referred to below the table.	The maximum annual opportunity is 100% of salary.	Performance measures and targets (and their weightings where there is more than one measure) are set by the Committee on an annual basis to reflect the Company's strategic priorities. At least 75% of the opportunity will be based on key financial measures, and the balance will be based on non-financial measures. *Financial measures* Up to 50% of the maximum payable in respect of a financial measure will be paid for on target performance, increasing to 100% for stretch performance. *Non-financial measures* Vesting in respect of any non-financial measure will be between 0% and 100% based on the Committee's assessment of the extent to which the relevant measure is achieved. Vesting in respect of any non-financial measure will ordinarily be subject to the satisfaction of a financial performance underpin.

Executive Directors' Policy Table (continued)

Purpose and link to strategy	Operation	Maximum opportunity	Performance metrics
Performance Share Plan 2016 (2016 PSP) To drive sustained long-term performance that supports the creation of shareholder value.	The 2016 PSP is used to provide a meaningful reward to senior executives linked to the long-term success of the business, by delivering annual awards in the form of nil (or nominal)-cost options, conditional awards of shares or such other form as has the same economic effect. Awards will be granted subject to performance conditions, assessed over a period of at least three years, The number of shares subject to awards under the 2016 PSP may be increased to take account of dividends that would have been paid on vested shares up to the date of vesting (calculated assuming the reinvestment of any such dividends into additional shares on a cumulative basis). Awards under the 2016 PSP are subject to malus and clawback provisions as referred to below the table. The Committee may, at its discretion, structure awards as Qualifying PSP awards comprising both a tax qualifying option and an ordinary PSP award, with the ordinary PSP award scaled back at exercise to take account of any gain made on the exercise of the tax qualifying option.	The 2016 PSP provides for awards of up to a maximum limit of 100% of basic salary in respect of any financial year of the Company. In exceptional circumstances (such as on the recruitment of a new Executive Director) awards in respect of any financial year may be granted at the level of up to 200% of salary. Where an award is granted as a Qualifying PSP Award, the shares subject to the tax qualifying option are not taken into account for the purposes of these limits, reflecting the "scale back" referred to in the "Operation" column.	Vesting of 2016 PSP awards is subject to continuous employment and performance against demanding performance measures. Awards made under the 2016 PSP will have a performance period of at least three years and will vest following the assessment of the performance conditions or on such later date as the Committee determines. If no entitlement has been earned at the end of the relevant performance period, the awards will lapse.
Save As You Earn Scheme 2016 To give all employees in the Group the opportunity to buy shares.	All qualifying employees and Executive Directors of the Group are invited to participate on the same basis. Awards in the UK must comply with certain legislative requirements to benefit from beneficial tax treatment.	Employees can save up to £500 per month (or such higher amount as is permitted under the relevant legislation) for a three or five year period, and can then use those savings to acquire shares at the end of the period at an exercise price set at the start of the savings contract at a discount of up to 20% to the market value of a share (or such higher percentage as is permitted under the applicable legislation).	None. Not performance related.

Notes to the Policy Table

Selection of performance measures

The performance measures under the Management Bonus Scheme and 2016 PSP are selected to reflect the main KPIs and strategic priorities for the Group and operating businesses. The Committee's policy is to set performance targets which are both stretching and achievable and that the maximum outcomes are only available for outstanding performance.

Performance conditions applying to subsisting awards may be amended or substituted by the Committee if an event occurs (such as a change in strategy, a material acquisition or divestment of a Group business or a change in prevailing market conditions) which causes the Committee to determine that the measures are no longer appropriate, and that amendment is required in order that they achieve their original purpose.

Operation of share plans

The Committee has discretion to operate the Company's share plans (including the 2016 PSP and the Save As You Earn Scheme 2016) in accordance with their terms, including the ability to settle awards in cash and to adjust the terms of awards in the event of any variation of the Company's share capital or any demerger, delisting, special dividend or other relevant event.

Shareholding guidelines

The Company expects Directors and senior employees when acquiring shares under the 2016 PSP (or the former performance share plan) not to dispose of more than fifty per cent (50%) of the shares acquired until the day on which his or her holding has a market value equal to that of his or her basic salary. Any shares that are sold to discharge the option holder's fiscal obligations are not treated as having been acquired.

Malus and clawback

For up to two years following the payment of a bonus under the Management Bonus Scheme, the Committee may require repayment of some or all of any bonus payment in circumstances which the Committee considers appropriate, including a material misstatement of accounts, an error in assessing performance conditions, or misconduct on the part of the participant.

For up to two years after the vesting of an award under the 2016 PSP the Committee may cancel an award or require the participant to make a payment to the Company in respect of an award in the event of gross misconduct, fraud, malpractice, a material misstatement of results, a material breach of risk management or other circumstances that, in the opinion of the Committee have a sufficiently significant impact on the reputation of any Group business. Where an award is granted as a Qualifying PSP Award, malus and clawback will apply to the tax qualifying option to the extent permitted by the applicable legislation.

Remuneration policy for Non-Executive Directors

The remuneration policy for Non-Executive Directors is set by the Board having taken account of the fees in other companies of similar size and the limits set in the Company's Articles of Association. When recruiting Non-Executive Directors, the remuneration offered will be in line with the policy table below.

Non-Executive Directors' Policy Table

The following policy applies to any remuneration payment or loss of office payment made to a Non-Executive Director on or after the Company's Annual General Meeting on 24 April 2017.

Purpose and link to strategy	Operation	Maximum opportunity	Performance measures
To attract and retain Non-Executive Directors of the highest calibre with broad commercial and other experience relevant to the Company	Each Non-Executive Director is paid a basic fee. Additional fees are payable for acting as Senior Independent Director and as Chairman of any of the Board's Committees (Audit and Remuneration) excluding the Nomination Committee. The fees paid to the Non-Executive Directors are determined by the Board. Fee levels are determined by reference to fees paid to Non-Executive Directors in similar sized businesses and the expected time commitment and complexity of the role. The Non-Executive Directors are not eligible to participate in the Company's performance-related incentive plans or pension arrangements. Non-Executive Directors may be eligible to receive benefits such as the use of secretarial support, travel costs and other benefits that may be considered appropriate.	Non-Executive Director fees are typically reviewed by the Board every year with any adjustments effective 1 January of the following financial year. However, in the event that there is a material change in the complexity, responsibility or time commitment required to fulfil a Non-Executive Director role, the Board shall seek shareholder approval to make the appropriate adjustment to the fee level. The maximum aggregate fees for all Non-Executive Directors will remain within the limit permitted by the Company's Articles of Association.	None

Remuneration policy for other employees across the Group

The Committee's approach to annual salary reviews is consistent across the Group, with consideration given to the scope of the role, level of experience, responsibility, individual performance and pay levels in comparable companies. Interim salary reviews are typically only proposed where an employee has a change in role or the scope of their role increases.

The Group offers three variable pay schemes to permanent employees of the Group who do not participate in the Management Bonus Scheme. These are the Sales Commission Plan, the Consultants' Bonus Scheme and the Annual Profit Share Bonus Plan. Employees participate in one of these schemes only.

Under the Sales Commission Plan, commission is calculated and paid on a monthly basis for all commission-earning sales people in the Microgen Group. Employees who are consultants and are targeted to generate fee income are eligible to participate in the Consultants' Bonus Scheme. Employees who do not participate in the Sales Commission Plan or the Consultants' Bonus Scheme are eligible to participate in an Annual Profit Share Bonus Plan where the quantum is set by the Committee in relation to Group and operating business performance. Opportunities and specific performance conditions vary by organisational level with business area-specific metrics incorporated where appropriate.

All employees are eligible to participate in the 2016 PSP, and are eligible to receive option grants. Under normal conditions, performance conditions are consistent for all participants, while award sizes vary by organisational level. All qualifying employees are offered the opportunity to save and buy shares through the Save As You Earn Scheme 2016 up to the same maximum level (or substantially equivalent maximum level for employees outside the UK), thus giving them the opportunity to be shareholders. However, the Executive Directors do not currently intend to participate in the Save As You Earn Scheme 2016.

Illustrations of the application of the Executive Directors' Remuneration Policy (Updated)

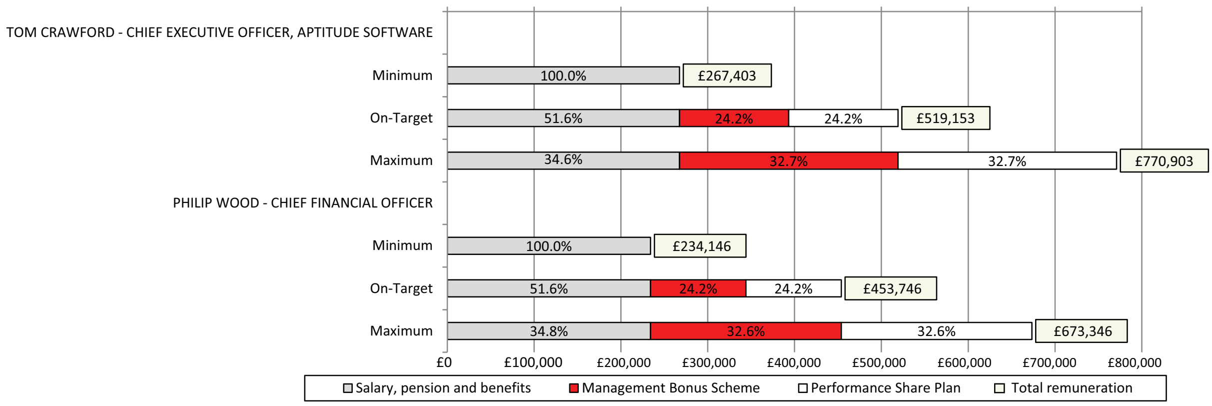
The following chart sets out an illustration in line with the Policy for the Executive Directors set out above and provides an estimate of the potential remuneration in 2019 for the Executive Directors, and the potential split between the different elements of remuneration under three different performance scenarios: 'minimum', 'on-target' and 'maximum'.

Potential reward opportunities are based on the Policy, taking into account basic salaries applying with effect from 1 January 2019, an employer pension contribution of 6% on those basic salaries and the 2018 benefits figure from the single total figure of remuneration table on page 48. Recognising that Philip Wood's salary supplement for the additional responsibilities and time commitment involved in his appointment as Acting Chief Executive Officer of Microgen Financial Systems is an interim arrangement and will not be taken into account for the purposes of his 2019 variable remuneration opportunities, it is ignored for the purposes of these charts. Note that the projected values exclude the impact of share price movement and the payment of dividends and actual outcomes may differ from those shown.

The 'minimum' scenario shows basic salary, pension and benefits (i.e. fixed remuneration) which are the only elements of the Executive Directors' remuneration packages which are not at risk.

The 'on-target' scenario reflects fixed remuneration as above plus a target pay-out of 50% of salary from the Management Bonus Scheme. In this scenario it is assumed that the Executive Directors are granted 2016 PSP awards of a value equivalent to 100% of their basic salary with 50% of the maximum ultimately vesting.

The 'maximum' scenario reflects fixed remuneration as above plus a pay-out of 100% of salary from the Management Bonus Scheme. In this scenario it is assumed that the Executive Directors are granted 2016 PSP awards of a value equivalent to 100% of their basic salary with the full award ultimately vesting.



Approach to Recruitment of Directors

Executive Directors

When hiring a new Executive Director, or promoting to the Board from within the Group, the Committee will typically align the package with the above Policy. The Committee may, in order to secure the services of a candidate with the suitable skills to execute the Company's strategy, include other elements of pay; however, this discretion is capped and subject to the principles set out below. The maximum level of variable remuneration that may be granted (excluding any "buy-out" award as referred to below) is 300% of salary (assuming a 100% of salary annual bonus, and a PSP award at the exceptional limit of 200% of salary, which would only be awarded where necessary to secure a candidate of appropriate quality and experience). Where an individual has contractual commitments made prior to their promotion to the Board, the Company will continue to honour these remuneration arrangements.

Component	Approach
Basic salary	The basic salaries of new appointees will be determined by reference to relevant market data, experience and skills of the individual, internal relativities and their current basic salary. Where new appointees have initial basic salaries set below a market competitive level, it may be increased to a market competitive rate over such period as the Committee determines, subject to their development in role.
Retirement benefits	Retirement benefits will be determined in accordance with the policy table above.
Benefits	Benefits will be determined in accordance with the policy table above, and may include relocation, travel and subsistence payments in appropriate circumstances.
Management Bonus Scheme	The scheme described in the policy table will apply to new appointees with the relevant maximum being pro-rated to reflect the proportion of employment over the year. Targets for the individual element will be tailored towards the executive.
Performance Share Plan 2016	New appointees who have been invited to participate in the 2016 PSP will be granted awards under the 2016 PSP, as described in the policy table. In accordance with the policy table and the rules of the 2016 PSP, in exceptional circumstances in order to enable the Company to recruit an executive with the experience and skills to execute the Company's strategy, awards may be granted up to the level of 200% of salary.
Save As You Earn Scheme	New Appointees will be invited to participate in the SAYE Scheme on the same basis as other employees and Executive Directors.

In determining an appropriate remuneration package for new Executive Directors, the Committee will take into consideration all relevant factors (including quantum, the nature of remuneration and where the candidate was recruited from) to ensure that arrangements are in the best interests of the Company and its shareholders.

An Executive Director may be recruited at a point in a financial year when it would be inappropriate to provide a bonus or long-term incentive award for that year (for example, because there would not be sufficient time to assess performance). In these circumstances, subject to the limit on variable remuneration set out above, the quantum of that Executive Director's bonus or long-term incentive award in respect of the months employed during that financial year may be transferred to the subsequent financial year so that the Executive Director is rewarded on a fair and reasonable basis.

The Committee may alter the performance measures and weightings and vesting period of the Management Bonus Scheme and long-term incentive award if the Committee considers that the circumstances of the recruitment merit such an alteration – the rationale will be clearly explained in a subsequent Directors' Remuneration Report.

In addition, the Committee reserves the right to make an award in respect of a new appointment to 'buy out' incentive arrangements forfeited on leaving a previous employer. In doing so, the Committee will consider relevant factors including any performance conditions attached to these awards and the likelihood of those conditions being met. The Committee will generally seek to structure any buy-out awards or payments on a comparable basis to the forfeited arrangements and to limit any such award to the expected value of the forfeited arrangements.

Share awards will be granted under the Company's existing share plans as far as possible, but the Company may adopt additional arrangements as permitted by the Listing Rules to facilitate the recruitment of an Executive Director.

Non-Executive Directors

In recruiting a new Non-Executive Director, the Committee will use the policy as set out in the table on page 21. A basic fee in line with the prevailing fee schedule would be payable for Board membership, with additional fees payable for acting as Senior Independent Director or Chairman of the Audit or Remuneration Committees as appropriate.

Directors' Service Contracts

Executive Director service contracts, including arrangements for early termination, are carefully considered by the Committee. Each Executive Director has a rolling service contract with the Group which can be terminated with written notice in accordance with the table below. Such contracts provide for an obligation to pay salary plus pension and benefits for any portion of the notice period waived by the Group. Executive Director service contracts are available to view at the Company's registered office.

Executive Director	Date of service contract	Notice period from the individual	Notice period from the employer
Tom Crawford	6 April 2014*	6 months	6 months
Philip Wood	21 October 2006	6 months	6 months

* Tom Crawford joined the Group in 2003 and was appointed to the Board on 1 January 2016.

The table below summarises how the awards under the Management Bonus Scheme and long-term incentives are typically treated in specific circumstances:

Reason for leaving	Treatment
Management Bonus Scheme	
Retirement, ill-health, disability, death, redundancy or other reasons at the discretion of the Committee	The Committee may consider it appropriate to award a bonus depending on the relevant termination scenario. The payment of any bonus will be subject to the satisfaction of the relevant performance conditions and will ordinarily be reduced to reflect the proportion of the bonus year for which the Executive Director was in service (although the Committee has discretion to waive this time-based reduction). Any such bonus will typically be paid following the end of the bonus year, although the Committee retains discretion to pay the bonus at the date of cessation (and to assess performance conditions accordingly).
Other reason	Awards lapse on the date of termination.
Performance Share Plan 2016	
Death	Awards can be exercised within 12 months from the date of death (or, if the Committee so decides, from the ordinary vesting date) on a pro-rata basis and to the extent that performance conditions have been met (as assessed by the Committee where awards vest before the end of the original performance period). However, the Committee reserves the right to disapply pro-rating.
Ill-health, disability, or redundancy, or any other reason at the discretion of the Committee	Awards will ordinarily continue and can be exercised within 6 months from the ordinary vesting date on a pro-rata basis and to the extent that performance conditions have been met. However, the Committee reserves the right to disapply pro-rating and to vest the award at the date of cessation (and to assess performance conditions accordingly) depending on the circumstances.
Other reason	Awards lapse on the date of termination.
Save As You Earn 2016	
Death	Options can be exercised within 12 months from the date of death (or 12 months after the end of the savings contract, if earlier).
Retirement, injury, disability, redundancy, sale of the participant's employer out of the Group	Options can be exercised within 6 months from the date of cessation of employment, but only to the extent that savings have been made.
Any other reason more than three years after grant	Options can be exercised within 6 months from the date of cessation of employment, but only to the extent that savings have been made.
Any other reason	Options lapse.

Change of control

Awards under the 2016 PSP may vest early on the change of control or other relevant event, or awards may be exchanged for awards in a new Company. Where awards vest, they can be exercised on a pro-rata basis and to the extent that performance conditions have been met (as assessed by the Committee), although the Committee reserves the right to disapply pro-rating. Options under the Save As You Earn 2016 may vest early in the event of a change of control to the extent permitted by the rules of the scheme (or may be exchanged for new options), which do not permit the exercise of discretion as to the treatment on change of control.

Other payments

In appropriate circumstances, payments may also be made in respect of accrued holiday, legal fees and outplacement services. The Committee reserves the right to make any other payments in connection with a Director's cessation of office or employment where the payments are made in good faith in discharge of an existing legal obligation (or by way of damages for breach of such an obligation) or by way of settlement of any claim arising in connection with the cessation.

Non-Executive Directors' Terms of Appointment (updated)

Subject to re-election by shareholders, Non-Executive Directors are appointed for an initial term of approximately three years. Subsequent terms of three years may be awarded, but with effect from the 2019 AGM, each Director will nevertheless offer themselves for annual re-election by shareholders, in accordance with the recommendations of the 2018 Corporate Governance Code.

Details of the Non-Executive Directors' terms of appointment are shown in the table below and copies of the Non-Executive Directors' terms of appointment are available to view at the Company's registered office. The appointment, re-appointment and the remuneration of Non-Executive Directors are matters reserved for the full Board.

	Initial agreement date	**Expiry date of current agreement**
Ivan Martin	21 October 2015	31 December 2021
Peter Whiting	2 February 2012	30 April 2020
Barbara Moorhouse	27 February 2017	30 April 2020

Legacy arrangements

The Committee reserves the right to make any remuneration payment and/or payment for loss of office (including exercising any discretions available to it in connection with such payments) notwithstanding that they are not in line with the Policy set out above where the terms of the payment were agreed:

1. before the Policy came into effect (and, in the case of a payment agreed on or after 28 April 2014, where the terms of the payment are in line with the policy approved at the 2014 AGM);

2. at a time when the relevant individual was not a Director of the Company and, in the opinion of the Committee, the payment was not in consideration for the individual becoming a Director of the Company.

For these purposes, the term "payment" includes the satisfaction of awards of variable remuneration and in relation to an award over shares the terms of the payment are agreed at the time the award is granted. For the avoidance of doubt, this includes the ability to satisfy any awards granted under the Company's 2006 Performance Share Plan, and to exercise discretion under that plan in respect of any such awards.

Executive Directors – External appointments

The Executive Directors may accept external appointments of non-executive directorships in order to broaden their experience for the benefit of the Company. Such appointments are subject to approval by the Board in each case, and the Executive Director may retain any fees paid in respect of such a directorship.

Consideration of conditions elsewhere in the Company

Although the Committee does not consult directly with employees on executive remuneration policy, the Committee does consider general basic salary increases across the Company, remuneration arrangements and employment conditions for the broader employee population when determining remuneration policy for the Executive Directors.

Consideration of shareholder views

The Committee is committed to an open and transparent dialogue with shareholders on matters relating to remuneration. When determining remuneration, the Committee takes into account views of shareholders and investor guidelines. The Committee is always open to feedback from shareholders on remuneration policy and arrangements, and commits to undergoing shareholder consultation in advance of any significant changes to remuneration policy.

B ANNUAL REPORT ON REMUNERATION

The following section provides details of how the Company's remuneration policy was implemented during the year ended 31 December 2018. The sections of the report which are audited are clearly identified as such in the section heading.

Role of the Remuneration Committee

The Committee's primary function is to support the Company's strategy by ensuring its delivery is supported by the Company's remuneration policy. The Committee's responsibilities during 2018 included:

- determining the Company's remuneration policy and monitoring its implementation;
- approving remuneration packages for each of the Executive Directors;
- determining the terms on which Performance Share Plan and Company Share Option Plan awards are made; and
- reviewing and setting performance targets for incentive plans.

The Committee has undertaken a review of its responsibilities in light of the 2018 Corporate Governance Code and has already put in place arrangements to review the remuneration of the Company's Senior Leadership Team with effect from 2019. The Committee will report fully on the application of the 2018 Corporate Governance Code in the 2019 Directors' Remuneration Report.

The Committee's full terms of reference provide further details of the roles and responsibilities of the Committee and are available on the Company's website.

Remuneration Committee membership in 2018

The membership of the Remuneration Committee as at 31 December 2018 comprised Peter Whiting (Committee Chair), Barbara Moorhouse and Ivan Martin.

Only Committee members have the right to attend Committee meetings, though other individuals such as the Executive Directors may attend by invitation. External consultants provide advice to the Committee from time to time. No individuals are involved in decisions relating to their own remuneration.

The Committee held 8 meetings during the financial year and details of members' attendance at meetings are provided in the Corporate Governance section on page 30.

Single total figure of remuneration (audited)

Executive Directors

The table below sets out a single figure for the total remuneration received by each Executive Director for the year ended 31 December 2018 and the prior year.

	Simon Baines*		Tom Crawford		Philip Wood******	
	2018	2017	**2018**	2017	**2018**	2017
	£	£	**£**	£	**£**	£
Basic Salary	**162,391**	190,550	**242,050**	225,650	**215,358**	197,775
Taxable benefits**	**1,093**	1,173	**548**	469	**1,370**	1,173
Pension***	**11,519**	11,183	**13,925**	12,695	**12,176**	11,183
Management Bonus****	**–**	67,169	**–**	194,623	**–**	152,049
Long Term Incentives*****	**601,607**	–	**601,607**	–	**601,607**	–
Total	**776,610**	270,075	**858,130**	433,437	**830,511**	362,180

* With effect from 29 October 2018, Simon Baines stepped down from the Board. In the table above, his remuneration for 2018 is stated to the date on which he stepped down from the Board. Details of payments made to him after that date are set out on page 52.
** Taxable benefits consist primarily of private healthcare insurance.
*** The Company paid £11,519 to Simon Baines and £12,176 to Philip Wood (2017: £11,183 for each of them) into a self-invested personal pension scheme. The Company paid £13,925 to Tom Crawford (2017: £12,695) by way of a pension allowance, from which tax and national insurance were deducted at the appropriate rates.
**** No bonuses were earned under the Management Bonus Scheme in respect of 2018 – further information is given below.
***** Includes, in respect of 2018, PSP awards vesting in respect of a performance period ending in the year ended 31 December 2018 – further information is given below.
****** With effect from 29 October 2018 Philip Wood has received a salary supplement of £2,000 per month in respect of his interim appointment as Acting Chief Executive Officer of Microgen Financial Systems which is included in "Basic Salary" above.

Non-Executive Directors

The table below sets out a single figure for the total remuneration received by each Non-Executive Director (including Ivan Martin, Non-Executive Chairman) who served during the year ended 31 December 2018 and the prior year:

	Ivan Martin		Peter Whiting		Barbara Moorhouse*	
	2018	2017	**2018**	2017	**2018**	2017
	£	£	**£**	£	**£**	£
Basic Salary	**134,000**	130,000	**43,300**	42,000	**43,300**	31,500
Committee Fees	**–**	–	****11,900**	**11,500	**7,700**	5,144
Other Fees	**–**	–	**–**	***2,500	**–**	–
Total	**134,000**	130,000	**55,200**	56,000	**51,000**	36,644

* Barbara Moorhouse was appointed to the Board on 1 April 2017.
** Peter Whiting's Committee fees consist of £6,700 in respect of his Chairmanship of the Remuneration Committee and £5,200 in respect of his holding the office of Senior Independent Director.
*** The other fee paid in 2017 to Peter Whiting was due to the increased time requirement pursuant to the recruitment of a new Non-Executive Director to the Board.

Salary increases during 2018

Each Executive Director's salary was increased by 3% with effect from 1 January 2018, reflecting wider workforce increases.

Incentive outcomes for the year ended 31 December 2018 (audited)

Management Bonus Scheme in respect of 2018 performance

The 2018 Management Bonus Scheme for Executive Directors is determined by the Committee by reference to the Group's financial performance (as regards 75% of the opportunity) and the achievement by each Executive Director of non-financial performance measures (as regards 25% of the opportunity) during 2018. The maximum bonus opportunity for each Executive Director was 100% of salary. The financial performance underpin was not met and, accordingly, no management bonuses were earned in 2018.

Financial performance measures (75% of the bonus opportunity)

Executive Director	Measure	Weighting	Threshold performance level	On-target performance level	Stretch performance level	Actual performance level	Bonus earned (% of salary)
Simon Baines*	Recurring revenue base in respect of the 5Series product	33.33% of the financial measures opportunity	£6.15m	£6.50m	£7.15m	£5.04m	0%
	Operating profit (pre-bonus accrual)	33.33% of the financial measures opportunity	£7.5m	£7.9m	£7.8m	£7.0m**	0%
	Quantum of acquired revenue (annualised)	33.33% of the financial measures opportunity	£2.0m	£4.0m	£8.0m	£0.0m	0%
Tom Crawford	Recurring revenue base (excluding effect of acquisitions)	50% of the financial measures opportunity	£23.1m	£24.0m	–	£24.0m	0%
	Operating Profit (pre-bonus accrual)	50% of the financial measures opportunity	£10.9m	£11.9m	£13.9m	£10.4m	0%

* Stepped down from the Board with effect from 29 October 2018.

** Operating Profit of Microgen Financial Systems for 2018 was impacted by the disposal of Microgen Banking Systems Limited on 2 July 2018. The disposed entity held the trade of the Goup's payments software business (see note 28 for further details). Even allowing for this, the Operating Profit threshold would not have been met.

Reflecting his Group-wide position, Philip Wood's bonus in respect of the financial performance measures is calculated by reference to the financial performance measures related to Microgen Financial Systems and the bonus earned by Tom Crawford on the basis of financial performance measures related to Aptitude Software, with the weighting between the Microgen Financial Systems measures and Aptitude Software measures determined by the Committee based on its assessment of the degree of support given to each business. As these measures were not met for 2018, Philip Wood did not earn a bonus for 2018 in respect of financial performance measures.

Non-financial performance measures (25% of the bonus opportunity)

The performance of each Executive Director was assessed by the Remuneration Committee against a number of metrics reflecting the Board's key strategic goals for the year, as stated below. However, the bonus based on the non-financial performance measures was capable of being earned only if the threshold level of performance level against the operating profit financial metrics was achieved and, accordingly, notwithstanding performance against the non-financial measures, no bonus was earned by reference to them.

Executive Director	Non-financial measure
Simon Baines*	Progress 5Series technology enhancements.
	Progress moving acquired client base towards migration onto Microgen 5Series while maintaining positive customer relationships.
	Drive a high performing culture with employees.
Tom Crawford	Grow annual contract value of Aptitude RevStream product, subscription, modules or renewal uplift in 2018.
	Launch a new specialised finance application (IFRS 17) to extend the product portfolio and make sales of the new application.
	Launch a new revenue stream for the business in 2018 (regarding nature of service, as opposed to new product) and make sales of the new service.
Philip Wood	Execute acquisition strategy in Microgen Financial Systems in the best interests of the Group.
	Successful implementation of new forecasting and reporting tool and roll out of new expenses system within existing budgeted spend.
	Provision of legal and commercial assistance to the Aptitude Software business.

* Stepped down from the Board with effect from 29 October 2018.

PSP awards vesting in respect of performance in 2018

Each of Simon Baines, Tom Crawford and Philip Wood was granted an award on 21 October 2015 under the Company's 2006 Performance Share Plan over 150,000 shares, which vested on 21 October 2018. The value included in the single total figure of remuneration table is based on the value of the vested shares, calculated as the share price on the date of vesting (£4.075, being the share price on 19 October 2018 the last dealing day before vesting) less the per share exercise price (6 3/7 pence).

Shares subject to award	Vesting percentage*	Vested shares	Value
150,000	100%	150,000	£601,607

*The awards vested subject to continued employment and performance based on Total Shareholder Return ("TSR") as follows:

- 50% would vest if (i) the Company's TSR at least matched the performance of the FTSE Fledgling Index over the performance period; and (ii) the Company's TSR over the performance period was not negative; and
- a further 50% would vest if (i) the Company's TSR outperformed the FTSE Fledgling Index by at least 25% over the performance period; and (ii) the Company's TSR over the performance period was at least 10%.

The Company's TSR over the period was over 360%, significantly in excess of the maximum targets and, accordingly, the awards vested in full.

Share awards granted during the year (audited)

On 30 August 2018 share options under the Performance Share Plan 2016 were awarded to the Executive Directors. Each award was granted in the form of an option with an exercise price of 6 3⁄7 pence per share and the basis of the award was 100% of salary, as follows:

Executive Director	Number of shares subject to award	Basis of award	Face value of award*	% of award vesting for threshold performance
Simon Baines**	46,289	100% of salary	£196,265	25%
Tom Crawford	57,087	100% of salary	£242,049	25%
Philip Wood	49,799	100% of salary	£211,148	25%

* Based on a share price of £4.24 being the average of the mid-market closing share price on the three days prior to the date of grant.

** Simon Baines stepped down from the Board on 29 October 2018 and will leave the Group in April 2019. His award lapsed on his stepping down from the Board.

The vesting of these options is subject to the satisfaction of performance conditions based on:

(a) as regards 50% the shares subject to the options, the annual compound growth in the Company's Earnings Per Share (EPS) measured over the period of three financial years commencing on 1 January 2018, as follows:

Percentage of the options subject to the EPS performance condition that vests	Annual compound growth in EPS
0%	Less than 10%
25%	10%
Determined on a straight-line basis between 25% and 100%	Between 10% and 12%
100%	Equal to or greater than 12%

(b) as regards the other 50% of the shares subject to the options, the Company's Total Shareholder Return measured over the period of three financial years commencing on 1 January 2018, compared with the Total Shareholder Return (TSR) of a comparator Group consisting of the companies constituting the FTSE SmallCap Index (excluding investment trusts) as follows:

Percentage of the options subject to the TSR performance condition that vests	Rank of the Company's TSR against the TSR of the members of the comparator Group
0%	Below median
25%	Median
Determined on a straight-line basis between 25% and 100%	Between median and upper quartile
100%	Upper quartile or above

For these purposes, the Company's TSR will be calculated by reference to the average net return index for the Company's shares over each weekday (excluding Saturdays and Sundays) during:

- the one-month period ending on the day before the start of the three-year performance period; and
- the one-month period ending on the last day of the performance period.

The awards are also subject to a further underpin condition. No element of any award will vest unless the Committee determines that the level of vesting reflects the overall financial performance of the Group over the performance period.

These awards are subject to a two-year holding period following the end of the performance period, at the end of which they can be exercised.

Termination payments and payments to past Directors (audited)

Simon Baines stepped down from the Board on 29 October 2018 and will leave the Group in April 2019. The remuneration arrangements relating to Simon Baines leaving the Group are as follows:

- Simon will remain with the Microgen Financial Systems business as an employee until 28 April 2019 and will continue to receive his salary and benefits (including pension benefits) to that date, of £104,290 in aggregate. Payments of £34,127 were made in respect of salary and benefits (including pension benefits) for the period from 30 October 2018 to 31 December 2018 and payments of £70,163 have been made or will be made in respect of salary and benefits (including pension benefits) for the period from 1 January 2019 to 28 April 2019, this amount has been accrued in full during 2018.
- Simon was not entitled to a bonus in respect of 2018 or 2019.
- Simon Baines will be entitled to retain the following options and exercise them up to 28 April 2019:

Date of Grant	Shares subject to option	Performance Period	Vesting Date
18 November 2013	172,419	November 2013 – November 2016	18 November 2018
21 October 2015	150,000	October 2015 – October 2018	21 October 2018

All other share options held by Simon Baines have lapsed.

Other than these arrangements, in the year no termination payments were made to Directors or payments made to past Directors.

Implementation of remuneration policy for 2019

Basic salary

Market positioning of basic salary is reviewed on an individual basis, by reference to individual performance, experience and market conditions with a view to providing a package which is appropriate for the responsibilities involved. The 4% increase awarded to Executive Directors is within the range of increases awarded to the wider workforce.

Executive Directors	Basic salary as at 31 December 2018	Basic salary from 1 January 2019	Percentage Increase on 1 January 2019
Tom Crawford	£242,050	£251,750	4%
Philip Wood*	£211,150	£219,600	4%

* With effect from 29 October 2018 Philip Wood has received a salary supplement of £2,000 per month in respect of his interim appointment as Acting Chief Executive Officer of Microgen Financial Systems.

Management Bonus Scheme

The maximum bonus opportunity for Executive Directors in 2019 will remain unchanged from the opportunity in 2018, and will be a maximum of 100% of salary, with 50% of the maximum paid for on target performance and 100% of the maximum paid for maximum performance.

As noted on page 35, Philip Wood's salary supplement relates to his interim appointment as Acting Chief Executive Officer of Microgen Financial Systems will not be taken into account for annual bonus purposes.

Bonuses will be based on performance compared to a number of financial metrics (as regards 75% of the overall opportunity) and the achievement of a number of non-financial performance measures set for the year (as regards 25% of the overall opportunity). The financial metrics include operating profit and a number of the KPIs of each operating business. The non-financial performance measures will be subject to a financial underpin. In the view of the Committee the measures and targets are commercially sensitive as they give competitors information in relation to the Company's targets and plans. Information will be disclosed when no longer considered commercially sensitive, as with the disclosure of the 2018 bonus outturn on pages 48 to 50.

Long-term incentives

Awards under the 2016 PSP will be granted to Executive Directors in 2019. The awards will be granted at the level of up to 100% of salary. Performance measures will be based on EPS and TSR as with the awards granted in 2018, with the measures again weighted 50:50. As with the awards granted in 2018, the TSR performance measures will compare Microgen's TSR performance with a comparator Group consisting of the FTSE SmallCap Index (excluding investment trusts), with 25% of the TSR element vesting for performance at median, rising to 100% for upper-quartile performance.

As noted on page 35, Philip Wood's salary supplement related to his interim appointment as Acting Chief Executive Officer of Microgen Financial Systems will not be taken into account for PSP purposes.

The EPS performance targets will be determined before the awards are granted and disclosed both at grant and in the 2019 Directors' Remuneration Report. Targets will be set to ensure that full vesting requires the achievement of stretching levels of performance, with threshold performance delivering 25% vesting. The awards will be subject to a two-year holding period following the end of the performance period, at the end of which they can be exercised.

Non-Executive Director fees

With effect from 1 January 2019, the fees payable to Non-Executive Directors have increased as follows:

	Fee at 1 January 2018 £	**Fee at 1 January 2019 £**
Basic Non-Executive Director Fee	43,300	45,000
Audit Committee Chair Fee	7,700	8,000
Remuneration Committee Chair Fee	6,700	7,000
Senior Independent Director Fee	5,200	5,400

With effect from 1 January 2019 the fee paid to Ivan Martin, Non-Executive Chairman, increased from £134,000 to £139,400, an increase of 4%.

The increases in the Non-Executive Director and Non-Executive Chairman fees are within the range of increases awarded to the wider workforce.

Percentage change in Executive Directors' remuneration

The table below shows the percentage change in Executive Directors' remuneration from the prior year compared to the average percentage change in remuneration for all other employees. For the purposes of this disclosure, remuneration comprises salary, benefits (excluding pension) and variable pay paid in the year only.

	Tom Crawford	**Philip Wood**	**Other employees***
Salary	3%	3%	5%
Taxable benefits	15%	17%	6%
Single-year variable**	n/a	n/a	(32%)

* Based on UK employees only as the most appropriate comparator group.
** No Executive Director earned a bonus for 2018.
*** The salary increase for Philip Wood is based on his salary as Chief Financial Officer and not the additional salary supplement of £2,000 per month payable to him on an interim basis in recognition of the additional responsibilities and time commitment involved in his appointment as Acting Chief Executive Officer of Microgen Financial Systems.

Relative importance of spend on pay

The table below shows the percentage change in spend on pay and shareholder distributions (i.e. dividends and share buybacks) from the financial year ended 31 December 2017 to the financial year ended 31 December 2018.

	% increase	**2018 £000**	2017 £000
Return to shareholders in year	17%	**3,928**	3,345
Employee remuneration	18%	**37,242**	31,555

Comparison of Company performance

The following graph shows the Company's performance, measured by total shareholder return, compared with the performance of the FTSE Fledgling Index for the ten years ended 31 December 2018. The Committee considers that the FTSE Fledgling Index is the most appropriate comparison across the period given the similarities between the Company and the companies forming this index.

The total shareholder return performance (as shown in the graph below) for the Company includes the impact of the dividends paid to its shareholders across the period; however, it does not reflect the 2010, 2013 and 2015 returns of capital to shareholders.

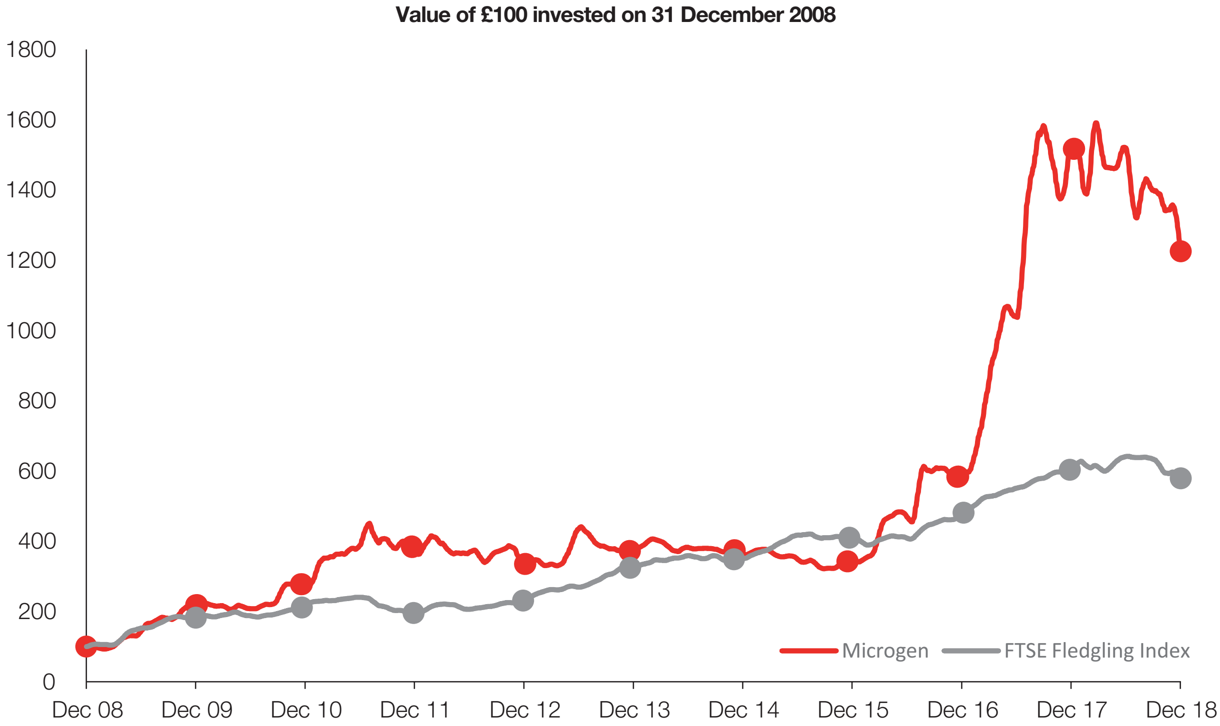


Table of historic remuneration (audited)

The table below details the total remuneration, bonus award as a percentage of maximum opportunity and long-term incentive awards vesting as a percentage of maximum opportunity for the Group's senior executive officer(s) for each of the years from 2009 - 2018 (inclusive).

Year		Total Remuneration	Bonus Award as a percentage of maximum opportunity	Long term incentives vesting as a percentage of maximum opportunity
2018	Simon Baines (Chief Executive Officer, Microgen Financial Systems)******	£776,610*	0.00%	100.00%
	Tom Crawford (Chief Executive Officer, Aptitude Software)	£858,130*	0.00%	100.00%
2017	Simon Baines (Chief Executive Officer, Microgen Financial Systems)	£270,075	35.25%	n/a
	Tom Crawford (Chief Executive Officer, Aptitude Software)	£433,437	86.25%	n/a
2016	Simon Baines (Chief Executive Officer, Microgen Financial Systems)	£1,141,653**	50.00%	98.53%
	Tom Crawford (Chief Executive Officer, Aptitude Software)	£1,269,113***	92.50%	98.53%
2015	Martyn Ratcliffe (Executive Chairman)****	£199,375	n/a	n/a
2014	Martyn Ratcliffe (Executive Chairman)	£275,000	n/a	n/a
2013	Martyn Ratcliffe (Executive Chairman)	£216,667	n/a	n/a
2012	Martyn Ratcliffe (Executive Chairman)	£205,000	n/a	n/a
2011	Martyn Ratcliffe (Executive Chairman)	£1,096,498*****	n/a	100.00%
2010	Martyn Ratcliffe (Executive Chairman)	£252,296	n/a	n/a
2009	Martyn Ratcliffe (Executive Chairman)	£350,931	n/a	n/a

* £601,607 of this amount relates to the vesting, in terms of performance, of awards under the Microgen 2006 Performance Share Plan.
** £852,241 of this amount relates to the vesting, in terms of performance, of awards under the Microgen 2006 Performance Share Plan.
*** £852,241 of this amount relates to the vesting, in terms of performance, of awards under the Microgen 2006 Performance Share Plan.
**** Martyn Ratcliffe was Executive Chairman in 2016 until his retirement on 4 March 2016.
***** £871,700 of this amount relates to the vesting, in terms of performance, of awards under the Group's share option schemes.
****** Simon Baines stepped down from the Board with effect from 29 October 2018 and in the table above his remuneration is stated to that date.

Directors' shareholdings and shareholding requirement (audited)

The interests of those persons who served as Directors during 2018 and their families in the ordinary shares of the Company as at 31 December 2018 (or, if earlier, the date of their cessation of employment) were as follows:

	Ordinary shares of 6 3/7 pence at 31 December 2018 (or, if earlier, the date on which stepped down from the Board)	Ordinary shares of 6 3/7 pence at 31 December 2017
Ivan Martin	**200,000**	200,000
Simon Baines (stepped down from the Board on 29 October 2018)	**100,000**	100,000
Tom Crawford	**380,000**	380,000
Philip Wood	**200,000**	200,000
Peter Whiting	**18,666**	18,666
Barbara Moorhouse	**–**	–

There have been no changes since 31 December 2018 to the shareholdings of any current Director. None of the Directors had an interest in the shares of any subsidiary undertaking of the Company or in any significant contracts of the Group. Details of Directors' interests in shares and options under Company long-term incentives are set out in the sections below.

Executive Directors are required to retain half of any shares acquired on the exercise of options under the Company's share plans until such time as their shareholding has a market value equal to 100% of salary. On each occasion that any Executive Director exercises options under the Company's share plans, the value of their shareholding will be assessed at that point. If the value of his or her shareholding (based on the closing mid-market share price at that date) is not equal to or higher than his or her base salary on that date, then the Executive Director will be required to retain such of the shares arising from the exercise of the options (but not exceeding 50% of the shares arising) as are necessary to increase the value of his or her shareholding to equal his or her base salary on that date.

Directors' interests under Company share plans (audited)

The table below shows the interests of each Director who served during 2018 as at 31 December 2018 in the Company's share plans. None of the Executive Directors exercised any of their options during the year.

Director	Grant	Shares subject to award as at 1 January 2018	Granted in 2018	Exercised in 2018	Lapsed in 2018	Shares subject to awards as at 31 December 2018 (or, if earlier, the date on which stepped down from the Board)	Status
Simon Baines (stepped down from the Board on 29 October 2018)	2013*	172,419	–	–	–	172,419	Vested
	2015**	150,000	–	–	–	150,000	Vested
	2016****	191,710	–	–	(191,710)***	–	Lapsed
	2017*****	43,208	–	–	(43,208)***	–	Lapsed
	2018******	–	46,289	–	(46,289)***	–	Lapsed
		557,337	**46,289**	**–**	**(281,207)**	**322,419**	
Tom Crawford	2013*	172,419	–	–	–	172,419	Vested
	2015**	150,000	–	–	–	150,000	Vested
	2016****	217,617	–	–	–	217,617	Unvested, subject to performance conditions
	2017*****	53,287	–	–	–	53,287	Unvested, subject to performance conditions
	2018******	–	57,087	–	–	57,087	Unvested, subject to performance conditions
		593,323	**57,087**	**–**	**–**	**650,410**	
Philip Wood	2013*	172,419	–	–	–	172,419	Vested
	2015**	150,000	–	–	–	150,000	Vested
	2016****	191,710	–	–	–	191,710	Unvested, subject to performance conditions
	2017*****	46,485	–	–	–	46,485	Unvested, subject to performance conditions
	2018******	–	49,799	–	–	49,799	Unvested, subject to performance conditions
		560,614	**49,799**	**–**	**–**	**610,413**	

* The awards granted in 2013 vested in 2016. 65% of the vested shares became capable of exercise on 20 November 2016 and the balance became capable of exercise in November 2018

** The awards granted in 2015 vested and became exercisable on 21 October 2018.

*** Simon Baines' awards granted in 2016, 2017 and 2018 lapsed on his stepping down from the Board

**** The awards granted in 2016 are subject to a performance condition described on page 46 of the 2016 Annual Report and Accounts

***** The awards granted in 2017 are subject to a performance condition described on page 49 of the 2017 Annual Report and Accounts

****** The awards granted in 2018 are subject to a performance condition described on page 51.

Advisors

In fulfilling its role the Committee seeks professional advice when considered appropriate to do so. The services of Deloitte LLP, independent advisors on executive remuneration, were made available to the Committee during the year. Their total fees for the provision of remuneration services to the Committee in 2018 were £6,190. After careful consideration the Committee is satisfied that the advice provided by Deloitte LLP is independent.

Deloitte LLP is a founder member of the Remuneration Consultants Group and adheres to its Code of Conduct for consultants to Remuneration Committees of UK-listed companies, details of which can be found at www.remunerationconsultantsgroup.com.

Statement of Shareholder voting

At the Annual General Meeting of the Company on 24 April 2017 Directors' Remuneration Policy was approved by shareholders as follows:

Approval of the Directors' Remuneration Policy	Total number of votes	% of votes cast
For (including discretionary)	42,630,950	95.70%
Against	1,914,484	4.30%
Total votes cast (excluding withheld votes)	**44,545,434**	**100.00%**
Votes withheld	13,516	
Total votes cast (including withheld votes)	**44,558,950**	

At the Annual General Meeting of the Company on 23 April 2018, the Directors' Remuneration Report for the year ended 31 December 2017 was approved by shareholders as follows:

Approval of the Directors' Remuneration Report for the year ended 31 December 2017	Total number of votes	% of votes cast
For (including discretionary)	45,945,466	99.99%
Against	3,922	0.01%
Total votes cast (excluding withheld votes)	**45,949,388**	**100.00%**
Votes withheld	0	
Total votes cast (including withheld votes)	**45,949,388**	

Note: Withheld votes are not included in the final voting figures as they are not recognised as a vote in law.

The Remuneration Report was approved by a duly authorised Committee of the Board of Directors on 22 March 2019 and signed on its behalf by:

Peter Whiting
Chair of the Remuneration Committee

22 March 2019

Independent Auditors'
Report to the Members of Microgen plc

Report on the audit of the financial statements

Opinion

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

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

We have audited the financial statements, included within the Annual Report, which comprise: the Balance Sheets as at 31 December 2018; the Consolidated Income Statement and Consolidated Statement of Comprehensive Income for the year then ended; the Statements of Cash Flows for the year then ended; the Consolidated Statement of Changes in Shareholders' Equity and Company Statement of Changes in Shareholders' Equity for the year then ended; and the notes to the financial statements, which include a description of the significant accounting policies.

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

Basis for opinion

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

Independence

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

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

Other than those disclosed in note 3 to the financial statements, we have provided no non-audit services to the Group or the Company in the period from 1 January 2018 to 31 December 2018.

Our audit approach

Overview

Materiality	• Overall Group materiality: £652,000 (2017: £599,000), based on 5% of profit before tax, adjusted for the gain on sale of Microgen Banking Systems Limited. • Overall Company materiality: £300,000 (2017: £450,000), based on 1% of total assets, reduced for an allocation of component materiality as part of the Group audit.
Audit scope	• We conducted an audit of full year financial information for six reporting units based on their aggregated contribution to the overall Group profit, with specific tests undertaken on a further three reporting units and at the Group's head office. • The reporting units where we performed audit work accounted for 84% of Group revenue, 71% of Group profit before tax and 77% of Group total assets.
Key Audit matters	• Risk of Fraud in Revenue Recognition – We considered and tested the recognition of revenue from customer contracts that require a higher level of management judgement due to their non-standard contract terms or current operating status.

The scope of our audit

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

Capability of the audit in detecting irregularities, including fraud

Based on our understanding of the Group and industry, we identified that the principal risks of non-compliance with laws and regulations related to claims by others that the Group's products or brands infringe their intellectual property rights or the Group's activities may result in the loss or disclosure of client data, and we considered the extent to which non-compliance might have a material effect on the financial statements. We also considered those laws and regulations that have a direct impact on the preparation of the financial statements such as the Companies Act 2006. We evaluated management's incentives and opportunities for fraudulent manipulation of the financial statements (including the risk of override of controls), and determined that the principal risks were related to posting inappropriate journal entries to increase revenue or reduce expenditure and management bias in accounting judgements for complex revenue contracts. The Group engagement team shared this risk assessment with the component auditors so that they could include appropriate audit procedures in response to such risks in their work. Audit procedures performed by the Group engagement team and/or component auditors included:

- Testing of risk defined journal entries to validate that these were genuine business transactions and not indicative of fraudulent manipulation of the financial statements; and
- Assessing the appropriateness of management judgements in relation to revenue recognition for contracts where there were unexpected complexities in delivering the ongoing project; and
- Discussions with management, and consideration of known or suspected instances of non-compliance with laws and regulation and fraud;

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

Key audit matters

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

Key audit matter	How our audit addressed the key audit matter
Risk of Fraud in Revenue Recognition The Group has recognised £70.3 million (2017: £63.0 million) of revenue in the year. The Group's key revenue recognition policies are set out on page 74 to the financial statements. The risk relates to the key judgements required in applying these policies. The accounting judgements can be complex when associated with recognition of invoiced and accrued or deferred income for contracts where there are specific ongoing delivery challenges, history or issues of slow or non-payment, ongoing commercial negotiations, contract claims or contract losses along with long term fixed priced contracts subject to a specified delivery output. There is also a risk that invoiced and accrued revenue on such contracts may not be recoverable.	We sought to identify those contracts where management may have encountered unexpected complexities in delivering the project. We made inquiries of operational management to identify contract claims or potential losses, reviewed project financial information and sought evidence of payment against milestones. We evaluated the appropriateness of the revenue recognised and recoverability of invoiced and accrued income by selecting a risk-based sample of contracts and obtaining evidence to support the amount of revenue recognised during the year. This evidence included testing support for subsequent and historic payments, obtaining explanations from operational teams and validating these to customer correspondence. Based on our procedures performed, we consider the revenue recognised for those contracts identified and tested to be reasonable.

We determined that there were no key audit matters applicable to the Company to communicate in our report.

How we tailored the audit scope

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

The Group is structured such that the significant majority of the business is comprised of two operating businesses, being Aptitude Software and Microgen Financial Systems. The Group financial statements are a consolidation of twenty three reporting units, comprising the Group's operating subsidiaries, overseas branches and centralised Group functions. In establishing the overall approach to the Group audit, we determined the type of work that needed to be performed at the reporting units.

Accordingly, of the Group's twenty three reporting units, we identified six which, in our view, required an audit of their complete financial information, either due to their size or their risk characteristics. In addition to the full scope audits, specific audit procedures were performed on three further reporting units and on selected consolidation adjustments made in relation to individually significant balances. These included procedures on the specific financial statement line items shown as non-underlying items, income tax expense, goodwill, intangible assets, deferred tax and current tax liabilities. This, together with additional procedures performed at the Group level, gave us the evidence we needed for our opinion on the Group financial statements as a whole. The reporting units where we performed audit work accounted for 84% of Group revenue, 71% of Group profit before tax and 77% of Group total assets.

We obtained reporting on specific financial statement line items from PwC Poland with regard to staff payroll costs in Aptitude Software (Poland). We have had regular discussions with the component audit team along with a review of their audit working papers.

Materiality

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

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

	Group financial statements	Company financial statements
Overall materiality	£652,000 (2017: £599,000).	£300,000 (2017: £450,000).
How we determined it	5% of profit before tax, adjusted for the gain on sale of Microgen Banking Systems Limited.	1% of total assets, reduced for an allocation of component materiality as part of the overall Group audit.
Rationale for benchmark applied	We believe that profit before tax is the primary measure used by the shareholders in assessing the performance of the Group, and is a generally accepted auditing benchmark. We adjusted the profit for the gain on sale of Microgen Banking Systems Limited, as this was considered an exceptional nonrecurring gain.	We believe that total assets is the primary measure used by the shareholders in assessing the performance and position of the Company and reflects the Company's principal activity as a holding Company. We have adjusted this down to £300,000 on the basis of an appropriate component materiality for the Group audit.

For each component in the scope of our Group audit, we allocated a materiality that is less than our overall Group materiality. The range of materiality allocated across components was between £137,000 to £585,000

We agreed with the Audit Committee that we would report to them misstatements identified during our audit above £32,600 (Group audit) (2017: £26,500) and £30,000 (Company audit) (2017: £22,500) as well as misstatements below those amounts that, in our view, warranted reporting for qualitative reasons.

Going concern

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

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

Reporting on other information

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

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

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

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

Strategic Report and Report of the Directors

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

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

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

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

- The Directors' confirmation on page 13 of the Annual Report that they have carried out a robust assessment of the principal risks facing the Group, including those that would threaten its business model, future performance, solvency or liquidity.
- The disclosures in the Annual Report that describe those risks and explain how they are being managed or mitigated.
- The Directors' explanation on page 16 of the Annual Report as to how they have assessed the prospects of the Group, over what period they have done so and why they consider that period to be appropriate, and their statement as to whether they have a reasonable expectation that the Group will be able to continue in operation and meet its liabilities as they fall due over the period of their assessment, including any related disclosures drawing attention to any necessary qualifications or assumptions.

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

Other Code Provisions
We have nothing to report in respect of our responsibility to report when: • The statement given by the Directors, on page 13, that they consider the Annual Report taken as a whole to be fair, balanced and understandable, and provides the information necessary for the members to assess the Group's and Company's position and performance, business model and strategy is materially inconsistent with our knowledge of the Group and Company obtained in the course of performing our audit. • The section of the Annual Report on page 27 describing the work of the Audit Committee does not appropriately address matters communicated by us to the Audit Committee. • The Directors' statement relating to the Company's compliance with the Code does not properly disclose a departure from a relevant provision of the Code specified, under the Listing Rules, for review by the auditors.
Directors' Remuneration
In our opinion, the part of the Directors' Remuneration Report to be audited has been properly prepared in accordance with the Companies Act 2006. *(CA06)*

Responsibilities for the financial statements and the audit

Responsibilities of the Directors for the financial statements

As explained more fully in the Statement of Directors' Responsibilities set out on page 13, the Directors are responsible for the preparation of the financial statements in accordance with the applicable framework and for being satisfied that they give a true and fair view. The Directors are also responsible for such internal control as they determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

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

Auditors' responsibilities for the audit of the financial statements

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

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

Use of this report

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

Independent Auditors'
Report to the Members of Microgen plc

Other required reporting

Companies Act 2006 exception reporting

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

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

We have no exceptions to report arising from this responsibility.

Appointment

Following the recommendation of the audit committee, we were appointed by the members on 21 March 1996 to audit the financial statements for the year ended 31 October 1996 and subsequent financial periods. The period of total uninterrupted engagement is 23 years, covering the years ended 31 October 1996 to 31 December 2018.

Sam Taylor (Senior Statutory Auditor)
for and on behalf of PricewaterhouseCoopers LLP
Chartered Accountants and Statutory Auditors
Reading

22 March 2019

Consolidated

Income Statement *for the year ended 31 December 2018*

	Note	Year ended 31 Dec 2018 Before non-underlying items	Non-underlying items	Total	Year ended 31 Dec 2017 Restated* Before non-underlying items	Non-underlying items	Total
		£000	£000	**£000**	£000	£000	**£000**
Revenue	1, 2	70,286	–	**70,286**	63,021	–	63,021
Operating costs	1, 3	(54,547)	(2,201)	**(56,748)**	(48,518)	(2,541)	(51,059)
Gain on disposal of subsidiary	28	–	3,237	**3,237**	–	–	–
Operating profit	3	15,739	1,036	**16,775**	14,503	(2,541)	11,962
Finance income	5	47	–	**47**	13	–	13
Finance costs	5	(480)	–	**(480)**	(472)	–	(472)
Net finance costs		(433)	–	**(433)**	(459)	–	(459)
Profit before income tax		15,306	1,036	**16,342**	14,044	(2,541)	11,503
Income tax expense	6	(3,070)	521	**(2,549)**	(2,447)	1,447	(1,000)
Profit for the year		12,236	1,557	**13,793**	11,597	(1,094)	10,503
Earnings per share							
Basic	7			**22.6p**			17.3p
Diluted	7			**21.5p**			16.5p

* See note 33 for details regarding the restatement of the prior year financial statements which has arisen as a result of a change in the Group's accounting policies.

The accounting policies and notes on pages 73 to 136 are an integral part of these consolidated financial statements.

Consolidated Statement

Of Comprehensive Income *for the year ended 31 December 2018*

	Note	Group Year ended 31 Dec 2018	Group Year ended 31 Dec 2017 Restated*
		£000	£000
Profit for the year		**13,793**	10,503
Other comprehensive (expense)/income			
Items that will or may be reclassified to profit or loss:			
Fair value (loss)/gain on hedged financial instruments	24	**(14)**	148
Currency translation difference		**(370)**	(40)
Other comprehensive (expense)/income for the year, net of tax		**(384)**	108
Total comprehensive income for the year		**13,409**	10,611

* See note 33 for details regarding the restatement of the prior year financial statements which has arisen as a result of a change in the Group's accounting policies.

The accounting policies and notes on pages 73 to 136 are an integral part of these consolidated financial statements.

Balance

Sheets *as at 31 December 2018*

	Note	Group As at 31 Dec 2018 £000	Group As at 31 Dec 2017 Restated* £000	Company As at 31 Dec 2018 £000	Company As at 31 Dec 2017 £000
ASSETS					
Non-current assets					
Property, plant and equipment	11	**5,417**	5,543	**206**	283
Goodwill	9	**48,793**	52,801	**–**	–
Intangible assets	10	**14,186**	16,124	**–**	–
Investments in subsidiaries	12	**–**	–	**44,194**	50,143
Other long-term assets	13	**1,581**	1,281	**–**	–
Deferred tax assets	14	**1,137**	1,421	**132**	136
		71,114	77,170	**44,532**	50,562
Current assets					
Trade and other receivables	15	**14,675**	13,568	**5,338**	5,685
Financial assets - derivative financial instruments	21	**114**	218	**48**	–
Current income tax assets		**1,535**	733	**2,604**	1,018
Cash and cash equivalents	16	**29,186**	19,137	**23,815**	9,234
		45,510	33,656	**31,805**	15,937
Total assets		**116,624**	110,826	**76,337**	66,499
LIABILITIES					
Current liabilities					
Financial liabilities					
- borrowings	18	**(2,040)**	(2,040)	**(2,040)**	(2,040)
- derivative financial instruments	21	**(12)**	(37)	**–**	(12)
Trade and other payables	17	**(35,484)**	(37,227)	**(4,567)**	(1,918)
Capital lease obligations	19	**(1,109)**	(1,038)	**–**	–
Current income tax liabilities		**(489)**	(381)	**–**	–
		(39,134)	(40,723)	**(6,607)**	(3,970)
Net current assets/(liabilities)		**6,376**	(7,067)	**25,198**	11,967
Non-current liabilities					
Financial liabilities - borrowings	18	**(5,818)**	(7,778)	**(5,818)**	(7,778)
Capital lease obligations	19	**(2,846)**	(3,200)	**–**	–
Provisions	20	**(424)**	(404)	**–**	–
Deferred tax liabilities	14	**(3,582)**	(4,297)	**–**	–
		(12,670)	(15,679)	**(5,818)**	(7,778)
NET ASSETS		**64,820**	54,424	**63,912**	54,751
SHAREHOLDERS' EQUITY					
Share capital	22	**3,958**	3,939	**3,958**	3,939
Share premium account	23	**6,488**	6,449	**6,488**	6,449
Capital redemption reserve		**12,372**	12,372	**12,372**	12,372
Other reserves	24	**34,265**	34,279	**17,404**	17,386
Retained earnings/(accumulated losses)	25	**8,010**	(2,712)	**23,690**	14,605
Foreign currency translation reserve		**(273)**	97	**–**	–
TOTAL EQUITY		**64,820**	54,424	**63,912**	54,751

* See note 33 for details regarding the restatement of the prior year financial statements which has arisen as a result of a change in the Group's accounting policies.

The accounting policies and notes on pages 73 to 136 are an integral part of these consolidated financial statements.

The financial statements on pages 67 to 136 were authorised for issue by the Board of Directors on 22 March 2019 and were signed on its behalf by:

Ivan Martin
Director

Philip Wood
Director

Company Registered Number: 1602662

Consolidated Statement
Of Changes in Shareholders' Equity

for the year ended 31 December 2018

	Note	Share capital £000	Share premium account £000	Retained earnings/ (accumulated losses) £000	Foreign currency translation reserve £000	Capital redemption reserve £000	Other reserves £000	Total equity £000
		Attributable to owners of the Parent						
Group								
Balance at 1 January 2017		3,811	4,498	(11,552)	137	12,372	34,131	**43,397**
Changes in accounting policies*		–	–	(28)	–	–	–	**(28)**
Restated total equity as at 1 January 2017		**3,811**	**4,498**	**(11,580)**	**137**	**12,372**	**34,131**	**43,369**
Restated profit for the year*		–	–	10,503	–	–	–	**10,503**
Cash flow hedges								
– net fair value gains in the year	24	–	–	–	–	–	148	**148**
Exchange rate adjustments		–	–	–	(40)	–	–	**(40)**
Total comprehensive income for the year		–	–	10,503	(40)	–	148	**10,611**
Shares issued under share option schemes	22-23	102	4	–	–	–	–	**106**
Shares to be issued	22-23	26	1,947	–	–	–	–	**1,973**
Share options - value of employee service	25	–	–	796	–	–	–	**796**
Deferred tax on financial instruments	14	–	–	39	–	–	–	**39**
Deferred tax on share options	14	–	–	383	–	–	–	**383**
Corporation tax on share options	25	–	–	492	–	–	–	**492**
Dividends to equity holders of the Company	8	–	–	(3,345)	–	–	–	**(3,345)**
Total Contributions by and distributions to owners of the Company recognised directly in equity		128	1,951	(1,635)	–	–	–	**444**
Balance at 31 December 2017		**3,939**	**6,449**	**(2,712)**	**97**	**12,372**	**34,279**	**54,424**
Profit for the year		–	–	13,793	–	–	–	**13,793**
Cash flow hedges								
– net fair value losses in the year	24	–	–	–	–	–	(14)	**(14)**
Exchange rate adjustments		–	–	–	(370)	–	–	**(370)**
Total comprehensive income for the year		–	–	13,793	(370)	–	(14)	**13,409**
Shares issued under share option schemes	22-23	19	39	–	–	–	–	**58**
Share options - value of employee service	25	–	–	1,074	–	–	–	**1,074**
Deferred tax on financial instruments	14	–	–	(17)	–	–	–	**(17)**
Deferred tax on share options	14	–	–	(331)	–	–	–	**(331)**
Corporation tax on share options	25	–	–	131	–	–	–	**131**
Dividends to equity holders of the Company	8	–	–	(3,928)	–	–	–	**(3,928)**
Total Contributions by and distributions to owners of the Company recognised directly in equity		19	39	(3,071)	–	–	–	**(3,013)**
Balance at 31 December 2018		**3,958**	**6,488**	**8,010**	**(273)**	**12,372**	**34,265**	**64,820**

* See note 33 for details regarding the restatement of the prior year financial statements which has arisen as a result of a change in the Group's accounting policies.

The accounting policies and notes on pages 73 to 136 are an integral part of these consolidated financial statements.

Company Statement
Of Changes in Shareholders' Equity

for the year ended 31 December 2018

		Attributable to owners of the Company					
		Share Capital	Share premium account	Retained earnings	Capital redemption reserve	Other reserves	**Total equity**
		£000	£000	£000	£000	£000	**£000**
Company							
Balance at 1 January 2017		**3,811**	**4,498**	**6,884**	**12,372**	**17,398**	**44,963**
Profit for the year	25	–	–	10,270	–	–	**10,270**
Cash flow hedges – net fair value losses in the year		–	–	–	–	(12)	**(12)**
Total comprehensive income for the year		–	–	10,270	–	(12)	**10,258**
Shares issued under share option schemes	22–23	102	4	–	–	–	**106**
Shares to be issued	22–23	26	1,947	–	–	–	**1,973**
Share options - value of employee service	25	–	–	796	–	–	**796**
Dividends to equity holders of the Company	8	–	–	(3,345)	–	–	**(3,345)**
Total Contributions by and distributions to owners of the Company recognised directly in equity		128	1,951	(2,549)	–	–	**(470)**
Balance at 31 December 2017		**3,939**	**6,449**	**14,605**	**12,372**	**17,386**	**54,751**
Profit for the year	25	–	–	11,949	–	–	**11,949**
Cash flow hedges – net fair value gains in the year	24	–	–	–	–	18	**18**
Total comprehensive income for the year		–	–	11,949	–	18	**11,967**
Shares issued under share option schemes	22–23	19	39	–	–	–	**58**
Share options - value of employee service	25	–	–	1,074	–	–	**1,074**
Deferred tax on financial instruments	14	–	–	9	–	–	**9**
Deferred tax on share options	14	–	–	(7)	–	–	**(7)**
Corporation tax on share options	25	–	–	(12)	–	–	**(12)**
Dividends to equity holders of the Company	8	–	–	(3,928)	–	–	**(3,928)**
Total Contributions by and distributions to owners of the Company recognised directly in equity		19	39	(2,864)	–	–	**(2,806)**
Balance at 31 December 2018		**3,958**	**6,488**	**23,690**	**12,372**	**17,404**	**63,912**

The accounting policies and notes on pages 73 to 136 are an integral part of these consolidated financial statements.

Statements
Of Cash Flow

for the year ended 31 December 2018

	Note	Group Year ended 31 Dec 2018 £000	Group Year ended 31 Dec 2017 Restated* £000	Company Year ended 31 Dec 2018 £000	Company Year ended 31 Dec 2017 £000
Cash flows from operating activities					
Cash generated from operations	26	**15,042**	15,193	**5,894**	7,103
Interest paid		**(440)**	(472)	**(227)**	(135)
Income tax paid		**(3,068)**	(2,525)	**(1,500)**	(1,000)
Net cash flows generated from operating activities		**11,534**	12,196	**4,167**	5,968
Cash flows from investing activities					
Dividends received		**–**	–	**13,852**	12,500
Purchase of property, plant and equipment, excluding right-of-use assets		**(985)**	(1,180)	**(53)**	(337)
Purchase of share capital in subsidiaries	12	**–**	–	**–**	(16,000)
Disposal of subsidiary, net of cash disposed	28	**6,770**	–	**–**	–
Acquisition of subsidiaries, net of cash acquired		**–**	(10,460)	**–**	–
Interest received		**47**	13	**5**	5
Net cash generated from/(used in) investing activities		**5,832**	(11,627)	**13,804**	(3,832)
Cash flows from financing activities					
Net proceeds from issuance of ordinary shares		**58**	106	**58**	106
Dividends paid to Company's shareholders	8	**(3,928)**	(3,345)	**(3,928)**	(3,345)
Repayments of loan		**(2,000)**	(12,250)	**(2,000)**	(2,000)
Repayment of capital lease obligations		**(1,314)**	(895)	**–**	–
Repayment of debt and debt like items acquired on acquisition		**–**	(591)	**–**	–
Drawdown of loan		**–**	11,818	**–**	11,818
Amounts borrowed from/(lent to) Group undertakings		**–**	–	**2,480**	(9,544)
Net cash used in financing activities		**(7,184)**	(5,157)	**(3,390)**	(2,965)
Net increase/(decrease) in cash and cash equivalents		**10,182**	(4,588)	**14,581**	(829)
Cash, cash equivalents and bank overdrafts at beginning of year	16	**19,137**	23,849	**9,234**	10,063
Exchange rate losses on cash and cash equivalents		**(133)**	(124)	**–**	–
Cash and cash equivalents at end of year	16	**29,186**	19,137	**23,815**	9,234

* See notes 27 and 33 for details regarding the restatement of the prior year financial statements which has arisen as a result of the reclassification of debt and debt like items on acquisition and a change in the Group's accounting policies.

The accounting policies and notes on pages 73 to 136 are an integral part of these consolidated financial statements.

ACCOUNTING POLICIES

General Information

The Company is a public company limited by shares and incorporated and domiciled in England and Wales.

The Group consolidated financial statements were authorised for issue by the Board of Directors on 22 March 2019.

Summary of significant accounting policies

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

Basis of preparation

The consolidated financial statements of Microgen plc have been prepared in accordance with International Financial Reporting Standards ("IFRS") as adopted by the European Union (IFRSs as adopted by the EU) and IFRS Interpretations Committee (formerly IFRIC) interpretations and the Companies Act 2006 applicable to companies reporting under IFRS. The consolidated financial statements have been prepared under the historical cost basis, as modified by the revaluation of financial assets and financial liabilities (including derivatives) which are recognised at fair value.

The presentation of financial statements in conformity with IFRS requires the use of certain critical accounting estimates. It also requires management to exercise its judgement in the process of applying the Group's accounting policies. The areas involving a higher degree of judgement or complexity, or where assumptions and estimates are significant to the consolidated financial statements are disclosed on page 90.

Going Concern

The Directors have a reasonable expectation that the Group has adequate resources to continue in operational existence for the foreseeable future. The Directors have prepared forecasts which show that the Group will have sufficient cash to operate within their existing bank facilities and to allow them to meet their operating liabilities as and when they fall due for a period of at least 12 months from the date of approval of these financial statements. The Group therefore continues to adopt the going concern basis in preparing its consolidated financial statements.

Changes in Accounting policy and disclosures

(a) New standards, interpretations and amendments effective from 1 January 2018

A number of new or amended standards became applicable for the current reporting period and the Group had to change its accounting policies and make retrospective adjustments as a result of adopting the following standards:

- IFRS 9 '*Financial instruments*', and
- IFRS 15 '*Revenue from Contracts with Customers*'

The impact of the adoption of these standards and the new accounting policies are disclosed in note 33.

No other new standards, interpretations and amendments which are effective for periods beginning 1 January 2018 had any impact on the Group's accounting policies and disclosures.

(b) New standards, interpretations and amendments that have been early adopted

IFRS 16 '*Leasing*' replaces IAS 17 and is mandatory for annual reporting periods beginning on or after 1 January 2019. The Group has taken the decision to early adopt with an effective date from 1 January 2018 and make retrospective adjustments. The impact of this early application and the new accounting policy is disclosed in note 33.

(c) New standards and interpretations that have not been early adopted.

None of the other new standards, amendments and interpretations, which are effective for periods beginning after 1 January 2018 and which have not been adopted early, are expected to have a significant effect on the consolidated financial statements of the Group.

Basis of consolidation

The financial statements of the Group comprise the financial statements of the Company, Microgen plc and its subsidiary undertakings ("subsidiaries") prepared at the consolidated statement of financial position date.

Subsidiaries are entities controlled by the Group. The Group has control over an entity where the Group is exposed to, or has rights to, variable returns from its involvement within the entity and it has the power over the entity to effect those returns. The existence and effect of potential voting rights that are currently exercisable or convertible are considered when assessing control. The Group also assesses existence of control where it does not have more than 50% of the voting power but is able to govern the financial and operating policies by virtue of de-facto control. De-Facto control may arise in circumstances where the size and dispersion of holdings of other shareholders give the Group the power to govern the financial and operating activities. The results of subsidiaries are consolidated from the date on which control passes to the Group. Results of disposed subsidiaries are consolidated up to the date on which control passes from the Group.

The purchase method of accounting is used to account for the acquisition of subsidiaries by the Group. The cost of an acquisition is measured as the fair value of the assets given, equity instruments issued and liabilities incurred or assumed at the date of exchange, plus costs directly attributable to the acquisition. Identifiable assets and liabilities and contingent liabilities assumed in a business combination are measured initially at their fair values at acquisition date, irrespective of the extent of any minority interest. The excess of cost of acquisition over the fair value of the Group's share of the identifiable net assets is recorded as goodwill.

Intercompany balances, income and expenses on transactions between Group companies and profits and losses resulting from intercompany transactions that are recognised in assets are all eliminated. Accounting policies of the subsidiaries have been changed where necessary to ensure consistency with the policies adopted by the Group.

Revenue recognition

Revenue compromises the fair value of the consideration received or receivable for the sale of goods and services in the ordinary course of the Group's activities. Revenue is shown net of value–added tax, returns, rebates and discounts and after eliminating sales within the Group.

The Group's two operating businesses derive their revenues from some or all of the following categories of revenue:

– software based activity relating to the Group's intellectual property (comprising software licences, maintenance, support, funded development and related consultancy);

– managed services (comprising principally of application management services); and

– general consultancy services.

The Group recognises revenue from each of these categories as follows:–

<u>Software based activity</u>

Software licences

The Group licences its software on an Annual Licence Fee, Initial Licence Fee or Perpetual Licence Fee basis.

The Group assesses whether ongoing contractual obligations represent a performance obligation that is distinct from the licence. If not distinct the combined performance obligation is recognised over time. If the licence is distinct it is recognised separately from the other performance obligations at the time of the delivery of the licenced software.

In assessing whether a licence is distinct the Group considers the continuing requirement to:–

- optimise functionality;
- optimise performance; and
- provide enhancements to ensure user regulatory compliance.

If there is a combined performance obligation then the Group will determine for each contract the period over which significant modification and optimisation of software is required, or whether the requirement is on–going during the expected duration of the contract.

In determining the most appropriate method of recognising revenue over time, the Group has concluded that for Aptitude Software products the combined performance obligation will be recognised in line with development activity related to the relevant product over the period in which the enhancements are required by the particular user.

The transfer of the combined performance obligation is considered complete once this period of intense functionality enhancement activity has concluded at which point it diminishes to a consistent level of ongoing maintenance obligation. Where this is delivered through Annual Licence Fees, the amount will be recognised on a straight-line basis in the period covered by the invoice.

For Microgen 5Series, the leading product of Microgen Financial Systems, there is a continuing requirement to provide enhancements to ensure regulatory compliance and consequently the Annual Licence Fee received from customers will be recognised on a straight-line basis in the period covered by the invoice.

For all other Microgen Financial Systems products, the Annual Licence Fees are recognised on a straight-line basis in the period covered by the invoice. This is due to the substance of the contract taking the form of a consistent level of ongoing maintenance being provided.

Software Maintenance
Fees relating to the maintenance of the Group’s software are recognised depending on the Group’s assessment of whether this ongoing contractual maintenance represents a performance obligation that is distinct from the licence. If the licence is distinct, software maintenance fees are recognised in the period the services are provided, using a straight-line basis over the term of the maintenance agreement.

If, however, the licence is not distinct, the software maintenance fees form a combined performance obligation which is recognised over time in line with the development activity related to the relevant product over the period in which the enhancements are required by the particular user.

The transfer of the combined performance obligation is considered complete once this period of intense functionality enhancement activity has concluded at which point it diminishes to a consistent level of ongoing maintenance obligation. Where this is delivered through annual maintenance charges, the amount will be recognised on a straight line basis across the period the services are provided.

Software subscription fees
Software subscription fees relating to the Group’s Software-as-a-service offering are recognised in the same manner as Annual Licence Fees in which the Group assesses whether ongoing contractual obligations represent a performance

obligation that is distinct from the licence. If not distinct the subscription fees are recognised over time. If the licence is distinct it is recognised separately from the other performance obligations at the time of the delivery of the licenced software.

The Group determines for each contract the period over which significant modification and optimisation of software is required with the most appropriate method being to recognise revenue in line with development activity related to the relevant product over the period in which the enhancements are required by the particular user. This period is considered complete once the activity reduces to a consistent level of ongoing maintenance at which point it is recognised on a straight-line basis in the period covered by the invoice.

Support fees
Support fees are billed to customers where the Group's software is used by a customer as part of an IT solution and that customer contracts with the Group for support relating to that IT solution. The customer will commit to a minimum monthly, quarterly or annual fee that covers an agreed level of support and then agrees additional fees for support used over and above the minimum commitment. Revenue from support contracts are recognised as the fees are earned.

Funded development
Where customers wish to accelerate the product development the Group may undertake funded development work. Revenue for funded development work is recognised on a percentage completed basis after deferring a proportion of the revenue to cover the resolution of any issues arising after the enhancement has been delivered to the customer. The percentage completed is determined with reference to effort required to complete the development. Once the enhancement has been accepted by the customer the deferred portion of the revenue is recognised.

Product specific consultancy
Consultancy services which relate to a project which includes the Group's software is contracted for on either a time and materials basis or fixed priced basis. Time and materials consultancy is recognised in the period it is performed in. Fixed price or share risk work is recognised on a percentage completion basis of the remaining unbilled milestones. The percentage completed is determined with reference to effort incurred to date and effort required to complete the development or consultancy.

Managed Services
Where the Group provides application management services to a customer for a third party software product or solution revenue from these services are recognised as the services are performed.

General Consultancy
The majority of general consultancy services are contracted for on a time and materials basis, with revenue and costs recognised as incurred. Revenue and costs on fixed price and shared risk contracts are recognised on a percentage completion basis after deferring a proportion of the overall revenue until the end of the relevant stage of the project.

Commissions
Software sales commission costs meet the definition under IFRS 15 of incremental costs of obtaining a contract. As a result, an asset is recognised at inception of the contract for the total value of commissions payable which will typically be amortised across the contract life of each customer.

Segmental reporting
Operating segments are reported in a manner consistent with the internal reporting provided to key decision makers. These decision makers are responsible for allocating resources and assessing performance of the operating segments.

The primary segmental reporting is by operating business being Aptitude Software and Microgen Financial Systems. The chief operational decision makers for the two businesses are Tom Crawford (Aptitude Software) and Philip Wood (Microgen Financial Systems).

The operating businesses are allocated central function costs in arriving at operating profit. Group overhead costs are not allocated into the operating businesses as the Board believes that these relate to Group activities as opposed to the operating businesses, these costs are detailed as "Group" costs in Note 1.

Non–underlying items.
Non–underlying items are material items of income or expense which are disclosed and described separately in the accounts where it is necessary to do so in order to provide a better understanding of the financial performance of the Group. These items include the gain or loss on disposal of a Group subsidiary, post acquisition restructuring costs, the amortisation of acquired intangibles, the impact of share based payments and fees in relation to replacement credit facilities.

Property, plant and equipment
Property, plant and equipment is shown at historic purchase cost less accumulated depreciation and adjusted for any impairment. Right-of-use assets are depreciated over the shorter of the lease term and their useful lives unless it is reasonably certain that the Group will obtain ownership by the end of the lease term, full details of the initial recognition and ongoing measurement of these assets is provided within the leasing policy note on page 81. Land is not depreciated. Costs include expenditure that is directly attributable to the acquisition of the items.

Depreciation is provided on assets so as to write off the cost of property, plant and equipment less their residual value over their estimated useful economic lives by equal annual instalments at the following rates.

Leasehold improvements	10 – 20 per cent (or the life of the lease if shorter)
Plant and machinery	20 – 50 per cent
Fixtures and fittings	20 per cent

Estimation of the useful economic life includes an assessment of the expected rate of technological developments and the intensity at which the assets are expected to be used.

The assets' residual values and useful economic lives are reviewed, and adjusted if appropriate, at each balance sheet date.

Goodwill
Goodwill arising on consolidation represents the excess of the fair value of the consideration given over the fair value of the identifiable net assets acquired. Goodwill is capitalised on the balance sheet and subject to an annual impairment test. The carrying value of goodwill is cost less accumulated impairment. Goodwill is allocated to cash generating units for the purpose of impairment testing. The allocation is made to those cash generating units that are expected to benefit from the business combinations in which the goodwill arose. Impairment reviews are carried out by the Board at least annually. Impairments to goodwill are charged to the income statement in the period in which they arise.

Disposal of subsidiary
When a change in the Company's ownership interest in a subsidiary results in a loss of control over the subsidiary, the assets and liabilities of the subsidiary including any goodwill are derecognised from this date. The amount of goodwill apportioned to the disposal is calculated based on the level of profits achieved over a set period prior to the date of sale compared with the profits generated within the cash generating unit to which the disposed entity is allocated. The

difference between the consideration received, net of directly attributable costs incurred and the carrying value of net assets or liabilities derecognised on the date of disposal is taken to the income statement.

Intangible assets

Research and Development ("R&D")

Research expenditure is expensed to the income statement as incurred. Costs incurred on internal development projects relating to new or substantially improved products are recognised as intangible assets from the date upon which all IAS 38 criteria have been satisfied.

In assessing the IAS 38 criteria it is considered that because of the challenges presented by the complexity of underlying software development issues and the competitive nature of the markets in which we operate, the technical feasibility and future probability of development has only been satisfied once the product is deployed into a live customer environment therefore all research and development costs have been expensed when incurred.

Externally acquired software intellectual property rights

Rights in externally acquired software assets are capitalised at cost and amortised over their estimated useful economic life. Useful economic life is assessed on an individual basis.

Software IPR and In process R&D

Software IPR and In process R&D is recognised only on acquisition. The fair value is derived based on time spent on the project by the Group at an average daily cost rate. The carrying value is stated at fair value at acquisition less accumulated amortisation and impairment losses. The useful economic life is assessed on an individual basis. Amortisation is charged on a straight line basis over the estimated useful economic life of the assets.

Customer relationships

Customer relationships are recognised only on acquisition. The fair value is derived based on discounted cash flows from estimated recurring revenue streams. The carrying value is stated at fair value at acquisition less accumulated amortisation and impairment losses. The useful economic life is assessed on an individual basis. Amortisation is charged on a straight line basis over the estimated economic useful life of the assets.

Interest income and expense

Interest is recognised using the effective interest method.

Impairment of non–financial assets

Assets that have an indefinite useful economic life are not subject to amortisation and are tested annually for impairment and whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. Assets that are subject to amortisation are tested for impairment whenever events or changes in circumstances indicate that the carrying value may not be recoverable. An impairment loss is recognised for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs to sell and value in use. For the purposes of assessing impairment, assets are grouped at the lowest levels for which there are separately identifiable cash flows. Non–financial assets other than goodwill that suffered an impairment are reviewed for possible reversal of the impairment at each reporting date. Any impairment of goodwill is not reversed.

Investments

Investments in subsidiaries are stated in the financial statements of the Company at cost less any provision for impairment.

Cash and cash equivalents

Cash is defined as cash in hand and on demand deposits. Cash equivalents are defined as short term, highly liquid investments with original maturities of three months or less.

Share–based payments

The Group operates share–based compensation plans that are equity settled. The fair value of the employee services received in exchange for the grant of the options is recognised as an expense in the Group income statement over the vesting period with a corresponding adjustment to equity. The expense in relation to options granted on 18 November 2013 (details can be found on page 97) is shown within non–underlying items. The expense for options granted between 2015 and 2018 are included within operating costs. The charge taken to the Company income statement reflects only those options granted to employees of the Company with the remainder granted to employees employed under subsidiary companies. These options are treated in a similar manner to capital contributions with an addition to investments.

The total amount to be expensed over the vesting period is determined by reference to the fair value of the options granted, excluding the impact of any non–market vesting conditions.

Non–market vesting conditions are included in assumptions about the number of options that are expected to become exercisable. At each balance sheet date, the entity revises its estimates of the number of options that are expected to become exercisable. It recognises the impact of the revision of original estimates, if any, in the income statement, with a corresponding adjustment to equity.

The proceeds received net of any directly attributable transaction costs are credited to share capital (nominal value) and share premium when the options are exercised.

Where the options granted have market based vesting conditions attached, the Group utilises the Monte Carlo pricing model. For all other option grants the Black Scholes pricing model is applied.

Foreign currency

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

Foreign transactions are translated into the functional currency at the exchange rate ruling when the transaction is entered into. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at year–end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognised in the income statement.

On consolidation, the balance sheet of each overseas subsidiary is translated at the closing rate at the date of the balance sheet, and the income and expenses for each income statement are translated at the average exchange rate for the period subject to revenue from overseas subsidiaries quarterly, half yearly or annual invoices for Annual Licence Fees or Maintenance being recognised at the exchange rate at the point of invoicing. Exchange gains and losses arising thereon are recognised as a separate component of equity. The main overseas balance sheets requiring translation are denominated in US Dollar, Euro, Polish Zloty and Canadian Dollar.

Exchange differences arising from the translation of the net investment in foreign subsidiaries are taken to shareholders' equity on consolidation. When a foreign operation is sold, such exchange differences are recognised in the income statement as part of the gain or loss on sale.

Pensions

The Group operates defined contribution retirement benefit plans in respect of its UK employees and for employees in certain overseas territories. Employee and employer contributions are based on basic earnings for the current year. The schemes are funded by payments to trustee–administered funds completely independent of the Group's finances. The expense is recognised on a monthly basis as accrued. The Group has no further payment obligations once the contributions have been paid.

Current and deferred income tax

The charge for current tax is based on the results for the year as adjusted for items which are non–assessable or disallowed. It is calculated using tax rates that have been enacted or substantively enacted by the balance sheet date.

Deferred income tax is provided in full, using the liability method, on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the consolidated financial statements. However, the deferred income tax is not accounted for, if it arises from initial recognition of an asset or liability in a transaction other than a business combination that at the time of the transaction affects neither accounting nor taxable profit and loss.

Deferred income tax is determined using tax rates (and laws) that have been enacted or substantially enacted by the balance sheet date and are expected to apply when the related deferred income tax asset is realised or the deferred income tax liability is settled.

Deferred tax assets are recognised to the extent that it is probable that future taxable profit will be available against which the temporary differences can be utilised.

Deferred income tax is provided on temporary differences arising on investments in subsidiaries and associates, except where the timing of the reversal of the temporary difference is controlled by the Group and it is probable that the temporary difference will not reverse in the foreseeable future.

Trade and other receivables

Trade and other receivables are recognised initially at fair value and to the extent that it is deemed necessary are subsequently measured at amortised cost using the effective interest method, less provision for impairment. The Group assesses impairment on a forward–looking basis using the expected credit loss method and has applied the simplified approach which permits the use of the lifetime expected loss provision for all trade and other receivables.

The amount of any provision is recognised in the income statement within other operating costs.

Trade payables

Trade payables are recognised initially at fair value and subsequently measured at amortised cost using the effective interest method.

Leasing

At inception of a contract, the Group assesses whether a contract is, or contains a lease. A contract is, or contains a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. To assess whether a contract conveys the right to control the use of an identified asset, the Group assesses whether:

- The contract involved the use of an identified asset – this may be specified explicitly or implicitly and should be physically distinct or represent substantially all of the capacity of a physically distinct asset. If the supplier has a substantive substitution right, then the asset is not identified

- The Group has the right to obtain substantially all of the economic benefits from use of the asset throughout the period of use; and

- The Group has the right to direct the use of the asset. The Group has this right when it has the decision–making rights that are most relevant to changing how and for what purposes the asset is used. In rare cases where all the decisions about how and for what purpose the asset is used are predetermined, the Group has the right to direct the use of the asset if either:

  – The Group has the right to operate the asset; or

  – The Group designed the asset in a way that predetermines how and for what purpose it will be used.

The Group has applied this approach on a fully retrospective basis to any contracts entered into.

On lease commencement date, the Group recognises a right–of–use asset and a lease liability. The right–of–use asset is initially measured at cost, which comprises the initial amount of the lease liability adjusted for any lease payments made at or before the commencement date, plus any initial direct costs incurred and an estimate of costs to dismantle, less any lease incentives received.

The right–of–use asset is subsequently depreciated using the straight–line method from the commencement date to the earlier of the end of the useful life of the right–of–use asset or the end of the lease term. The estimated useful lives of the right–of–use asset is periodically reduced by impairment losses, if any, and adjusted for certain re–measurements of the lease liability.

The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date, discounted using the interest rate implicit in the lease or, if that rate cannot be readily determined, the Group's incremental borrowing rate adjusted for lease specific and asset specific terms where required. Generally, the Group uses its incremental borrowing rate as the discount rate adjusted for lease specific and asset specific terms where required.

Lease payments included in the measurement of the lease liability comprise:

– Fixed payments, including in–substance fixed payments;

– Variable lease payments that depend on an index or a rate, initially measured using the index or rate as at the commencement date; and

– Lease payments in an option renewal period if the Group is reasonably certain to exercise an extension option, and penalties for early termination of a lease unless the Group is reasonably certain not to terminate early.

The lease liability is measured at amortised cost using the effective interest method. It is remeasured when there is a change in future lease payments arising from a change in an index or rate, or if the Group changes its assessment of whether it will exercise an extension or termination option.

Where the Group leases properties with no defined lease term, management have made an estimate of the remaining lease term on commencement date based on their view of the business needs. The lease liability is then remeasured if circumstances arise which change management's perception of the remaining lease term and subsequent future lease payments.

If the contract includes options to break or terminate the lease which are at the right of the lessor, the Group measures the lease term based on the expectation that these will lapse unless it has been made aware at the time of adoption. If subsequently the lessor decides to exercise any of these options, the lease liability is then remeasured due to the change in future lease payments.

When the lease liability is remeasured in the above circumstances, a corresponding adjustment is made to the carrying value of the right–of–use asset, or is recorded in the profit or loss if the carrying value of the right–of–use asset has been reduced to zero.

Where the Group has a legal obligation for future expenditure in relation to onerous lease properties which are either vacant or being sublet, the right-of-use asset is adjusted by the present value of management's best estimate of the expenditure required to settle the present obligation. The discount rate used to determine the present value reflects current market assessments of the time value of money and the risks specific to the lease agreement.

The Group presents right–of–use assets within "property, plant and equipment" and lease liabilities in "capital lease obligations".

Short term lease and leases of low–value assets
The Group has elected to take the exemption not to recognise right–of–use assets and lease liabilities for short–term lease of machinery that have a lease term of 12 months or less and leases of low–value assets. The Group defines leases of low-value assets as being any lease agreement where the total value of payments made across the lease term is less than £5,000. The Group recognises the lease payments associated with these leases as an expense on a straight–line basis over the lease.

Share capital
Ordinary shares are classified as equity. Incremental costs directly attributable to the issue of new ordinary shares or options are shown in equity as a deduction, net of tax, from the proceeds.

Provisions
Provisions are created on the Group's leased properties where it has a legal obligation to return them to their fair condition at the end of their respective lease terms. The provision is measured at the present value of management's best estimate of the future expected repair costs required at the balance sheet date. The discount rate used to determine the present value reflects the current market assessments of the time value of money and the risks specific to the liability.

Borrowings
Borrowings are recognised initially at fair value, net of transaction costs incurred. Borrowings are subsequently carried at amortised cost; any difference between the proceeds (net of transaction costs) and the redemption value is recognised in the income statement over the period of the borrowings using the effective rate.

Dividend distribution
Dividend distribution to the Company's shareholders is recognised as a liability in the Group's financial statements in the period in which the dividends are approved by the Company's shareholders or in respect of interim dividends when they are paid.

Dividend income
Dividend income to the Company received from subsidiary investments is recognised in the Company income statement in the period in which it is paid.

Derivative financial instruments and hedging activities
The Group holds derivative financial instruments to hedge its foreign currency and interest rate risk exposure.

Derivatives are initially recognised and measured at fair value on the date a derivative contract is entered into and subsequently measured at fair value. The gain or loss on re–measurement is taken to the income statement except where the derivative is a designated hedging instrument. The accounting treatment of derivatives classified as hedges depends on their designation, which occurs on the date that the derivative contract is committed to. At the year-end the Group has designated its derivatives as a hedge of the cost of a highly probable forecasted transaction commitment ('cash flow hedge'). Gains or losses on cash flow hedges that are regarded as highly effective are recognised in equity. If the forecasted transaction or commitment results in future income or expenditure, gains or losses deferred in equity are transferred to the income statement in the same period as the underlying income or expenditure.

For the portion of hedges deemed ineffective or transactions that do not qualify for hedge accounting under IFRS 9, any change in assets or liabilities is recognised immediately in the income statement. When a hedging instrument expires or is sold, any cumulative gain or loss existing in equity at that time remains in equity and is recognised when the forecasted transaction is ultimately recognised in the income statement.

FINANCIAL RISK MANAGEMENT
The Group's trading, multi–national operations and debt financing expose it to financial risks that include the effects of changes in foreign currency exchange rates, credit risk, liquidity and interest rates.

The Group manages these risks so as to limit any adverse effects on the financial performance of the Group.

(a) Market risk – Foreign exchange
The Group's major foreign exchange exposures are to the Euro, Polish Zloty, South African Rand, US Dollar, Canadian Dollar and Singapore Dollar. Group policy in this area is to eliminate foreign currency cash flows between Group companies once the size and timing of transactions can be predicted with sufficient certainty. Since April 2007 this has been achieved by hedging Polish Zloty cash outflows 12 months in advance by using forward foreign currency contracts. These have the effect of fixing the sterling amount of Polish Zlotys to be paid in the future. The average remaining life of the forward exchange contracts at 31 December 2018 was 5 months (2017: 6 months).

In addition, forward foreign currency contracts were also put in place from March 2017 to hedge a proportion of the Group's forecasted US dollar denominated service related revenue less US dollar denominated cost over the next 12 months. These have the effect of fixing the sterling amount of US dollars to be received in the future from US dollar denominated service revenue less US dollar denominated costs. The average remaining life of the forward contracts at 31 December 2018 was 4 months (2017: 5 months).

Given the above policy, the table below approximates the impact on the Group's profit before tax of a 5% exchange rate movement (strengthening of sterling against the specified currency) of the Group's major non sterling trading currencies during the year.

	2018 £000	2017 Restated* £000
Polish Zloty	**18**	47
South African Rand	**(41)**	(48)
US Dollar	**(82)**	(124)
Euro	**(16)**	(8)
Canadian Dollar	**(4)**	2
Singapore Dollar	**46**	8
	(79)	(123)

* See note 33 for details regarding the restatement of the prior year financial statements which has arisen as a result of a change in the Group's accounting policies.

For a 5% weakening of sterling against the relevant currency, there would be a comparable but opposite impact on the profit.

(b) Market risk – Interest rate

The Group's major interest rate exposures arise from both interest payable on borrowings and interest earned on its cash balances.

In respect of interest payable on borrowings, it is the Group's policy to enter into an interest rate swap so that there is no change in interest payable pursuant to changes in interest rates. The fixed interest rate payable on the Group's credit facility is 2.46%.

The Group's policy on interest earned from its cash balances is to maximise the return (subject to the constraints imposed by the need to limit credit and liquidity risk as detailed below).

Given the above policies the table below approximates the impact on the Group's profit before tax of an increase of 100 basis points in interest rates during the year.

	2018 £000	2017 £000
Increase in interest receivable on cash balances	**182**	167

For a decrease of 100 basis points in interest rates, there would be a comparable but opposite impact on profit.

(c) Credit risk

The Group's major credit risk exposures arise from its cash and trade receivable balances. The Group's policies in this area are:

– in respect of cash balances to ensure that deposits are always held across at least 2 financial institutions; and

– in respect of trade receivables, the client or prospective client's credit risk is assessed at the commencement of any new project with payment terms agreed which are appropriate. Regular receivable reports are provided to senior management and in addition credit insurance is maintained as appropriate for a number of trade receivable balances.

The table below shows the credit rating and balance of the six major counterparties at the balance sheet date:

Counterparty	Current Rating (Moody's)	31 December 2018 Balance £000	31 December 2017 Balance £000
Bank A	**Baa2**	**10,741**	10,619
Bank B	**Aa2**	**9,801**	3,504
Bank C	**Baa3**	**4,340**	1,020
		24,882	15,143
Customer A	**Ba2**	**911**	1,094
Customer B	**A1**	**792**	793
Customer C	**Aa2**	**655**	590
		2,358	2,477

The Group applies the IFRS 9 simplified approach to measuring expected credit losses which uses a lifetime expected loss allowance for all trade receivables.

To measure the expected credit losses, trade receivables have been grouped based on shared credit risk characteristics and the days past due.

The expected loss rates are based on the payment profiles of sales over a period of 36 months before 31 December 2018 and the corresponding historical credit losses experienced within this period. The historical loss rates are adjusted to reflect current and forward-looking information on macroeconomic factors affecting the ability of the customers to settle the receivables.

The gross trade receivables amount included within the loss allowance calculation has been adjusted for elements which carry no expected credit loss; these being both the upfront Annual Licence Fees and amounts covered by the Group's credit insurance.

Where the Company holds intercompany loan amounts due from fellow Group subsidiaries, IFRS 9 requires the measurement of expected credit losses. These loans were determined to be stage 1 intercompany loans for the purposes of the IFRS 9 impairment model and consequently a twelve month expected credit loss was calculated.

On that basis, the loss allowance as at 31 December 2018 for the Group and Company was determined as follows:

Group	Not past due £000	Less than one month overdue £000	One to two months overdue £000	Two to three months overdue £000	More than three months overdue £000	2018 Total £000
Expected loss rate	1%	5%	10%	15%	20%	
Net carrying amount – trade receivables**	716	611	152	25	218	**1,722**
Less: specific loss allowance provision	–	–	–	–	(161)	**(161)**
Amounts subject to expected loss allowance rate	716	611	152	25	57	**1,561**
Loss allowance provision						
Expected loss allowance	7	31	15	4	11	**68**
Specific loss allowance	–	–	–	–	161	**161**
Total loss allowance	**7**	**31**	**15**	**4**	**172**	**229**

** Net carrying amount excludes the value of annual licence fees and amounts covered by credit insurance.

Company	2018 £000
Gross carrying amount – intercompany loan receivables	2,057
Expected loss rate	1%
Loss allowance provision	**21**

(d) Liquidity risk

The Group's major liquidity exposures arise from the need to settle its trade, employee and taxation liabilities as they fall due.

Whilst the Group is comfortably able to finance all of these payments out of operating cash flows, policies are in place to further limit exposure to liquidity risk:

- surplus cash is never deposited for maturities of longer than 110 days; and
- uncommitted facilities will be entered into to support any specific expansion opportunities that arise.

Management monitors forecasts of the Group's liquidity reserve on the basis of expected cash flow. The Group's liquidity management policy involves projecting cash flows in major currencies and considering the level of liquid assets necessary to meet these.

The table below analyses the Group and Company's financial liabilities and net–settled derivative financial liabilities into relevant maturity groupings based on the remaining period at the balance sheet to the contractual maturity date. The amounts disclosed in the table are the contractual undiscounted cash flows including interest.

Group **At 31 December 2018**	**Less than 1 year £000**	**Between 1 and 2 years £000**	**Between 2 and 5 years £000**
Borrowings	**2,219**	**4,290**	**2,046**
Capital lease obligations	**1,109**	**2,295**	**551**
Derivative financial instruments	**12**	**–**	**–**
Trade and other payables	**33,522**	**–**	**–**
	36,862	**6,585**	**2,597**

At 31 December 2017 Restated*	**Less than 1 year £000**	**Between 1 and 2 years £000**	**Between 2 and 5 years £000**
Borrowings	2,268	4,389	4,166
Capital lease obligations	1,038	2,503	697
Derivative financial instruments	37	–	–
Trade and other payables	35,424	–	–
	38,767	6,892	4,863

Company **At 31 December 2018**	**Less than 1 year £000**	**Between 1 and 2 years £000**	**Between 2 and 5 years £000**
Borrowings	**2,219**	**4,290**	**2,046**
Trade and other payables	**4,309**	**–**	**–**
	6,528	**4,290**	**2,046**

At 31 December 2017	**Less than 1 year £000**	**Between 1 and 2 years £000**	**Between 2 and 5 years £000**
Borrowings	2,268	4,389	4,166
Trade and other payables	1,880	–	–
	4,148	4,389	4,166

* See note 33 for details regarding the restatement of the prior year financial statements which has arisen as a result of a change in the Group's accounting policies.

The table below analyses the Group's derivative financial instruments which will be settled on a gross basis into the relevant maturity Groups based on the remaining period at the balance sheet to the contractual maturity date. The amounts disclosed in the table are the contractual undiscounted cash flows.

At 31 December 2018	**Less than 1 year £000**	**Between 1 and 2 years £000**	**Between 2 and 5 years £000**
Forward foreign exchange contracts			
– cash flow hedges			
Outflow	**(5,038)**	**–**	**–**
Inflow	**5,026**	**–**	**–**
Interest rate swap			
– cash flow hedges			
Outflow	**(219)**	**(290)**	**(46)**
Inflow	**206**	**276**	**45**
	(25)	**(14)**	**(1)**

At 31 December 2017	**Less than 1 year £000**	**Between 1 and 2 years £000**	**Between 2 and 5 years £000**
Forward foreign exchange contracts			
– cash flow hedges			
Outflow	(5,906)	–	–
Inflow	5,898	–	–
Interest rate swap			
– cash flow hedges			
Outflow	(268)	(389)	(166)
Inflow	234	345	154
	(42)	(44)	(12)

Fair value estimation

Financial instruments not measured at fair value

Financial instruments not measured at fair value includes cash and cash equivalents, trade and other receivables, trade and other payables, and loans and borrowings, however, due to their short term nature and ability to be liquidated at short notice their carrying value approximates their fair value.

Financial instruments measured at fair value

The fair value hierarchy of the financial instruments measures at fair value is provided below.

	Level 2	
	2018 £000	2017 £000
Financial Assets		
Derivative financial assets (designated hedge instruments)	**114**	218
	114	218
Financial Liabilities		
Derivative financial liabilities (designated hedge instruments)	**12**	37
	12	37

The derivative financial assets and liabilities have been valued using the market approach and are considered to be Level 2 inputs. There were no changes to the valuation techniques used in the year. There were no transfers between levels during the year.

Capital risk management

The Group's capital is considered by the Board to be the equity of the Company's shareholders and includes the Group's tangible and intangible fixed assets and cash balances. The Group's objectives when managing capital are to safeguard the Group's ability to continue as a going concern in order to provide returns for shareholders and benefits for other stakeholders and to maintain an optimal capital structure to reduce the cost of capital. In order to maintain or adjust the capital structure, the Group may adjust the amount of dividends paid to shareholders, return capital to shareholders, issue new shares or sell assets to reduce debt.

Microgen plc manage the capital structure based on the economic conditions and the risk characteristics of the Group. The Board reviews the capital structure regularly. No changes were made to our objectives and processes during 2018.

Our general funding policy is to raise long term debt when required to meet the anticipated requirements of the Group.

Microgen plc has a bank loan, details of which are given in note 18. Microgen plc has complied with the externally imposed capital requirements to which it is subject. There are no further capital covenants to which the Group or the Company are subject.

CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS

(a) Recognition of Revenue

The policy for the recognition of Licence Fees is detailed on pages 74 to 75. For recognition of Licence Fees to commence a number of criteria need to be met at which point, in respect of Initial or Perpetual Licence Fees, a deferral of revenue may be required in respect of any unfunded performance obligations which will require estimation. Furthermore for Annual Licence Fees, where the ongoing contractual obligations are not distinct from the licence the Group will determine for each contract the period over which significant modification and optimisation of software is required. Where the Group has concluded that a combined performance obligation will be recognised in line with development activity related to the relevant product, estimation is needed to calculate the period in which the enhancements are required by the particular user. Fixed priced development or consultancy projects also require estimates in respect of the percentage completion of each project.

(b) Impairment of goodwill

Determining whether goodwill is impaired requires an estimation of the value in use of the cash generating units to which goodwill has been allocated. The value in use calculation requires the Group to estimate the future cash flows expected to arise from the cash generating unit and a suitable discount rate in order to calculate present value. The discount rate applied in the value in use calculation approximates to the Group's Weighted Average Cost of Capital.

The Group annually reviews the goodwill valuation based on various scenarios and each of these scenarios have different growth rate assumptions. The growth rate assumptions are in relation to periods covered by Board approved plans.

Impairments recognised during the year are performed against the carrying value of goodwill. The impairment is recognised in the income statements in the period which it is deemed to arise.

(c) Impairment of other intangibles

The Group also assesses annually any indicators that other intangible assets might be impaired. The impairment tests are based on value–in–use calculations on a similar basis to that used in the impairment of Goodwill calculation and is therefore subject to the same estimates by management.

Impairments recognised during the year are performed against the carrying value of other intangible assets. The impairment is recognised in the income statement in the period which it is deemed to arise.

(d) Impairment of investments

The Group has also carried out an impairment review on the value of investments held in the Company. Where the investment is held in a Company which has an ongoing trade, the value is derived by a value in use calculation of the cash generating units. This is done on a similar basis to that used in the impairment of goodwill calculation as detailed above and is therefore subject to the same estimates by management. Where the investment is held in a Company which is no longer trading, the value is derived from the carrying value of the net assets on the balance sheet of that entity.

(e) Taxation

The actual tax the Group pays on its profits is determined according to complex tax laws and regulations. Where the effect of these laws and regulations is unclear, estimates are used in determining the liability for the tax to be paid on past profits which are then recognised in the financial statements. The Group believes the estimates, assumptions and judgements are reasonable but this can involve complex issues which may take a number of years to resolve. The final determination of prior year tax liabilities could be different from the estimates reflected in the financial statements and may result in the recognition of an additional tax expense or tax credit in the income statement.

Deferred tax assets and liabilities require management judgement in determining the amount to be recognised. In particular, judgement is used when assessing the extent to which deferred tax assets should be recognised with consideration given to the timing and level of future taxable income.

1. **Segmental Information**

Business segments

The Board has determined the operating segments based on the reports it receives from management to make strategic decisions.

The segmental analysis is split into the Aptitude Software and Microgen Financial Systems operating businesses.

The principal activity of the Group throughout 2017 and 2018 was the provision of business-critical software and services.

The operating businesses are allocated central function costs in arriving at operating profit/(loss). Group overhead costs are not allocated into the operating businesses as the Board believes that these relate to Group activities as opposed to the operating businesses. Capital expenditure and depreciation detailed within note 1(b) as Group is in respect of assets utilised by both operating businesses and the Group function. Assets and liabilities detailed within note 1(c) as Group are in respect of assets and liabilities held separately from the two operating businesses.

(a) Revenue and operating profit by operating business

Year ended 31 December 2018	Aptitude Software £000	Microgen Financial Systems £000	Group £000	Total £000
Revenue	52,274	18,012	–	**70,286**
Operating costs	(41,873)	(11,048)	–	**(52,921)**
Operating profit before Group overheads	10,401	6,964	–	**17,365**
Unallocated Group overheads			(1,626)	**(1,626)**
Operating profit before non–underlying and other				**15,739**
Non–underlying items	(1,008)	(1,092)	(101)	**(2,201)**
Gain on disposal of subsidiary	–	3,237	–	**3,237**
Operating profit/(loss)	**9,393**	**9,109**	**(1,727)**	**16,775**
Net finance costs				**(433)**
Profit before tax				**16,342**
Income tax expense				**(2,549)**
Profit for the year				**13,793**

Year ended 31 December 2017 Restated*	Aptitude Software £000	Microgen Financial Systems £000	Group £000	Total £000
Revenue	44,721	18,300	–	**63,021**
Operating costs	(36,102)	(10,765)	–	**(46,867)**
Operating profit before Group overheads	8,619	7,535	–	**16,154**
Unallocated Group overheads			(1,651)	**(1,651)**
Operating profit before non–underlying items				**14,503**
Non–underlying items	(829)	(1,398)	(314)	**(2,541)**
Operating profit/(loss)	**7,790**	**6,137**	**(1,965)**	**11,962**
Net finance costs				**(459)**
Profit before tax				**11,503**
Income tax expense				**(1,000)**
Profit for the year				**10,503**

* See note 33 for details regarding the restatement of the prior year financial statements which has arisen as a result of a change in the Group's accounting policies.

1. Segmental Information (continued)

(b) Other information

Year ended 31 December 2018	Aptitude Software £000	Microgen Financial Systems £000	Group £000	Total £000
Capital expenditure				
– property, plant and equipment (note 11)	**778**	**154**	**53**	**985**
Depreciation (note 11)	**(488)**	**(227)**	**(130)**	**(845)**

Year ended 31 December 2017 Restated*	Aptitude Software £000	Microgen Financial Systems £000	Group £000	Total £000
Capital expenditure				
– property, plant and equipment (note 11)	630	248	302	1,180
Depreciation (note 11)	(364)	(238)	(105)	(707)

* See note 33 for details regarding the restatement of the prior year financial statements which has arisen as a result of a change in the Group's accounting policies.

(c) Balance sheet

Year ended 31 December 2018	Aptitude Software £000	Microgen Financial Systems £000	Group £000	Total £000
Consolidated total assets	**53,329**	**36,229**	**27,066**	**116,624**
Consolidated total liabilities	**(30,892)**	**(12,036)**	**(8,876)**	**(51,804)**
	22,437	**24,193**	**18,190**	**64,820**

Year ended 31 December 2017 Restated*	Aptitude Software £000	Microgen Financial Systems £000	Group £000	Total £000
Consolidated total assets	53,494	35,902	21,430	110,826
Consolidated total liabilities	(32,028)	(14,924)	(9,450)	(56,402)
	21,466	20,978	11,980	54,424

* See note 33 for details regarding the restatement of the prior year financial statements which has arisen as a result of a change in the Group's accounting policies.

Capital expenditure comprises additions to property, plant and equipment and intangible assets, excluding right-of-use asset additions resulting from property lease agreements or acquisitions through business combinations.

1. **Segmental Information (continued)**

(d) **Geographical segments**

The Group has two geographical segments for reporting purposes, the United Kingdom and the Rest of the World.

The following table provides an analysis of the Group's sales by origin and by destination.

	Sales revenue by origin		Sales revenue by destination	
	Year ended 31 Dec 2018 £000	Year ended 31 Dec 2017 Restated* £000	**Year ended 31 Dec 2018 £000**	Year ended 31 Dec 2017 Restated* £000
United Kingdom	**36,190**	32,343	**10,188**	11,111
Rest of World	**34,096**	30,678	**60,098**	51,910
	70,286	63,021	**70,286**	63,021

The following is an analysis of the carrying amount of non-current assets (excluding deferred tax assets), and additions to property, plant and equipment and intangible assets (excluding right-of-use asset additions resulting from property lease agreements or acquisitions through business combinations), analysed by the geographical area in which the assets are located.

	Carrying amount of non–current assets		Capital expenditure	
	Year ended 31 Dec 2018 £000	Year ended 31 Dec 2017 Restated* £000	**Year ended 31 Dec 2018 £000**	Year ended 31 Dec 2017 £000
United Kingdom	**40,324**	47,430	**380**	780
Rest of World	**29,653**	28,319	**605**	400
	69,977	75,749	**985**	1,180

* See note 33 for details regarding the restatement of the prior year financial statements which has arisen as a result of a change in the Group's accounting policies.

The reduction in the carrying value of non-current assets located within the UK is principally due to the disposal of Microgen Banking Systems Limited, see note 28 for details.

The Company's business is to invest in its subsidiaries and, therefore, it operates in a single segment.

1. Segmental Information (continued)

(e) Organic Growth in Revenue

Within this report the Group discloses the level of Organic Growth in Revenue it has generated.

This is computed by excluding both the benefit of any acquisitions completed in 2017 along with the impact of the 2018 disposal of the Payments software business, see note 28 for further information.

The following table provides an analysis of how this has been calculated.

Year ended 31 December 2018	**Aptitude Software £000**	**Microgen Financial Systems £000**	**Total £000**
Revenue as presented	**52,274**	**18,012**	**70,286**
Revenue generated from 2017 acquisitions	**(7,484)**	**(873)**	**(8,357)**
Payments software revenue	**–**	**(758)**	**(758)**
	44,790	**16,381**	**61,171**

Year ended 31 December 2017 Restated*	**Aptitude Software £000**	**Microgen Financial Systems £000**	**Total £000**
Revenue as presented	44,721	18,300	63,021
Revenue generated from 2017 acquisitions	(2,980)	(792)	(3,772)
Payments software revenue	–	(1,448)	(1,448)
	41,741	16,060	57,801

* See note 33 for details regarding the restatement of the prior year financial statements which has arisen as a result of a change in the Group's accounting policies.

(f) Ongoing Revenue and Adjusted Operating Profit of Microgen Financial Systems

Within this report the Group discloses the level of Ongoing Revenue and Adjusted Operating Profit generated within the Microgen Financial Systems business.

This has been computed by excluding the contribution from the Payments software business. See note 28 for details.

The tables below provide an analysis of how these have been calculated.

Ongoing Revenue	**Year ending 31 Dec 2018 £000**	**Year ending 31 Dec 2017 £000**
Revenue as presented	**18,012**	18,300
Payments software revenue	**(758)**	(1,448)
	17,254	16,852

Ongoing Adjusted Operating Profit	**Year ending 31 Dec 2018 £000**	**Year ending 31 Dec 2017 £000**
Adjusted Operating Profit as presented	**6,964**	7,535
Payments software adjusted operating profit	**(483)**	(1,047)
	6,481	6,488

2 Revenue from contracts with customers

(a) Analysis of revenue from contracts with customers

The Group derives revenue from the transfer of goods and services in the following major product lines and geographical regions:

	Aptitude Software				Microgen Financial Systems				
	Software related revenue		Services related revenue		Software related revenue		Services related revenue		Total
Year ended 31 Dec 2018	**United Kingdom £000**	**Rest of World £000**	**United Kingdom £000**	**Rest of World £000**	**United Kingdom £000**	**Rest of World £000**	**United Kingdom £000**	**Rest of World £000**	**£000**
Revenue from external customers	**3,573**	**21,241**	**2,464**	**24,996**	**3,454**	**10,197**	**691**	**3,670**	**70,286**

	Aptitude Software				Microgen Financial Systems				
	Software related revenue		Services related revenue		Software related revenue		Services related revenue		Total
Year ended 31 Dec 2017 Restated*	United Kingdom £000	Rest of World £000	United Kingdom £000	Rest of World £000	United Kingdom £000	Rest of World £000	United Kingdom £000	Rest of World £000	£000
Revenue from external customers	3,372	14,735	2,304	24,310	4,122	9,774	908	3,496	63,021

All of the revenue displayed in the above table is recognised over time in line with the Group's accounting policy detailed on pages 74 to 76 and has been generated from contracts with customers.

For software related revenue, the Group receives payment for its licence and maintenance fees annually in advance of the performance obligations being satisfied. Service related revenue is paid as and when either the services have been provided or, in the case of fixed price projects in line with the payment schedule.

* See note 33 for details regarding the restatement of the prior year financial statements which has arisen as a result of a change in the Group's accounting policies.

(b) Assets and liabilities related to contracts with customers

The Group has recognised assets and liabilities relating to contracts with customers. These amounts are classified as accrued and deferred income respectively for the purposes of this report and are displayed within notes 15 and 17.

(i) Significant movements in accrued and deferred income

Accrued income has decreased slightly against the prior year to £1,158,000 at 31 December 2018 (31 December 2017: £1,190,000) due to timing differences on when the software or service was provided against when it has been invoiced to the customer.

Deferred income has increased by £1,605,000 to £28,276,000 at 31 December 2018. This has arisen principally through the Group's new business growth during the year which has caused an uplift in the value of Annual Licence Fee invoices issued during 2018 in excess of that recognised.

2 Revenue from contracts with customers (continued)

(ii) Revenue recognised in relation to deferred income

The following table shows how much of the revenue recognised in the current reporting period relates to the release of the carried-forward deferred income balance on 31 December of the previous period:

	Group Year ended 31 Dec 2018 £000	Group Year ended 31 Dec 2017 Restated* £000
Revenue recognised that was included in the deferred income balance at 31 December of the previous period	**25,458**	19,066

*see note 33 for details regarding the restatement of the prior year financial statements which has arisen as a result of a change in the Group's accounting policies

Of the deferred income balance at 31 December 2017, £0.4 million was not recognised in revenue during the year due to it being derecognised on the disposal of Microgen Banking Systems Limited. See note 28 for details.

(iii) Revenue yet to be recognised on long-term contracts

The following table details the value of future contracted revenue resulting from the Group's fixed price long term software and services contracts which is yet to be recognised in the income statement due to the relevant contractual performance obligations not being satisfied before the year end. These amounts are set to be recognised in the Group's income statement across the period 1 January 2019 to 31 December 2024 on a contract by contract basis as and when the performance obligations are met:

	Group As at 31 Dec 2018 £000	Group As at 31 Dec 2017 £000
Aggregate amount of future contracted revenue in relation to long-term software and service contracts that is not recognised in the income statement as at 31 December	**104,720**	–*

*As permitted under the transitional provisions in IFRS 15, the value as of 31 December 2017 is not disclosed.

All other software and service contracts are billed based on time incurred. As permitted under IFRS 15, these amounts have been excluded for the purposes of the above calculation given the variable nature.

(iv) Assets recognised from costs to fulfil a contract

In addition to the contract balances disclosed above, the Group has also recognised an asset in relation to the commission costs of obtaining a contract. This is amortised on a straight-line basis over the term of the specific contract and presented within other long-term assets in the balance sheet.

	Group As at 31 Dec 2018 £000	Group As at 31 Dec 2017 Restated* £000
Asset recognised from costs incurred to fulfil a contract at 31 December	**1,581**	1,281
Amortisation recognised as cost of providing services during the year	**564**	623

* See note 33 for details regarding the restatement of the prior year financial statements which has arisen as a result of a change in the Group's accounting policies.

3 Operating profit

The following items are included in operating costs:

	Year ended 31 Dec 2018 £000	Year ended 31 Dec 2017 Restated* £000
Employee benefit expense (note 4)	**37,242**	31,555
Depreciation (note 11)	**1,869**	1,529
Other operating costs	**15,436**	15,434
Non-underlying operating costs:		
Amortisation of intangibles	**1,938**	1,316
Share based payments on share options issued in 2013	**101**	115
Costs in relation to replacement credit facility	**–**	199
Acquisition and associated restructuring costs	**162**	911
	56,748	51,059

* See note 33 for details regarding the restatement of the prior year financial statements which has arisen as a result of a change in the Group's accounting policies.

Profit from operations has been arrived at after charging:

	Year ended 31 Dec 2018 £000	Year ended 31 Dec 2017 Restated* £000
Net foreign exchange gains	**(182)**	(201)
Research and development costs – Aptitude Software	**7,457**	5,262
Research and development costs – Microgen Financial Systems	**3,159**	3,350
Depreciation of property, plant and equipment (note 11)	**1,869**	1,529
Repairs and maintenance expenditure on property, plant and equipment	**321**	234

* See note 33 for details regarding the restatement of the prior year financial statements which has arisen as a result of a change in the Group's accounting policies.

During the year the Group obtained the following services from the Group's auditors at costs as detailed below:

	Year ended 31 Dec 2018 £000	Year ended 31 Dec 2017 £000
Fees payable to Company's auditors for the audit of the Parent Company and consolidated financial statements	**139**	122
Fees payable to the Company's auditors and its associates for other services:		
– the audit of Company's subsidiaries pursuant to legislation	**38**	46
– audit related assurance service	**15**	35
– other consultancy services	**10**	28
– corporation tax services	**–**	10
	202	241

A description of the work of the Audit Committee is included in the corporate governance statement on pages 27 and 28 and includes an explanation of how auditor objectivity and independence is safeguarded when non-audit services are provided by the auditors.

4 **Employees and Directors**

	Group Year ended 31 Dec 2018 £000	Group Year ended 31 Dec 2017 £000	Company Year ended 31 Dec 2018 £000	Company Year ended 31 Dec 2017 £000
Employee benefit expense during the year				
Excluding non-underlying costs				
Wages and salaries	**32,547**	27,883	**1,233**	831
Social security costs	**2,758**	2,335	**133**	79
Other pension costs (note 31)	**964**	656	**46**	21
Share based payment costs on share options issued after 2013 (note 30)	**973**	681	**127**	55
	37,242	31,555	**1,539**	986
Non-underlying share based payment cost on share options issued in 2013 (note 30)	**101**	115	**101**	58
	37,343	31,670	**1,640**	1,044

Average monthly number of employees (including Directors) are:

	Group Year ended 31 Dec 2018 Number	Group Year ended 31 Dec 2017 Number	Company Year ended 31 Dec 2018 Number	Company Year ended 31 Dec 2017 Number
By location:				
United Kingdom	**182**	150	**13**	7
Rest of World	**225**	204	**–**	–
	407	354	**13**	7

Group headcount at 31 December 2018 was 405 (2017: 396).

	Year ended 31 Dec 2018 £000	Year ended 31 Dec 2017 £000
Key management compensation:		
Short-term employee benefits	**2,266**	2,463
Post employment benefits	**86**	71
Share based payment	**498**	427
	2,850	2,961

Key management compensation for the Group includes the Board of the Company and senior executives within the Group.

Directors	Year ended 31 Dec 2018 £000	Year ended 31 Dec 2017 £000
Aggregate emoluments	**858**	1,269
Company contributions to money purchase pension scheme	**38**	35
	896	1,304

Average monthly number of Directors and senior executives were 16 (2017: 12). The key management figures given above include the Directors of Microgen plc.

The information on Directors' remuneration required by the Companies Act and the Listing Rules of the Financial Conduct Authority is contained in the Directors' Remuneration Report on pages 35 to 59. Amounts displayed above exclude the impact of long term incentive awards which have vested but are yet to be exercised.

5 Net finance costs

	Year ended 31 Dec 2018 £000	Year ended 31 Dec 2017 Restated* £000
Finance income		
Interest on bank deposits	**47**	13
	47	13
Finance costs		
Interest payable on bank borrowings	**(273)**	(316)
Interest payable on capital lease obligations	**(167)**	(156)
Amortisation of loan facility arrangement fee	**(40)**	–
	(480)	(472)
Net finance costs	**(433)**	(459)

* See note 33 for details regarding the restatement of the prior year financial statements which has arisen as a result of a change in the Group's accounting policies.

6 Income tax costs

Analysis of charge in the year	Year ended 31 Dec 2018 £000	Year ended 31 Dec 2017 Restated* £000
Current tax:		
– tax charge on underlying items	**(3,479)**	(2,707)
– adjustment to tax in respect of prior periods	**145**	(96)
Total current tax	**(3,334)**	(2,803)
Deferred tax (note 14):		
– tax credit on underlying items	**18**	112
– tax credit on non-underlying items	**521**	1,447
– adjustment to tax in respect of prior periods	**2**	403
– adjustment for change in accounting policies	**244**	(159)
Total deferred tax	**785**	1,803
Income tax expense	**(2,549)**	(1,000)

* See note 33 for details regarding the restatement of the prior year financial statements which has arisen as a result of a change in the Group's accounting policies.

UK corporation tax is calculated at 19.00% (2017: 19.25%) of the estimated assessable profit for the year. Taxation for other jurisdictions is calculated at the rates prevailing in the respective jurisdictions.

UK corporation tax rates substantively enacted as part of the Finance Bill 2016 include reductions to the main rate to 19% from 1 April 2017 and further reduction to 17% from 1 April 2020. In 2017, changes to the US tax rates were substantively enacted by the balance sheet date where the Federal tax rate was reduced from 35% to 21%, which after taking into account state taxes reduces the Group's US effective tax rate from 43% to 29% for 2018. Deferred taxes at the balance sheet date have been measured using these enacted rates and reflected in the financial statements. Within the prior year, a deferred tax credit on non-underlying items was recognised totaling £1.1 million in respect of the revaluation of the £3.6 million deferred tax liability established on the acquisition of Aptitude RevStream Inc.

6 **Income tax expense (continued)**

During the year the Group adopted a number of new accounting standards on a retrospective basis, the result of which was an adjustment to reserves for the year ending 31 December 2017. The tax impact of these movements was reflected in the deferred tax balance. In accordance with tax legislation in the relevant jurisdictions, adjustments which directly impact the income statement have now been fully realised in the current period. See note 33 for full details.

The tax for the year is lower than (2017: lower than) the standard rate of corporation tax in the UK of 19.00% (2017: 19.25%). The differences are explained below:

	Year ended 31 Dec 2018 £000	Year ended 31 Dec 2017 Restated* £000
Profit on ordinary activities before tax	**16,342**	11,503
Tax at the UK corporation tax rate of 19.00% (2017: 19.25%)	**(3,105)**	(2,214)
Effects of:		
Adjustment to tax in respect of prior periods	**145**	307
Adjustment for change in accounting policies	**244**	–
Adjustment in respect of foreign tax rates	**(499)**	(409)
Expenses not deductible for tax purposes		
Exempt gain on disposal	**594**	–
Other	**18**	(112)
Recognition of tax losses	**50**	321
Change in future tax rates	**4**	1,107
Total taxation	**(2,549)**	(1,000)

The total tax charge of £2,549,000 (2017 Restated*: £1,000,000) represents 15.60% (2017 Restated*: 8.69%) of the Group profit before tax of £16,342,000 (2017 Restated*: £11,503,000). The increase in effective rate from the prior year is due principally to the impact of the movement in the US deferred tax rate during 2017.

After adjusting for the impact of non-underlying items, change in tax rates, share based payment charge, prior year tax charges and the change in accounting policies, the tax charge for the year of £3,509,000 (2017 Restated*: £3,075,000) represents 22.93% (2017: 21.90%), which is the tax rate used for calculating the adjusted earnings per share.

* See note 33 for details regarding the restatement of the prior year financial statements which has arisen as a result of a change in the Group's accounting policies.

7 Earnings per share

Basic earnings per share is calculated by dividing the earnings attributable to ordinary shareholders by the weighted average number of ordinary shares outstanding during the year.

For diluted earnings per share, the weighted average number of ordinary shares in issue is adjusted to assume conversion of all dilutive potential ordinary shares. The Group has dilutive potential ordinary shares in the form of share options granted to employees where the exercise price is less than the average market price of the Company's ordinary shares during the year along with the deferred equity consideration arising as part of the Aptitude RevStream Inc. acquisition.

The calculation of the basic and diluted earnings per share is based on the following data:

	Year ended 31 Dec 2018			Year ended 31 Dec 2017 Restated*		
	Earnings £000	**Weighted average number of shares (in thousands)**	**Per–share amount pence**	Earnings £000	Weighted average number of shares (in thousands)	Per–share amount pence
Basic EPS						
Earnings attributable to ordinary shareholders	**13,793**	**60,922**	**22.6**	10,503	60,612	17.3
Effect of dilutive securities:						
– share options	**–**	**3,336**	**(1.1)**	–	3,228	(0.8)
Diluted EPS	**13,793**	**64,258**	**21.5**	10,503	63,840	16.5

To provide an indication of the underlying operating performance per share the adjusted profit after tax figure shown below excludes non-underlying and other items and has a tax charge using the effective rate of 22.93% (2017: 21.90%).

	Year ended 31 Dec 2018		Year ended 31 Dec 2017 Restated*	
	Basic EPS pence	**Diluted EPS pence**	Basic EPS pence	Diluted EPS pence
Earnings per share	**22.6**	**21.5**	17.3	16.5
Non-underlying items net of tax	**(2.5)**	**(2.4)**	1.8	1.7
Prior years' tax credit	**(0.2)**	**(0.2)**	(0.5)	(0.4)
Change in accounting policies	**(0.4)**	**(0.4)**	–	–
Tax losses recognised	**(0.1)**	**(0.1)**	(0.6)	(0.6)
Adjusted earnings per share	**19.4**	**18.4**	18.0	17.2

7 Earnings per share (continued)

	Year ended 31 Dec 2018 £000	Year ended 31 Dec 2017 Restated* £000
Profit on ordinary activities before tax and non-underlying items	**15,306**	14,044
Tax charge at a rate of 22.93% (2017: 21.90%)	**(3,509)**	(3,075)
	11,797	10,969
Prior years' tax charge	**145**	307
Non-underlying items net of tax	**1,557**	(1,094)
Change in accounting policies	**244**	–
Recognition of tax losses	**50**	321
Profit on ordinary activities after tax	**13,793**	10,503

* See note 33 for details regarding the restatement of the prior year financial statements which has arisen as a result of a change in the Group's accounting policies.

8 Dividends

	2018 pence per share	2017 pence per share	2018 £000	2017 £000
Dividends paid:				
Interim dividend	**2.20**	2.00	**1,340**	1,217
Final dividend (prior year)	**4.25**	3.50	**2,588**	2,128
	6.45	5.50	**3,928**	3,345
Proposed but not recognised as a liability:				
Final dividend (current year)	**4.40**	4.25	**2,692**	2,587

The proposed final dividend was approved by the Board on 4 March 2019 but was not included as a liability as at 31 December 2018, in accordance with IAS 10 'Events after the Balance Sheet date'. If approved by the shareholders at the Annual General Meeting this final dividend will be payable on 30 May 2019 to shareholders on the register at the close of business on 24 May 2019.

9 Goodwill

	31 Dec 2018 £000	31 Dec 2017 £000
Cost		
At 1 January	**70,736**	59,709
Acquisitions through business combinations	**–**	9,329
Disposal of subsidiary	**(4,008)**	–
Transfer from Intangibles	**–**	1,698
At 31 December	**66,728**	70,736
Accumulated impairment		
At 1 January and 31 December	**(17,935)**	(17,935)
Net book amount	**48,793**	52,801

9 Goodwill (continued)

Goodwill acquired in a business combination is allocated, at acquisition, to the cash generating units (CGUs) that are expected to benefit from that business combination. The carrying amount of goodwill has been allocated as follows:

	Aptitude Software £000	Microgen Financial Systems £000	Total £000
At 1 January 2018	23,787	29,014	52,801
Disposal of subsidiary	–	(4,008)	(4,008)
At 31 December 2018	**23,787**	**25,006**	**48,793**

The disposal of subsidiary during the year of £4,008,000 represents the amount of goodwill allocated within the Microgen Financial Systems cash generating unit to Microgen Banking Systems Limited. See note 28 for details.

The transfer from Intangibles during the prior year of £1,698,000 was made to re-allocate part of the value attributed to Intangibles in recent business combinations. The re-allocation was made because this amount should, under IAS 12, have been treated as goodwill because it arose from the recognition of a deferred tax liability relating to acquired Intangibles. The Directors consider that the effect of this misallocation on prior period financial statements was immaterial.

The Group tests goodwill annually for impairment, or more frequently if there are indications that goodwill might be impaired.

Determining whether goodwill is impaired requires an estimation of the value in use of the CGUs to which goodwill has been allocated. The value in use calculation requires the Group to estimate the future cash flows expected to arise from the CGUs and a suitable discount rate in order to calculate present value.

The Board-approved plans, prepared for the Microgen Financial Systems operating business, project a continuation of current operating profit levels for the next four years following the approved 2019 plan. The Board considers this achievable through a combination of continued organic growth in the Wealth Management sector and the contribution from focused acquisitions. No benefit of any potential acquisitions is, however, included in the value in use calculation for Microgen Financial Systems.

The Board approved plans for Aptitude Software project a growth in operating income of 10% per annum for the next four years following the approved 2019 plans. This growth rate was applied based on the Group's assessment of the future opportunities within the market, supported by the latest three year forecast produced by management.

The terminal growth rates for the period after 2023 are no greater than 2.25% per annum for either business based on both the Group's assessment of the market opportunities and the inherent uncertainties in preparing forecasts from this point onwards. The conversion to cash ratios for Microgen Financial Systems and Aptitude Software are assumed to be 81% and 77% respectively based on Aptitude Software's increased activity within the US. The utilisation of deferred tax losses to offset the tax payable has not been considered. The discount rate applied to the CGUs was 9.8% (2017: 9.8%).

Sensitivity analysis was performed on both businesses with a reasonable proportional movement in any combination of the assumptions for Aptitude Software Limited not resulting in an impairment. For Microgen Financial Systems, an impairment would only be triggered if operating profits were to see a reduction of 12.5% year on year for the period to 2023. Given the business benefits from high levels of contracted recurring revenue based on its Annual Licence Fee model complemented by the business' ability in previous periods to meet planned operating profit levels which, in the latest three year forecast produced by management are significantly higher than that which would trigger an impairment, the risk of this occurring is considered extremely remote.

10 Intangible assets

	Software IPR and in process R&D £000	Customer relationships £000	Total £000
Group			
Cost			
At 1 January and 31 December 2018	**6,033**	**12,648**	**18,681**
Accumulated amortisation and impairment			
At 1 January 2018	561	1,996	2,557
Amortisation	672	1,266	1,938
At 31 December 2018	**1,233**	**3,262**	**4,495**
Net book amount			
At 31 December 2018	**4,800**	**9,386**	**14,186**

	Software IPR and in process R&D £000	Customer relationships £000	Total £000
Group			
Cost			
At 1 January 2017	982	7,516	8,498
Acquisitions through business combinations	5,247	6,634	11,881
Transfer to Goodwill	(196)	(1,502)	(1,698)
At 31 December 2017	**6,033**	**12,648**	**18,681**
Accumulated amortisation and impairment			
At 1 January 2017	229	1,012	1,241
Amortisation	332	984	1,316
At 31 December 2017	**561**	**1,996**	**2,557**
Net book amount			
At 31 December 2017	**5,472**	**10,652**	**16,124**

The Company held no intangible assets during the year (2017: nil).

The externally acquired software IPR and in process R&D relates to expected future benefits of software and development projects in progress at the date of acquisition. As at 31 December 2018 no internal research and development costs have been capitalised. The customer relationships relate to expected benefits obtained from recurring level of business from customers obtained as a result of acquisitions. The useful lives of the intangible assets acquired during the year has been determined as between 6-10 years (2017: 6-10 years) in respect of software IPR and in process R&D and 10 years (2017: 10 years) in respect of customer relationships.

The amortisation charge in the year is shown in non–underlying costs.

11 Property, plant and equipment

The Group leases various offices and plant and machinery which, following the adoption of IFRS 16, met the criteria set out to be recognised as capital lease agreements. Consequently right-of-use assets were recognised, see note 33 for details.

	Right-of-use assets £000	Leasehold improve-ments £000	Plant & machinery £000	Fixtures & fittings £000	Total £000
Group					
Cost					
At 1 January 2018	7,680	649	5,375	425	**14,129**
Additions	879	87	748	150	**1,864**
On disposal of subsidiary	–	–	(281)	–	**(281)**
Disposals	(43)	(28)	(327)	(11)	**(409)**
Exchange movements	–	(1)	(28)	4	**(25)**
At 31 December 2018	**8,516**	**707**	**5,487**	**568**	**15,278**
Accumulated depreciation					
At 1 January 2018	3,962	481	3,936	207	**8,586**
Charge for the year (note 3)	1,024	26	747	72	**1,869**
On disposal of subsidiary	–	–	(230)	–	**(230)**
Disposals	(1)	(6)	(321)	(5)	**(333)**
Exchange movements	–	–	(16)	(15)	**(31)**
At 31 December 2018	**4,985**	**501**	**4,116**	**259**	**9,861**
Net book amount					
At 31 December 2018	**3,531**	**206**	**1,371**	**309**	**5,417**

	Right-of-use assets £000	Leasehold improve-ments £000	Plant & machinery £000	Fixtures & fittings £000	Total £000
Group Restated*					
Cost					
At 1 January 2017	6,300	599	4,721	202	**11,822**
Additions	1,380	33	941	206	**2,628**
Acquired from acquisitions	–	8	17	38	**63**
Disposals	–	–	(506)	(22)	**(596)**
Exchange movements	–	9	202	1	**212**
At 31 December 2017	**7,680**	**649**	**5,375**	**425**	**14,129**
Accumulated depreciation					
At 1 January 2017	3,140	455	3,571	166	**7,332**
Charge for the year (note 3)	822	20	650	37	**1,529**
Disposals	–	–	(491)	(5)	**(496)**
Exchange movements	–	6	206	9	**221**
At 31 December 2017	**3,962**	**481**	**3,936**	**207**	**8,586**
Net book amount					
At 31 December 2017	**3,718**	**168**	**1,439**	**218**	**5,543**

* See note 33 for details regarding the restatement of the prior year financial statements which has arisen as a result of a change in the Group's accounting policies.

11 Property, plant and equipment (continued)

	Plant & machinery £000	Total £000
Company		
Cost		
At 1 January 2018	337	**337**
Additions	53	**53**
At 31 December 2018	**390**	**390**
Accumulated depreciation		
At 1 January 2018	54	**54**
Charge for the year	130	**130**
At 31 December 2018	**184**	**184**
Net book amount		
At 31 December 2018	**206**	**206**

	Plant & machinery £000	Total £000
Company		
Cost		
At 1 January 2017	–	**–**
Additions	337	**337**
At 31 December 2017	**337**	**337**
Accumulated depreciation		
At 1 January 2017	–	**–**
Charge for the year	54	**54**
At 31 December 2017	**54**	**54**
Net book amount		
At 31 December 2017	**283**	**283**

12 Investments in subsidiaries

The Group did not hold any investments in 2018 (2017: nil).

	2018 £000	2017 £000
Company		
Cost		
At 1 January	**72,298**	55,614
Additions	**–**	16,000
Share based payments – share options granted to employees of subsidiaries	**846**	684
At 31 December	**73,144**	72,298
Impairment		
At 1 January	**22,155**	13,155
Charge for the year pursuant to return of capital	**6,795**	9,000
At 31 December	**28,950**	22,155
Net book amount		
At 31 December	**44,194**	50,143

Investments are held at cost less provisions for impairment. If there is an impairment trigger then the recoverable amounts of the investments are determined by calculating a value in use for the appropriate subsidiary investment. Management estimates discount rates using pre–tax rates that reflect current market assessments of the time value of money and the risks specific to the subsidiary investments. During the course of 2018, a return of capital was made by Microgen Management Services Limited to Microgen plc of £6,795,000. At this time the net book value of the investment in Microgen Management Services Limited was reduced by the value of this return of capital to its recoverable amount.

Where the investment is held in a Company which is no longer trading, the value is derived from the carrying value of the net assets on the balance sheet of that entity.

The Directors consider the value of the investments to be supported by their underlying assets.

Subsidiaries	Country	Activity
Aptitude Software (Canada) Limited *	Canada	Employment and Group Services
Aptitude Software Inc.*	USA	Software and Services
Aptitude Software Limited	England & Wales	Software and Services
Aptitude Software (Poland) sp. z o.o.*	Poland	Development
Aptitude Revstream Inc.*	USA	Software and Services
Infoscreen (Cyprus) Limited*	Cyprus	Software and Services
Microgen (Channel Islands) Limited *	Guernsey	Software and Services
Microgen Financial Systems Limited	England & Wales	Software and Services
Microgen (Jersey) Limited *	Jersey	Software and Services
Microgen Management Services Limited	England & Wales	Dormant
Microgen Software (Primacy) Limited*	Canada	Software and Services
Microgen Solutions Limited *	England & Wales	Software and Services
Microgen (South Africa) Pty Limited *	South Africa	Software and Services
Microgen Wealth Management Systems Limited *	England & Wales	Software and Services

* Indirectly held by Microgen plc

The Company owns 100% of the ordinary share capital and share premium in the above subsidiaries.

12 Investments in subsidiaries (continued)

The registered office of the Group's principal subsidiaries which is not that of the Company are detailed below:

Subsidiaries	Registered office
Aptitude Software (Canada) Limited	1500 Royal Centre, 1055 West Georgia Street, PO Box 11117, Vancouver, British Columbia, V6E 4N7, Canada
Aptitude Software Inc	CT Corporation System, 111 8th Avenue, New York, 10011, USA
Aptitude RevStream Inc.	100 Marine Parkway, Suite 210, Redwood City, CA 94065, USA
Infoscreen (Cyprus) Limited	Sophia Court, 3rd Floor, Agias, Filaxeos 166, Limassol 3083, Cyprus
Microgen (Channel Islands) Limited	Provident House, Havilland Street, Guernsey, GY1 2QE
Microgen (Jersey) Limited	19 Hilary Street, St Helier, Jersey, JE2 4SX
Microgen Poland Sp. Z.o.o.	ul. Muchoborska 6, 54–424 Wroclaw, Poland
Microgen Software (Primacy) Limited	Suite 2600, Three Bentall Centre, 595 Burrard Street, PO Box 49314, Vancouver BC V7X 1L3, Canada
Microgen (South Africa) Pty Limited	6th Floor, 199 Hertzog Boulevard, Foreshore, Cape Town, 8001, South Africa

During 2018 Microgen Financial Systems, a subsidiary of Microgen plc, disposed of the entire share capital of Microgen Banking Systems Limited to an unrelated third party. See note 28 for details.

13 Other long–term assets

	Group 2018 £000	Group 2017 Restated* £000
Prepaid commission costs	**1,581**	1,281

On adoption of IFRS 15, the Group's assessment is that commission incurred on software licence sales meets the definition of incremental costs of obtaining a contract. An asset is therefore recognised at inception of the contract for the total value of commissions payable which is then amortised across the contract life of each customer.

The Company held no other long term assets during the year (2017: nil).

* See note 33 for details regarding the restatement of the prior year financial statements which has arisen as a result of a change in the Group's accounting policies.

14 Deferred tax

Deferred tax is calculated in full on temporary differences under the liability method using a tax rate of 19% (2017: 19%) for balances expected to be recovered within 12 months and 17% (2017: 19%) for all subsequent periods. US deferred tax is calculated using an effective rate of 30.3% being made up of 21% federal and 9.3% state tax (2017: 29% made up of 21% federal and 8% state tax).

Deferred tax	**Group 2018 £000**	Group 2017 Restated* £000	**Company 2018 £000**	Company 2017 £000
Group				
Deferred tax assets:				
– Deferred tax asset to be recovered after more than 12 months	**1,032**	1,042	**112**	116
– Deferred tax asset to be recovered within 12 months	**105**	379	**20**	20
	1,137	1,421	**132**	136
Deferred tax liabilities:				
– Deferred tax liabilities to be settled after more than 12 months	**(3,080)**	(3,720)	**–**	–
– Deferred tax liabilities to be settled within 12 months	**(502)**	(577)	**–**	–
	(3,582)	(4,297)	**–**	–
Net deferred tax (liability)/asset	**(2,445)**	(2,876)	**132**	136

* See note 33 for details regarding the restatement of the prior year financial statements which has arisen as a result of a change in the Group's accounting policies.

Net deferred tax (liability)/asset	**Group 2018 £000**	Group 2017 Restated* £000	**Company 2018 £000**	Company 2017 £000
At 1 January	**(2,876)**	(578)	**136**	–
Total credit/(charge) to income statement for the year	**101**	173	**(6)**	2
Charge to equity (note 24)	**(348)**	422	**2**	–
Exchange differences	**(6)**	18	**–**	–
On acquisition of subsidiaries	**–**	(4,527)	**–**	–
Non-underlying deferred tax credit to the income statement for the year	**434**	661	**–**	–
Changes in tax rate	**6**	1,107	**–**	–
Recognised on reorganisation of Group	**–**	–	**–**	134
Adjustment for change in accounting policies	**244**	(152)	**–**	–
At 31 December	**(2,445)**	(2,876)	**132**	136

* See note 33 for details regarding the restatement of the prior year financial statements which has arisen as a result of a change in the Group's accounting policies.

The deferred tax liability recognised on acquisition of subsidiaries in 2017 is in relation to the acquisitions of Microgen Solutions (Primacy) Limited (£889,000) and Aptitude Revstream Inc. (£3,638,000). These amounts represent the intangible assets acquired on acquisition recognised at the effective tax rate enforced on that date.

As outlined in note 6, the US tax rate was reduced during 2017 which lowered the Group's US effective rate from 43% to 29%. As a result, the deferred tax liability recognised with respect to Aptitude Revstream Inc during the prior year was revalued at the new enacted rate, the effect of which is shown within the changes in tax rate.

14 Deferred tax (continued)

Deferred tax assets have been recognised in respect of taxable losses and other temporary differences giving rise to deferred tax assets where it is probable that these assets will be recovered.

Deferred tax asset Restated*	Accelerated capital allowances £000	Short term timing differences £000	Share-based payments £000	Taxable trading losses £000	Total £000
Group					
At 1 January 2017	94	130	428	86	738
Total credit to income statement for the year	35	64	16	58	173
Credit to equity (note 25)	–	39	383	–	422
Exchange differences	–	18	–	–	18
Changes in tax rate	(5)	(10)	–	–	(15)
Adjustment for change in accounting policies	–	85	–	–	85
At 31 December 2017	**124**	**326**	**827**	**144**	**1,421**
Total (charge)/credit to income statement for the year	(10)	(9)	178	(58)	101
Charge to equity (note 25)	–	(17)	(331)	–	(348)
Exchange differences	–	(5)	–	–	(5)
Adjustment for change in accounting policies	–	6	–	–	6
Changes in tax rate	(12)	(16)	–	(10)	(38)
At 31 December 2018	**102**	**285**	**674**	**76**	**1,137**

* See note 33 for details regarding the restatement of the prior year financial statements which has arisen as a result of a change in the Group's accounting policies.

At the balance sheet date, the Group has unused tax losses of £3,080,000 (2017: £3,366,000) available for offset against future profits. A deferred tax asset has been recognised in respect of £455,000 (2017: £756,000) of such losses which is the maximum the Group anticipates being able to utilise in the year ending 31 December 2019. No deferred asset has been recognised in respect of the remaining £2,625,000 (2017: £2,610,000) due to the unpredictability of future profit streams.

	Accelerated capital allowances £000	Share-based payments £000	Total £000
Company			
At 1 January 2017	**–**	**–**	**–**
Total credit to income statement for the year	2	–	2
Recognised on reorganisation of Group	18	116	134
At 31 December 2017	**20**	**116**	**136**
Total credit/(charge) to income statement for the year	6	(12)	(6)
Credit/(charge) to equity (note 25)	9	(7)	2
At 31 December 2018	**35**	**97**	**132**

During the prior year, the employees and trade of Microgen Management Services Limited, a subsidiary of Microgen plc, was transferred into the relevant Group entity. Microgen plc recognised a deferred tax asset on its share of the transferred trade.

Deferred tax assets and liabilities are only offset where there is a legally enforceable right of offset and there is an intention to settle the balances net.

14 Deferred tax (continued)

Deferred tax liability arising on acquisitions of intangible fixed assets	2018 £000	2017 Restated* £000
Group		
At 1 January	**(4,297)**	(1,316)
On acquisition of subsidiaries	**–**	(4,527)
Non-underlying deferred tax credit to the income statement for the year	**434**	661
Changes in tax rate	**44**	1,122
Adjustment for change in accounting policies	**237**	(237)
At 31 December	**(3,582)**	(4,297)

* See note 33 for details regarding the restatement of the prior year financial statements which has arisen as a result of a change in the Group's accounting policies.

Explanation of the movements in the year is provided on page 109.

15 Trade and other receivables

	Group 31 Dec 2018 £000	Group 31 Dec 2017 Restated* £000	Company 31 Dec 2018 £000	Company 31 Dec 2017 £000
Trade receivables	**11,258**	10,496	**–**	–
Less: provision for impairment of receivables	**(229)**	(88)	**–**	–
Trade receivables – net	**11,029**	10,408	**–**	–
Amounts owed by Group undertakings	**–**	–	**5,085**	5,308
Other receivables	**1,571**	964	**21**	72
Prepayments	**917**	1,006	**232**	305
Accrued income	**1,158**	1,190	**–**	–
	14,675	13,568	**5,338**	5,685

* See note 33 for details regarding the restatement of the prior year financial statements which has arisen as a result of a change in the Group's accounting policies.

Amounts due from Group undertakings are unsecured and repayable on demand.

Within the trade receivables balance of £11,258,000 (2017: £10,496,000) there are balances totalling £3,718,000 (2017: £3,531,000) which, at 31 December 2018, were overdue for payment. Of this balance £3,596,000 (2017: £3,125,000) has been collected at 22 March 2019 (2017: 6 March 2018).

	Trade receivables	
	31 Dec 2018	31 Dec 2017
The ageing of the trade receivables is as follows:	**£000**	£000
Not past due	**7,540**	6,965
Past due		
Less than one month overdue	**1,954**	2,806
One to two months overdue	**1,172**	296
Two to three months overdue	**113**	232
More than three months overdue	**479**	197
At 31 December	**11,258**	10,496

The Company had no trade receivables in either year.

15 Trade and other receivables (continued)

Trade and other receivables are denominated in the following currencies:

	Group 31 Dec 2018 £000	Group 31 Dec 2017 Restated* £000	Company 31 Dec 2018 £000	Company 31 Dec 2017 £000
Sterling	**8,624**	7,248	**5,338**	5,685
United States Dollars	**5,619**	5,884	**–**	–
Other	**432**	436	**–**	–
	14,675	13,568	**5,338**	5,685

* See note 33 for details regarding the restatement of the prior year financial statements which has arisen as a result of a change in the Group's accounting policies.

Movements on the provision for impairment of trade receivables are as follows:

	Group 31 Dec 2018 £000	Group 31 Dec 2017 £000
At 1 January	**88**	4
On acquisition	**–**	14
Charged to income statement	**141**	70
At 31 December	**229**	88

Movements in the provision for impaired trade receivables have been included in the income statement under other operating costs. No amounts were written off as unrecoverable to the income statement during the year (2017: £nil). Non–trade receivables do not contain any impaired assets.

Whilst the Group retains credit insurance in respect of certain balances, the maximum exposure to credit risk at the reporting date is the fair value of each receivable class mentioned above. No collateral is held as security against these assets.

The Company does not have any provision for impairment against its trade receivables (2017: nil) but does have a provision for impairment on its intercompany loan balance totalling £21,000 (2017: nil). See financial risk management section for details.

16 Cash and cash equivalents

Cash and cash equivalents are denominated in the following currencies:

	Group 31 Dec 2018 £000	Group 31 Dec 2017 £000	Company 31 Dec 2018 £000	Company 31 Dec 2017 £000
Sterling	**24,178**	12,065	**23,815**	9,234
South African Rand	**219**	772	**–**	–
United States Dollar	**4,407**	5,448	**–**	–
Polish Zloty	**158**	215	**–**	–
Canadian Dollar	**197**	572	**–**	–
Euros	**27**	64	**–**	–
Serbian Dinars	**–**	1	**–**	–
Cash at bank and in hand	**29,186**	19,137	**23,815**	9,234

The effective interest rate on short term deposits was 0.2% (2017: 0.1%).

17 Trade and other payables

	Group 31 Dec 2018 £000	Group 31 Dec 2017 Restated* £000	Company 31 Dec 2018 £000	Company 31 Dec 2017 £000
Trade payables	**1,778**	1,797	**495**	169
Amounts owed to Group undertakings	**–**	–	**3,506**	1,091
Other tax and social security payable	**1,962**	1,803	**258**	38
Other payables	**228**	113	**10**	14
Accruals	**3,240**	6,843	**298**	606
Deferred income	**28,276**	26,671	**–**	–
	35,484	37,227	**4,567**	1,918

* See note 33 for details regarding the restatement of the prior year financial statements which has arisen as a result of a change in the Group's accounting policies.

The amounts owed to Group undertakings are unsecured, interest free and repayable upon demand.

18 Financial liabilities

	Group 31 Dec 2018 £000	Group 31 Dec 2017 £000	Company 31 Dec 2018 £000	Company 31 Dec 2017 £000
Bank loan	**7,858**	9,818	**7,858**	9,818
The borrowings are repayable as follows:				
Within one year	**2,040**	2,040	**2,040**	2,040
In the second year	**2,040**	2,040	**2,040**	2,040
In the third to fifth years inclusive	**3,920**	5,920	**3,920**	5,920
	8,000	10,000	**8,000**	10,000
Unamortised prepaid facility arrangement fees	**(142)**	(182)	**(142)**	(182)
As at 31 December	**7,858**	9,818	**7,858**	9,818

On 21 July 2017, the Group and Company entered into a loan agreement with Bank of Ireland consisting of a £10 million term loan in addition to a revolving credit facility of £10 million. The loan is secured on the assets of the Group. Operating covenants are limited to the Group's net debt leverage and interest cover. The term loan is repayable over five years with an annual capital repayment of £2,000,000. The loan is denominated in Pound Sterling and carries interest at LIBOR plus 1.60%. The Group entered into an interest swap on 24 July 2017, effectively fixing the interest rate at 2.46% over a five year period.

19 Capital lease obligations

The Group leases various offices and plant and machinery which, following the adoption of IFRS 16 met the criteria set out to be recognised as capital lease agreements (see note 33 for details).

	Group 31 Dec 2018 £000	Group 31 Dec 2017 Restated* £000
Amounts payable under capital lease arrangements:		
Within one year	**1,243**	1,155
Within two to five years	**2,510**	2,798
After five years	**571**	736
Total	**4,324**	4,689
Less: future finance charges	**(369)**	(451)
Present value of lease obligations	**3,955**	4,238
Less: Amount due for settlement within 12 months (shown under current liabilities)	**(1,109)**	(1,038)
	2,846	3,200

	Group 31 Dec 2018 £000	Group 31 Dec 2017 Restated* £000
The present value of financial lease liabilities is split as follows:		
Within one year	**1,109**	1,038
Within two to five years	**2,295**	2,503
After five years	**551**	697
	3,955	4,238

The Company had no capital lease obligations during the year (2017: nil).

* See note 33 for details regarding the restatement of the prior year financial statements which has arisen as a result of a change in the Group's accounting policies.

20 Provisions

	Provisions	
	31 Dec 2018	31 Dec 2017
	£000	£000
Group		
At 1 January	**404**	311
Charged to income statement	**14**	94
Utilised	**–**	(9)
Foreign exchange	**6**	8
At 31 December	**424**	404

Provisions have been analysed between current and non-current as follows:

	Provisions	
	31 Dec 2018	31 Dec 2017
	£000	£000
Current	–	–
Non–current	**424**	404
	424	404

£374,000 (2017: £365,000) of the total provision at 31 December 2018 of £424,000 relates to the cost of dilapidations in respect of the Group's occupied leasehold premises.

All of the non-current provision is expected to unwind within 2 to 5 years (2017: £404,000).

21 Financial instruments

At the balance sheet date, the total notional amount of outstanding forward foreign exchange and the interest rate swap are:

	31 Dec 2018		31 Dec 2017	
Group	**Assets £000**	**Liabilities £000**	Assets £000	Liabilities £000
Interest rate swaps – cash flow hedges	**48**	**–**	–	12
Forward foreign exchange contracts – cash flow hedges	**66**	**12**	218	25
	114	**12**	218	37

	31 Dec 2018		31 Dec 2017	
Company	**Assets £000**	**Liabilities £000**	Assets £000	Liabilities £000
Interest rate swaps – cash flow hedges	**48**	**–**	–	12

Total derivatives designated as hedging instruments

The maximum exposure to credit risk at the reporting date is the fair value of the derivative assets in the consolidated statement of financial position.

21 Financial instruments (continued)

Currency derivatives

As in previous years, forward foreign exchange contracts are used to hedge the Group's forecasted Polish Zloty denominated costs over the next 12 months. In addition, forward foreign currency contracts were also put in place from March 2017 to hedge a proportion of the Group's forecasted US dollar denominated service related revenue less US dollar denominated cost over the next 12 months. The forward exchange contracts mature across the year.

The notional principal amounts outstanding at the balance sheet date are as follows:

	31 Dec 2018 £000	31 Dec 2017 £000
Forward foreign exchange contracts – Polish Zloty	**4,379**	4,610
Forward foreign exchange contracts – US Dollar	**659**	1,296

At 31 December 2018, the fair value of the Group's currency derivatives is estimated to be an asset of approximately £54,000, (2017: £193,000), comprising £66,000 assets (2017: £218,000) and £12,000 liabilities (2017: £25,000), based on quoted market values.

The forward contracts are designated as effective cash flow hedges in accordance with IFRS 9 '*Financial Instruments*'. The fair value has been recognised in other comprehensive income and presented in the hedging reserve in equity. These will be transferred to the income statement over the next 12 months (2017: 12 months).

A gain of £94,000 (2017: £437,000) has been transferred to the income statement in respect of contracts which have matured during the year.

Fair Value interest rate swaps

The Group and Company entered into floating-to-fixed interest rate swaps to hedge the fair value interest rate risk arising where it has borrowed at floating rates.

The notional principal amounts of the outstanding interest rate swap contracts designated as hedging instruments in fair value interest rate debt at 31 December 2018 amounts to £8,000,000 (2017: £10,000,000).

The fair value asset recognised in the consolidated statement of comprehensive income is £48,000 (2017: liability of £12,000).

Additional disclosures are set out in the accounting policies relating to risk management.

Fair values of non-derivative financial assets and financial liabilities

Where market values are not available, fair values of financial assets and financial liabilities have been calculated by discounting expected future cash flows at prevailing interest rates and by applying year-end exchange rates.

		31 Dec 2018		31 Dec 2017	
	Note	**Book value £000**	**Fair value £000**	Book value £000	Fair value £000
Group					
Cash at bank and in hand	16	**29,186**	**29,186**	19,137	19,137

21 Financial instruments (continued)

	Note	31 Dec 2018 Book value £000	31 Dec 2018 Fair value £000	31 Dec 2017 Book value £000	31 Dec 2017 Fair value £000
Company					
Cash at bank and in hand	16	**23,815**	**23,815**	9,234	9,234

The carrying amount of borrowings, short term payables and receivables, net of impairment, is equal to their fair value.

Neither the Group or the Company defaulted on any loans during the year. In addition the Group and Company did not breach the terms of any loan agreements during the year.

Credit quality of financial assets

The credit quality of financial assets that are neither past due or impaired can be assessed by reference to the customer type.

Group	2018 £000	2017 £000
Trade receivables		
Banks and financial institutions	**2,116**	1,503
Other corporates	**5,424**	5,462
Total current trade receivables	**7,540**	6,965
Overdue trade receivables	**3,718**	3,531
Total trade receivables	**11,258**	10,496

Cash at bank and short–term bank deposits	Current Rating (Moody's)	2018 £000	2017 £000
	Aa2	**10,606**	261
	Aa3	**2,834**	2,537
	A1	**167**	4,332
	A2	**253**	10,619
	Baa2	**10,959**	772
	Baa3	**4,340**	–
	B1	**27**	–
	Caa1	**–**	64
	No rating	**–**	552
		29,186	19,137

None of the financial assets that are fully performing have been renegotiated in the last year.

22 Share capital

Group and Company	31 Dec 2018 Number	31 Dec 2018 £000	31 Dec 2017 Number	31 Dec 2017 £000
Ordinary shares of 6 3/7p each				
Issued and fully paid:				
At 1 January	**60,878,689**	**3,913**	59,297,030	3,811
Issued under share option schemes	**294,241**	**19**	1,581,659	102
At 31 December	**61,172,930**	**3,932**	60,878,689	3,913
Shares to be issued:				
Deferred equity consideration on acquisition	**398,518**	**26**	398,518	26
Total Ordinary shares issued and to be issued at 31 December	**61,571,448**	**3,958**	61,277,207	3,939

The 398,518 shares to be issued in August 2019 represents the deferred equity consideration arising on the acquisition of Aptitude Revstream Inc. These shares have been recognised at the market value on date of acquisition and are due to be issued in August 2019.

The number of ordinary shares for which Microgen employees hold options and the period to which the options are exercisable are as follows (note 30):

Period	Year of grant	Exercise price	2018 Number	2017 Number
Between 28 February 2011 and 28 February 2018	2008	48.17p	–	20,832
Between 2 December 2011 and 2 December 2018	2008	43.50p	–	24,999
Between 18 November 2018 and 18 November 2023	2013	5p	752,403	842,403
Between 21 October 2018 and 21 October 2025	2015	6 3/7p	527,423	690,000
Between 3 August 2019 and 3 August 2026	2016	6 3/7p	409,327	601,037
Between 3 August 2019 and 3 August 2026	2016	6 3/7p	282,850	386,476
Between 1 November 2019 and 1 May 2020	2016	190.5p	183,147	199,491
Between 1 November 2019 and 1 May 2020	2016	186.5p	501,815	541,195
Between 1 November 2020 and 1 May 2021	2017	450.5p	53,009	89,944
Between 1 November 2020 and 1 May 2021	2017	433.0p	121,749	122,754
Between 1 December 2020 and 1 June 2021	2017	400.0p	108,692	108,692
Between March 2022 and 10 August 2027	2017	6 3/7p	99,772	142,980
Between March 2020 and 10 August 2027	2017	6 3/7p	100,794	126,285
Between March 2020 and 15 March 2021	2017	6 3/7p	205,013	243,115
Between 30 August 2023 and 10 August 2028	2018	6 3/7p	106,886	–
Between 30 August 2023 and 10 August 2028	2018	6 3/7p	192,435	–
Between 12 March 2021 and 10 August 2028	2018	6 3/7p	41,763	–
Between 1 November 2021 and 1 May 2022	2018	410.0p	80,216	–
Between 1 November 2021 and 1 May 2022	2018	418.0p	154,634	–
			3,921,928	4,140,203

23 Share premium account

	2018 £000	2017 £000
Group and Company		
At 1 January	**6,449**	4,498
Premium on shares issued during the year under the share option schemes	**39**	4
Premium on shares to be issued	**–**	1,947
At 31 December	**6,488**	6,449

24 Other reserves

	Derivatives hedge reserve £000	Merger reserve £000	Total £000
Group			
At 1 January 2017	(64)	34,195	34,131
– net fair value gains in the period	148	–	148
At 31 December 2017	84	34,195	34,279
Cash flow hedges			
– net fair value losses in the period	(14)	–	(14)
At 31 December 2018	**70**	**34,195**	**34,265**

	Derivatives hedge reserve £000	Merger reserve £000	Total £000
Company			
At 1 January 2017	–	17,398	17,398
Cash flow hedges			
– net fair value losses in the period	(12)	–	(12)
At 31 December 2017	**(12)**	**17,398**	**17,386**
Cash flow hedges			
– net fair value gains in the period	18	**–**	**18**
At 31 December 2018	**6**	**17,398**	**17,404**

25 Retained earnings/(accumulated losses)

	Group £000	Company £000
At 1 January 2017	(11,552)	6,884
Changes in accounting policies*	(28)	–
Restated (accumulated losses)/retained earnings at 1 January 2017	(11,580)	6,884
Restated profit for the year*	10,503	10,270
Share options – value of employee service (note 30)	796	796
Deferred tax on financial instruments (note 14)	39	–
Deferred tax on share options (note 14)	383	–
Corporation tax on share options	492	–
Dividends paid (note 8)	(3,345)	(3,345)
At 31 December 2017	(2,712)	14,605
Profit for the year	13,793	11,949
Share options – value of employee service (note 30)	1,074	1,074
Deferred tax on financial instruments (note 14)	(17)	9
Deferred tax on share options (note 14)	(331)	(7)
Corporation tax on share options	131	(12)
Dividends paid (note 8)	(3,928)	(3,928)
At 31 December 2018	**8,010**	**23,690**

* See note 33 for details regarding the restatement of the prior year financial statements which has arisen as a result of a change in the Group's accounting policies.

The profit for the financial year dealt with in the financial statements of the Company was £11,949,000 (2017: £10,270,000). As permitted by Section 408 of the Companies Act 2006, no separate income statement or statement of comprehensive income is presented in respect of the Company.

Of the Company's £23,690,000 retained earnings, £21,099,000 (2017: £10,686,000) is distributable to shareholders following adjustment for the cumulative impact of share options value of service through reserves.

26 Cash flows from operating activities

Reconciliation of profit before tax to net cash generated from operations:

	Group Year ended 31 Dec 2018 £000	Group Year ended 31 Dec 2017 Restated* £000	**Company Year ended 31 Dec 2018 £000**	Company Year ended 31 Dec 2017 £000
Profit before tax	**16,342**	11,503	**11,949**	10,270
Adjustments for:				
Depreciation	**1,869**	1,529	**130**	54
Amortisation	**1,938**	1,316	**–**	–
Share-based payment expense	**1,074**	796	**228**	113
Gain on disposal of subsidiary	**(3,237)**	–	**–**	–
Finance income	**(47)**	(13)	**(5)**	(5)
Finance costs	**480**	472	**267**	135
Dividend income, net of capital contribution	**–**	–	**(7,057)**	(3,500)
Changes in working capital excluding the effects of acquisition:				
(Increase)/decrease in receivables	**(2,040)**	(3,924)	**124**	(155)
(Decrease)/increase in payables	**(1,357)**	3,421	**258**	191
Increase in provisions	**20**	93	**–**	–
Cash generated from operations	**15,042**	15,193	**5,894**	7,103

* See note 33 for details regarding the restatement of the prior year financial statements which has arisen as a result of a change in the Group's accounting policies.

27 Acquisitions

RevStream Inc. ("RevStream")

At 31 December 2017, the fair value adjustments for the August 2017 acquisition of RevStream Inc. (subsequently renamed Aptitude RevStream Inc.) were provisional. The Group has completed the review in 2018 and the net assets acquired in 2017 and the intangibles arising remain at the values disclosed within the 2017 annual report.

As part of the acquisition the Group agreed to repay the outstanding loan balance of £0.6 million. Within the Group's cash flow statement presented in the 2017 annual report, this amount had been classified within cash generated from operations as a movement in payables. For the purposes of this report, it was concluded that this amount should be reclassified as a separate line item within cash flows from financing activities.

Primacy Corporation ("Primacy")

At 31 December 2017, the fair value adjustments for the February 2017 acquisition of Primacy Corporation (subsequently renamed Microgen Software (Primacy) Limited) were provisional. The Group has completed the review in 2018 and the net assets acquired in 2017 and the intangibles arising remain at the values disclosed within the 2017 annual report.

28 Disposals

On 2 July 2018 the Group disposed of the entire share capital and voting rights of Microgen Banking Systems Limited for consideration in cash of £6.9 million. The disposed entity held the trade of the Group's Payments software business.

The book value of the net assets disposed of in the transaction and the gain arising on disposal are as follows:

	Book Value £000
Net assets disposed	
Property, plant and equipment	51
Trade and other receivables	502
Cash and cash equivalents	130
Trade and other payables	(440)
Deferred income	(905)
Deferred income tax liability	(1)
Net liabilities before goodwill allocation	(663)
Goodwill	4,008
Total net assets on disposal	3,345
Consideration received	
Proceeds received on completion	6,900
Directly attributable costs incurred	(318)
Net consideration	6,582
Gain on disposal	3,237

Microgen Banking Systems Limited generated revenue of £1.7 million and £1.0 million profit before non-underlying items and intra-group recharges in 2018 whilst under Microgen's ownership. Prior to the sale, the trades of the Group's Cortex and Musketeer products were transferred into Microgen Solutions Limited, a fellow Group subsidiary. These trades generated revenue of £0.9 million and £0.6 million profit before non-underlying items and intra-group recharges in 2018 whilst under the ownership of Microgen Banking Systems Limited. The remaining £0.8 million of revenue and £0.4 million profit before non-underlying items and intra-group recharges was generated by the Payments software business, the trade held by Microgen Banking Systems Limited on disposal.

The amount of goodwill allocated on disposal has been calculated based on comparing the profits generated by the trade of the Group's Payments business being disposed against the overall profits of the Microgen Financial Systems business over a period of 36 months prior to the date of sale. This value has then been deducted against the carrying value of Goodwill assigned to the Microgen Financial Systems cash generating unit.

29 Commitments and operating leases

The Group and Company have no unprovided financial commitments (2017: £nil).

Operating leases – minimum lease payments

The Group leases various offices and plant and machinery which previously were accounted for as non-cancellable operating lease agreements. Following the adoption of IFRS 16, these are now treated as capital leases and consequently neither the Group or Company held any operating leases during the year (2017: £nil (restated*)).

* See note 33 for details regarding the restatement of the prior year financial statements which has arisen as a result of a change in the Group's accounting policies.

30 Share based payments

Performance Share Plan (PSP)

Under the 2006 Performance Share Plan (PSP), the Remuneration Committee is allowed to grant conditional allocations of par value options in the Company to key executives. In 2016 a new scheme was introduced, the 2016 Performance Share Plan, with many similar features as the 2006 Performance Share Plan. For the purposes of this note 30, references to the PSP is in respect of both the 2006 and 2016 Performance Share Plans. The contractual life of an option is 10 years.

The PSP is considered a Long Term Incentive Plan (LTIP) award.

391,304 options were granted between 12 March and 30 August 2018 (2017: 512,380 awards granted). The performance conditions are in line with those described for the executive Directors on page 51.

At the year end there were 27 (2017: 30) employees currently participating in the scheme. Exercise of an option is subject to continued employment.

Details of the share options outstanding under the PSP during the year are as follows:

	2018		2017	
	Number	**Weighted average exercise price**	Number	Weighted average exercise price
Outstanding at 1 January	**3,032,296**	**6.04p**	4,092,948	5.59p
Granted	**391,304**	**6 3/7p**	512,380	6 3/7p
Exercised	**(252,577)**	**5.51p**	(1,555,788)	5p
Lapsed	**(452,357)**	**6 3/7p**	–	0
Forfeited	**–**	**–**	(17,244)	5p
Outstanding at 31 December	**2,718,666**	**6.08p**	3,032,296	6.04p
Exercisable at 31 December	**1,279,826**	**5.59p**	–	–

252,577 PSP share options were exercised in 2018. The weighted average share price at the date of exercise for share options exercised during 2018 under the Share Option Plans was 459p.

The options outstanding at the end of the year have an expected weighted average remaining contractual life of 6.62 years (2017: 7.32 years).

30 Share based payments (continued)

Share Option Plans

The Group has set up several Share Option Plans, under which the Remuneration Committee can grant options over shares in the Company to employees of the Group. Options are granted with a fixed exercise price equal to the market price of the shares under option at the date of grant. The contractual life of an option is 10 years. Following the introduction of a new sharesave scheme in 2018, 275 employees (2017: 242) currently participate in these Plans.

Options granted under the Share Option Plans will become exercisable on the third anniversary of the date of grant, subject to specific criteria being met. The present criteria are based on a combination of factors including adjusted earnings per share and share price growth over a minimum period of three years.

Exercise of an option is subject to continued employment.

Details of the share options outstanding under the Share Option Plans during the year are as follows:

	2018		2017	
	Number	**Weighted average exercise price**	Number	Weighted average exercise price
Outstanding at 1 January	**1,107,907**	**253.61p**	851,355	177.51p
Granted	**234,850**	**415.27p**	324,921	426.57p
Exercised	**(41,664)**	**40.49p**	(25,871)	108.79p
Lapsed	**(97,831)**	**259.60p**	(42,498)	205.19p
Outstanding at 31 December	**1,203,262**	**293.44p**	1,107,907	253.61p
Exercisable at 31 December	**–**	**–**	45,831	45.62p

The weighted average share price at the date of exercise for share options exercised during the year under the Share Option Plans was 417.1p (2017: 359.3p).

The options outstanding at the end of the year have an expected weighted average remaining contractual life of 2.88 year (2017: 2.55 years).

Included within the outstanding share options at 31 December 2018 under Share Option Plans and the PSP were outstanding share options of 1,279,826 (2017: 1,532,403) which whilst outside of the Association of British Insurers recommended limits, have been approved by the Company's shareholders.

The Group recognised total expenses of £1,074,000 (2017: £796,000) related to equity–settled share–based payment transactions during the year. After deferred tax, the total charge in the income statement was £1,152,000 (2017: £843,000). There was a deferred tax charge of £331,000 (2017: credit of £383,000) and a corporation tax credit of £131,000 (2017: £492,000) taken directly to equity.

The Company recognised total expenses of £228,000 (2017: £113,000) related to the equity-settled share-based payment transactions of its employees during the year. After deferred tax, the total charge in the income statement was £240,000 (2017: £113,000). There was a deferred tax charge of £7,000 (2017: £nil) and a corporation tax charge of £12,000 (2017: £nil) taken directly to equity.

31 Retirement benefit schemes

The Group operates defined contribution retirement benefit plans for qualifying employees in the UK. The assets of the plans are held separately from those of the Group in funds under the control of trustees.

The Group also operates defined contribution retirement benefit plans for its overseas employees with contributions of up to 9.76% of basic salary.

The total expense recognised in the income statement of £964,000 (2017: £656,000) represents contributions payable to these plans by the Group at rates specified in the rules of the plans. As at 31 December 2018, contributions of £67,000 (2017: £55,000) due in respect of the 2018 reporting year had not been paid over to the plans and were included within accruals. The amounts were paid over subsequent to the balance sheet date.

32 Related party transactions

Group

The following transactions were carried out with related parties:

During 2018, the Group entered into transactions with a subsidiary of FDM Group (Holdings) plc, a Company for which Peter Whiting (non-executive Director) is currently a non-executive Director. Ivan Martin (Chairman) also acted as a non-executive Director during 2018 but stood down from his role on 5 March 2019. FDM Group (Holdings) plc provided consultancy services to the Group during the year at a cost of £231,000 (2017: £99,000).

During 2018, the Group entered into transactions with Phoenix Johnson Ltd, a Company for which Naomi Johnson (an experienced facility management professional), the wife of Tom Crawford (Director), is both the sole shareholder and an employee. Phoenix Johnson Ltd provided consultancy services to Microgen plc during the year at a cost of £67,000 (2017: £9,000).

The Company acts as the Group's treasury vehicle and during the year was owed a net £1,579,000 (2017: £4,217,000) from its subsidiary companies.

There were no further related party transactions in the year ended 31 December 2018 (2017: nil), as defined by International Accounting Standard No 24 "Related Party Disclosures" other than key management compensation as disclosed in note 4.

33 Changes in accounting policies

This note explains the impact of the adoption of IFRS 9 'Financial Instruments', IFRS 15 'Revenue from Contracts with Customers' and IFRS 16 'Leasing' on the Group's financial statements together with the new accounting policies that have been applied from 1 January 2018 where they are different to those applied in prior periods.

33(a) Impact on financial statements

As a result of the changes in the Group's accounting policies the prior year financial statements have been restated. The tables on the following pages summarise the impact of the adjustments which are explained in more detail in section 33(b). The new accounting policies where relevant are provided in section 33(c).

Whilst the adoption of IFRS 9 '*Financial Instruments*' from 1 January 2018 resulted in changes in accounting policies, no adjustments were made to the amounts recognised in the financial statements as the effect was deemed to be insignificant.

Condensed consolidated income statement extract

	Year ended 31 Dec 2017 As originally presented £000	IFRS 15 £000	IFRS 16 £000	**Year ended 31 Dec 2017 Restated £000**
Revenue	62,640	381	–	**63,021**
Operating costs	(51,560)	271	230	**(51,059)**
Operating profit	**11,080**	**652**	**230**	**11,962**
Finance income	13	–	–	**13**
Finance costs	(316)	–	(156)	**(472)**
Net finance costs	**(303)**	**–**	**(156)**	**(459)**
Profit before income tax	10,777	652	74	**11,503**
Income tax expense	(841)	(150)	(9)	**(1,000)**
Profit for the year	**9,936**	**502**	**65**	**10,503**
Earnings per share				
Basic	16.4p	0.7p	0.2p	**17.3p**
Diluted	15.6p	0.7p	0.2p	**16.5p**

33(a) Impact on financial statements (continued)

Condensed consolidated balance sheet extracts

	As at 31 Dec 2017 As originally presented £000	IFRS 15 £000	IFRS 16 £000	**As at 31 Dec 2017 Restated £000**
ASSETS				
Non–current assets				
Property, plant and equipment	1,825	–	3,718	**5,543**
Other long–term assets	–	1,281	–	**1,281**
Deferred tax assets	1,336	(6)	91	**1,421**
	72,086	**1,275**	**3,809**	**77,170**
Current assets				
Trade and other receivables	13,363	205	–	**13,568**
	33,451	**205**	**–**	**33,656**
Total assets	**105,537**	**1,480**	**3,809**	**110,826**
LIABILITIES				
Current liabilities				
Trade and other payables	(36,952)	(343)	68	**(37,227)**
Capital lease obligations	–	–	(1,038)	**(1,038)**
	(39,410)	**(343)**	**(970)**	**(40,723)**
Net current liabilities	**(5,959)**	**(138)**	**(970)**	**(7,067)**
Non–current liabilities				
Capital lease obligations	–	–	(3,200)	**(3,200)**
Deferred tax liabilities	(4,060)	(237)	–	**(4,297)**
	(12,242)	**(237)**	**(3,200)**	**(15,679)**
NET ASSETS	**53,885**	**900**	**(361)**	**54,424**
SHAREHOLDERS' EQUITY				
Accumulated losses	(3,251)	900	(361)	**(2,712)**
TOTAL EQUITY	**53,885**	**900**	**(361)**	**54,424**

The above table details line items within the condensed consolidated balance sheet which have been subject to adjustment as a result of the changes in accounting policies. Line items unaffected by the changes have not been included.

The adoption of the new accounting standards during the year had no impact on the comparative figures presented within the Company balance sheet.

33(a) Impact on financial statements (continued)

	As at 31 Dec 2016 As originally presented £000	IFRS 15 £000	IFRS 16 £000	**As at 1 Jan 2017 £000**
ASSETS				
Non-current assets				
Property, plant and equipment	1,330	–	3,160	**4,490**
Other long-term assets	–	1,010	–	**1,010**
Deferred tax assets	738	–	100	**838**
	51,099	**1,010**	**3,260**	**55,369**
Current assets				
Trade and other receivables	8,337	14	–	**8,351**
	32,320	**14**	**–**	**32,334**
Total assets	**83,419**	**1,024**	**3,260**	**87,703**
LIABILITIES				
Current liabilities				
Trade and other payables	(27,847)	(533)	–	**(28,380)**
Capital lease obligations	–	–	(774)	**(774)**
	(31,169)	**(533)**	**(774)**	**(32,476)**
Net current assets/(liabilities)	**1,151**	**(519)**	**(774)**	**(142)**
Non-current liabilities				
Capital lease obligations	–	–	(2,912)	**(2,912)**
Deferred tax liabilities	(1,316)	(93)	–	**(1,409)**
	(8,853)	**(93)**	**(2,912)**	**(11,858)**
NET ASSETS	**43,397**	**398**	**(426)**	**43,369**
SHAREHOLDERS' EQUITY				
Accumulated losses	(11,552)	398	(426)	**(11,580)**
TOTAL EQUITY	**43,397**	**398**	**(426)**	**43,369**

The above table details line items within the condensed consolidated balance sheet which have been subject to adjustment as a result of the changes in accounting policies. Line items unaffected by the changes have not been included.

The adoption of the new accounting standards during the year had no impact on the comparative figures presented within the Company balance sheet.

33(a) Impact on financial statements (continued)

Condensed consolidated statement of cash flow extract

	Year ended 31 Dec 2017* £000	IFRS 16 £000	**Year ended 31 Dec 2017 Restated £000**
Cash flows from operating activities			
Cash generated from operations	14,142	1,051	**15,193**
Interest paid	(316)	(156)	**(472)**
Net cash flows generated from operating activities	**11,301**	**895**	**12,196**
Cash flows from investing activities			
Net cash used in investing activities	**(11,627)**	**–**	**(11,627)**
Cash flows from financing activities			
Repayment of capital lease obligations	–	(895)	**(895)**
Net cash used in financing activities	**(4,262)**	**(895)**	**(5,157)**
Net decrease in cash and cash equivalents	(4,588)	–	**(4,588)**
Cash, cash equivalents and bank overdrafts at beginning of year	23,849	–	**23,849**
Exchange rate losses on cash and cash equivalents	(124)	–	**(124)**
Cash and cash equivalents at end of year	**19,137**	**–**	**19,137**

* Amounts displayed above are as originally presented but after the reclassification of the loan repayment totalling £0.6 million which was made as part of the Group's acquisition of RevStream Inc. in 2017. This amount had been shown in cash generated from operations but was reclassified as a separate item within cash flows from financing activities. See note 27 for details.

The above table details line items within the condensed consolidated statement of cash flow which have been subject to adjustment as a result of the changes in accounting policies. Line items unaffected by the changes have not been included.

The adoption of the new accounting standards during the year had no impact on the comparative figures presented within the Company statement of cash flow.

33(b) Impact of adoption

IFRS 9

IFRS 9 '*Financial instruments*' replaces the provisions of IAS 39 that relate to the recognition, classification and measurement of financial assets and financial liabilities, derecognition of financial instruments, impairment of financial assets and hedge accounting.

As mentioned, the adoption of IFRS 9 '*Financial Instruments*' from 1 January 2018 resulted in changes in accounting policies but no adjustments were made to the amounts recognised in the financial statements as the effect was deemed to be insignificant. The new accounting policies are set out in note 33(c). In accordance with the transitional provisions in IFRS 9 (7.2.15) and (7.2.26), comparative figures have not been restated.

33(b) Impact of adoption (continued)

IFRS 15

The Group has adopted IFRS 15 '*Revenue from Contracts with Customers*' from 1 January 2018 which has resulted in changes in accounting policies and adjustments to the amounts recognised in prior year financial statements. In accordance with the transition provisions in IFRS 15, the Group has adopted the new accounting policies retrospectively and has restated comparatives for the 2017 financial year.

The income statement impact on each of the Group's operating segments for the year ended 31 December 2017 is summarised below:

Year ending 31 December 2017

			IFRS 15 adjustments			
	Ref	31 Dec 2017 As originally presented* £000	Aptitude Software £000	Microgen Financial Systems £000	Group £000	**IFRS 15 31 Dec 2017 Restated £000**
Revenue	(i)	62,640	381	–	–	**63,021**
Operating Costs	(ii)	(51,560)	270	1	–	**(51,289)**
Income tax expense	(iii)	(841)	(150)	–	–	**(991)**

*The amounts in the tables above do not include the adjustments from the adoption of IFRS 16

In addition, the following adjustments were made to the amounts recognised in the condensed consolidated balance sheet at the date of initial application (1 January 2018):

	Ref	31 Dec 17 As originally presented* £000	Re-measurements £000	**IFRS 15 carrying amount 1 Jan 18 £000**
Other long-term assets	(ii)	–	1,281	**1,281**
Deferred tax asset	(iii)	1,336	(6)	**1,330**
Trade and other receivables	(i)	13,363	205	**13,568**
Trade and other payables	(i)/(ii)	(36,952)	(343)	**(37,295)**
Deferred tax liability	(iii)	(4,060)	(237)	**(4,297)**

*The amounts in the tables above do not include the adjustments from the adoption of IFRS 16

The impact on the Group's retained earnings as at 1 January 2018 and 1 January 2017 is as follows:

	Ref	**2018 £000**	2017 £000
Closing retained earnings at 31 December as originally presented in the previous year		**(3,251)**	(11,552)
Recognition of revenue	(i)	**(138)**	(519)
Commission recognised on new customer contracts	(ii)	**1,281**	1,010
Movement in deferred tax	(iii)	**(243)**	(93)
Adjustment to retained earnings from adoption of IFRS 15		**900**	398
Opening retained earnings 1 January – IFRS 15		**(2,351)**	(11,154)

33(b) Impact of adoption (continued)

(i) Recognition of software licences and maintenance services

The Group's revenue contracts overwhelmingly include the provision of licenced software where enhancement of the core software over time represents an integral part of the obligation to our customers. For Aptitude Software products this enhancement typically involves significant ongoing optimisation of functionality and performance for its users. For Microgen 5Series, the key product of Microgen Financial Systems, the enhancements typically provide mission-critical and timely regulatory functionality. These enhancements are essential for the ongoing compliance of its users and their clients.

These material ongoing enhancement obligations have historically been the reason why the significant majority of our products are structured around Annual Licence Fees for which revenue has been recognised over time in prior periods. Further information in respect of the accounting policies governing the recognition of software licence and maintenance revenues in previous reporting periods is detailed on page 74 of the 2017 Annual Report.

IFRS 15 requires an entity to evaluate whether the ongoing obligations represent a performance obligation that is distinct from the licence. If not distinct the combined performance obligation is evaluated against recognition over time criteria. If the licence is distinct it is recognised separately from the other performance obligations.

The Group's evaluation of this judgement for Aptitude Software products and Microgen 5Series is further explained below.

<u>*Aptitude Software products*</u>

Aptitude Software's specialised financial management software applications require optimisation of functionality and performance in the initial years of their use to ensure that the applications continue to meet the requirements of the users. This requirement is due to the significant complexity of the applications which specialise in very rapidly processing very high volume complex, business event-driven transactions and calculations. As a result, the Group has concluded that the software licence and maintenance services are not distinct from each other during the period in which the functionality is being optimised and should be combined to create a single performance obligation ('Combined Performance Obligation'). The Group's evaluation is that the Combined Performance Obligation meets the criteria for revenue to be recognised over time as the services are significantly modifying and optimising the software the customer controls.

In determining the most appropriate method of recognising revenue over time, the Group has concluded that the Combined Performance Obligation will be recognised in line with development activity related to the relevant product over the period in which the enhancements are required by the particular user.

The transfer of the Combined Performance Obligation is considered complete when the intense functionality enhancement activity in the initial years diminishes to a consistent level of ongoing maintenance obligation which is delivered through either annual maintenance charges or Annual Licence Fees.

Consequently, the adoption of IFRS 15 to Aptitude Software's revenue from customer contracts has resulted in additional revenue being recognised totalling £381,000 and £509,000 for the year ended 31 December 2017 and 31 December 2018 respectively.

The Group's net asset position reduced by £138,000 on 1 January 2018 (£519,000 lower on 1 January 2017) as a result of this adoption.

33(b) Impact of adoption (continued)

Microgen 5Series

Microgen 5Series, the leading product of Microgen Financial Systems, is focused on the Trust & Fund Administration market. A core requirement of Microgen 5Series is to enable its users, and in turn their customers, to remain compliant with multiple significant financial industry regulations. The Microgen team expends considerable effort ensuring that the product remains up to date with changing regulations across multiple jurisdictions. Should this effort not be expended, and the product consequently fails to be kept updated, the risk to customers would be such that they would be unlikely to continue to use the product. As a result of this need for ongoing material modification to the product's functionality, the Group considers that the two promises in a typical contract (the software licence and the maintenance services) should be combined to create a Combined Performance Obligation, the revenue relating to which is recognised over time. With revenue continuing to be recognised over time the adoption of IFRS 15 does not result in any restatement of revenues recognised in previous reporting periods.

(ii) Commission recognised on software licence sales

In previous reporting periods, commission incurred on software licence sales would be recognised in full as and when it fell due. Under the adoption of IFRS 15, the Group's assessment is that these commissions meet the definition of incremental costs of obtaining a contract. As a result, an asset is required to be recognised which will typically be amortised across the expected contract life of each client.

To reflect this change in policy, the Group has recognised a reduction in its commission related costs of £271,000 and £113,000 for the year ended 31 December 2017 and 31 December 2018 respectively.

The Group's net asset position improved by £1,281,000 on 1 January 2018 (£1,010,000 on 1 January 2017) as a result of long-term assets being recognised for the prepaid commissions which will be amortised across the life of the respective contracts.

(iii) Movement in deferred tax

As a result of the adjustments to the net asset position and subsequent retained earnings balance on 1 January 2018, the Group has recognised a net deferred tax liability of £243,000 (1 January 2017: £93,000). This amount has been calculated based on the net equity adjustment multiplied by the relevant tax rate prevailing in the jurisdictions of those Group entities for which IFRS 15 has impacted.

For the year ended 31 December 2017 the Group has recognised a movement through deferred tax creating an additional tax expense of £150,000 due to the adoption of IFRS 15 bringing about an increase in profit before tax.

For the year ended 31 December 2018, the adjustment to the net asset position and subsequent retained earnings was fully realised within the current year tax charge. The deferred tax liability of £243,000 recognised on 1 January 2018 is now within the Group's current income tax liability.

33(b) Impact of adoption (continued)

IFRS 16

The Group has early adopted IFRS 16 'Leasing' from 1 January 2018 which resulted in changes in accounting policies and adjustments to the amounts recognised in the previous period financial statements due to the introduction of a single lessee accounting model which eliminates the previous classification within IAS 17 of leases being either operating or finance.

In accordance with the transition provisions in IFRS 16, the Group has adopted the new rules retrospectively and has restated comparatives for the 2017 financial year.

The income statement impact on each of the Group's operating segments for the year ended 31 December 2017 is summarised below:

Year ending 31 December 2017

			IFRS 16 adjustments			
	Ref	31 Dec 2017* £000	Aptitude Software £000	Microgen Financial Systems £000	Group £000	**IFRS 16 31 Dec 2017 Restated £000**
Operating costs	(i)	(51,289)	22	32	176	**(51,059)**
Finance costs	(i)	(316)	(78)	(32)	(46)	**(472)**
Income tax expense	(ii)	(991)	16	–	(25)	**(1,000)**

*The amounts in the table above include the adjustments from the adoption of IFRS 15

In addition, the following adjustments were made to the amounts recognised in the condensed consolidated balance sheet at the date of initial application (1 January 2018):

	Ref	31 Dec 17* £000	Re–measurements £000	**IFRS 16 carrying amount 1 Jan 18 £000**
Property, plant and equipment	(i)	1,825	3,718	**5,543**
Deferred tax asset	(ii)	1,330	91	**1,421**
Trade and other payables	(i)	(37,295)	68	**(37,227)**
Obligations under capital lease	(i)	–	(4,238)	**(4,238)**

*The amounts in the table above include the adjustments from the adoption of IFRS 15

The impact on the Group's retained earnings as at 1 January 2018 and 1 January 2017 is as follows:

	Ref	**2018 £000**	2017 £000
Closing retained earnings at 31 December in the previous year – after IFRS 15 restatement		**(2,351)**	(11,154)
Capitalisation of property leases previously recognised as operating lease	(i)	**(452)**	(526)
Movement in deferred tax	(ii)	**91**	100
Adjustment to retained earnings from adoption of IFRS 16		**(361)**	(426)
Opening retained earnings 1 January – IFRS 15 and IFRS 16		**(2,712)**	(11,580)

33(b) Impact of adoption (continued)

(i) Accounting for property leases previously recognised as operating leases

As a lessee, the Group previously classified leases as operating or finance leases based on its assessment of whether the lease transferred significantly all of the risks and rewards incidental to ownership of the underlying asset to the Group. Under IFRS 16, the Group recognises right-of-use assets and lease liabilities for most leases based on the definition detailed within the Group's accounting policy on page 81.

As a consequence, the Group recognised right-of-use assets on its property leases totalling £3,718,000 and corresponding capital lease liabilities of £4,238,000 on 1 January 2018 with a net reduction in retained earnings of £452,000 (£526,000 on 1 January 2017) after taking account of a reduction in trade and other payables of £68,000 due to an onerous lease accrual recognised under the previous policy.

Under IFRS 16, the Group has chosen to apply the practical expedient in relation to its assessment of whether leases are onerous by applying IAS 37 "*Provisions, Contingent Liabilities and Contingent Assets*" immediately before the date of initial application as an alternative to performing an impairment review. Subsequently, the right-of-use asset at the date of initial application was adjusted by the amount of any provision for onerous leases recognised in the statement of financial position immediately before the date of initial application.

The assets are amortised on a straight–line basis over the term of the lease with the liability being measured at amortised cost using the effective interest method. During the year ended 31 December 2017 and 31 December 2018, additional depreciation of £822,000 and £1,024,000 was charged along with lease liability interest costs totalling £156,000 and £167,000. These amounts are net of capital lease repayments which, under IAS 17 were charged to the income statement on a straight-line basis in line with their classification as operating leases. Instead, under IFRS 16, these amounts should have been accounted for as a reduction against the lease liability. Subsequently, operating lease costs amounting to £1,050,000 and £1,482,000 respectively were credited from the Group's income statement. The net impact on the Group's income statement for the year ended 31 December 2017 and 31 December 2018 is an increase in profit before tax of £74,000 and £291,000 respectively.

(ii) Movement in deferred tax

The recognition of right-of-use assets and corresponding lease liabilities under IFRS 16 for the Group's various property leases gives rise to deferred tax balances through temporary timing differences. On 1 January 2018, the Group has recognised a deferred tax asset of £91,000 (deferred tax asset of £100,000 on 1 January 2017).

For the year ended 31 December 2017 and 31 December 2018, the Group recognised a movement through deferred tax which created an additional tax expense of £9,000 and £22,000 respectively. This resulted from the increase in profit before tax across both periods caused by the adoption of IFRS 16.

33(c) Changes to accounting policies applied from 1 January 2018

<u>Software licences</u>

This policy replaces "Software licences" on page 74 of the 2017 annual report in which Annual Licence Fees were recognised in the period the services were provided, using a straight-line basis over the term of the licence.

On adoption of IFRS 15, the Group makes an assessment of whether ongoing contractual obligations represent a performance obligation that is distinct from the licence. Where the licence fee is determined to be distinct, it is recognised separately from the other performance obligations at the time of the delivery of the licenced software.

If, however, the conclusion is that the licence is not distinct, a combined performance obligation is recognised over time which is determined on a contract by contract basis and represents the period over which significant modification and optimisation of the software is required.

33(c) Changes to accounting policies applied from 1 January 2018 (continued)

In determining the most appropriate method of recognising revenue over time, the Group has concluded that for Aptitude Software products the combined performance obligation will be recognised in line with development activity related to the relevant product over the period in which the enhancements are required by the particular user.

Once this period of intense functionality enhancement has diminished to a consistent level of ongoing maintenance obligation, the transfer of combined performance obligation is considered complete. Where this ongoing obligation is delivered through Annual Licence Fees this amount is recognised on a straight-line basis in the period covered by the invoice.

For Microgen 5Series, the leading product of Microgen Financial Systems, there is a continuing requirement to provide enhancements to ensure regulatory compliance and consequently the recognition of the Annual Licence Fee is done on a straight-line basis over the period covered by the invoice.

Software maintenance

Fees relating to the maintenance of the Group's software are now recognised depending on the Group's assessment of whether this ongoing contractual maintenance represents a performance obligation that is distinct from the licence. If the licence is distinct, the software maintenance fees are recognised in the period the services are provided, using a straight-line basis over the term of the maintenance agreement. This is consistent with the Group's previous policy detailed on page 74 of the 2017 annual report.

If, however, the licence is not distinct, the software maintenance fees form a combined performance obligation which is recognised over time in line with the development activity related to the relevant product over the period in which the enhancements are required by the particular user.

Consistent with the treatment of software licence revenue, once this period of intense functionality enhancement has diminished to a consistent level of ongoing maintenance obligation, the combined performance obligation is considered complete and maintenance fees from this point are recognised on a straight-line basis in the period the services are provided.

Commissions (a new accounting policy)

Under previous accounting policies, software sales commission costs were recognised in full through the income statement on the date of signing the contract. On adoption of IFRS 15, these costs meet the definition of incremental costs of obtaining a contract. As a result, an asset is recognised at inception of the contract for the total value of commission payable which will typically be amortised across the contract life of each client.

Leasing

The Group leases a number of properties which, under IAS 17, were classified as operating leases. Consequently, the accounting policy (detailed on page 75 of the 2017 annual report) was to charge the rentals directly to the income statement on a straight-line basis over the life of the lease.

On adoption of IFRS 16, the Group is now required to recognise right-of-use assets and corresponding lease liabilities in respect of these property leases due to its single lessee accounting model.

The right-of-use asset is subsequently depreciated using the straight-line method from the commencement date to the earlier of the end of the useful life of the right-of-use asset or the end of the lease term and is adjusted to reflect any onerous lease arrangements.

The lease liability is initially measured at the present value of the lease payments and then unwound over the remaining lease term with an interest charge recognised in the income statement.

Where the Group has short term leases or leases of low-value assets, the treatment of these is consistent with that of an operating lease.

33(c) Changes to accounting policies applied from 1 January 2018 (continued)

Trade and other receivables

Under IFRS 9, a provision for impairment of trade and other receivables is assessed on a forward-looking basis using the expected credit loss method with the simplified approach permitting the use of the lifetime expected loss provision for all trade receivables. This represents a change from the prior year accounting policy "Trade receivables" detailed on page 78 of the 2017 annual report where provisions for impairment were only established when there was objective evidence that the Group will not be able to collect all amounts due according to the original terms of the receivables.

Shareholder Information

Size of Shareholding	Number of Shareholders	Percentage of Total Shareholders	Number of shares	Percentage of total issued shares
1 – 1,000	561	56.84%	173,438	0.28%
1,001 – 5,000	209	21.17%	482,987	0.79%
5,001 – 50,000	126	12.77%	2,179,080	3.56%
50,001 – 500,000	66	6.69%	10,454,150	17.09%
500,001 and above	25	2.53%	47,887,482	78.28%
Totals	**987**	**100.00%**	**61,177,137**	**100.00%**

Investor Type	Number of Shares	Percentage of Total issued shares
Nominee Companies	46,743,236	76.41%
Bank & Bank Nominees	5,232,399	8.55%
Private Shareholders	5,274,336	8.62%
Pension Funds	1,500,000	2.45%
Limited Companies	60,677	0.10%
Other Institutions	2,337,133	3.82%
Deceased Shareholders	29,356	0.05%
Totals	**61,177,137**	**100.00%**

Registered Office and Group Head Office

Microgen plc
Old Change House
128 Queen Victoria Street
London
EC4V 4BJ

Telephone:(0) 203 880 7100
e-mail: investors@aptitudesoftware.com

Registrar

Link Asset Services
The Registry
34 Beckenham Road
Beckenham
Kent
BR3 4TU

Telephone: 0871 664 0300
e-mail: shareholderenquiries@linkgroup.co.uk

Microgen plc ordinary shares are listed on the main market of the London Stock Exchange.

Shareholders' enquiries

Enquiries regarding shareholdings or dividends should in the first instance be addressed to Link Asset Services.

Please note that calls will cost 12p per minute plus network extras. Lines are open 9.00 am – 5.30 pm Monday to Friday, excluding public holidays.

Annual General Meeting

The forthcoming Annual General Meeting will be held at 9.00 a.m. on Tuesday, 21 May 2019 at Old Change House, 128 Queen Victoria Street, London EC4V 4BJ. Details are given in a separate notice to shareholders enclosed with this Annual Report. A copy of the Notice of Annual General Meeting together with this Annual Report is posted on the Company's website www.aptitudesoftwaregroup.com.

microgen plc
Old Change House
128 Queen Victoria Street
London, EC4V 4BJ
0203 880 7100

investors@aptitudesoftware.com
www.aptitudesoftwaregroup.com

Company Registered Number: 1602662
Microgen PLC