Instem

Information Solutions For Life

ANNUAL REPORT 2019

500

More than 500 clients

Instem has over 500 customers with its blue chip customer base consisting of the leading pharmaceutical, medical device, chemical and contract research organisations as well as academic, government and privately funded research institutions across many sites worldwide. These include all of the top 25 pharmaceutical and biotech companies such as GlaxoSmithKline and AstraZeneca.

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As the number one global provider, we estimate that approximately half of the world's preclinical drug safety data has been collected over the last 20 years using Instem software.

Instem

Information Solutions For Life

Powerful Solutions • Unique Perspective • Global Coverage

Instem is a leading provider of IT solutions & services to the life sciences market delivering compelling solutions for Study Management and Data Collection; Regulatory Solutions for Submissions and Compliance; and Informatics-based Insight Generation.

Instem solutions are in use by over 500 customers worldwide, including all the largest 25 pharmaceutical companies, enabling clients to bring life enhancing products to market faster. Instem's portfolio of software solutions increases client productivity by automating study-related processes while offering the unique ability to generate new knowledge through the extraction and harmonisation of actionable scientific information.

Instem products and services now address aspects of the entire drug development value chain, from discovery through to market launch. Management estimate that over 50% of all drugs on the market have been through some part of Instem's platform at some stage of their development. To learn more about Instem solutions and its mission, please visit instem.com.

HIGHLIGHTS

We are delighted with our performance during the period with our proven business model generating improvements across all of our key performance metrics.

FINANCIAL HIGHLIGHTS

- Revenues increased 13% to £25.7m (2018: £22.7m)
  - Software as a Service (SaaS) revenues increased 16% to £6.4m (2018: £5.5m)
  - Recurring revenues (annual support and SaaS) increased 9% to £14.9m (2018: £13.7m)
- Adjusted EBITDA* of £4.9m (2018: £4.1m)
- Reported loss before tax of £0.9m (2018: profit of £1.7m), after **non-cash goodwill and intangible asset impairment of £3.2m (2018: £nil)
- Adjusted profit before tax*** of £3.2m (2018: £2.8m)
- Fully diluted loss per share of (5.7p) (2018: 8.7p earnings per share)
- Adjusted*** fully diluted earnings per share of 18.4p (2018: 15.5p)
- Cash balance as at 31 December 2019 of £6.0m (2018: £3.6m)

*Earnings before interest, tax, depreciation, amortisation, impairment of goodwill and capitalised development costs and non-recurring items. 2019 reflects the adoption of IFRS16.
** This is associated with our Clinical business and covered in more detail in the Strategic Report.
***After adjusting for the effect of foreign currency exchange on the revaluation of inter-company balances included in finance income/(costs), non-recurring items, impairment of goodwill and capitalised development costs and amortisation of intangibles on acquisitions.
Profit is adjusted in this way to provide a clearer measure of underlying operating performance.

OPERATIONAL HIGHLIGHTS

- Continued transition to SaaS deployment, increasing recurring revenue
- Rapidly growing informatics service, automating a key industry process of "Target Safety Assessment"
- Earnings enhancing acquisition of Leadscope Inc for up to $4.7m, extending our artificial intelligence technology offering and opening up cross-selling and upselling opportunities
- FDA's SEND initiative continued to underpin strong technology enabled outsourced services revenue growth

We are delighted with our performance during the period with our proven business model generating improvements across all of our key performance metrics. We have an established base from which to grow, both organically and via acquisition, and have established long-term relationships with our blue-chip client base. Importantly, we are well positioned to add new clients and generate increasing revenues from existing clients while our transition to a SaaS model increases visibility.

Increased revenue predictability and high retention rates provide a strong foundation from which the business can grow as it builds on the momentum achieved during 2019. While some future uncertainty inevitably remains as a consequence of the COVID-19 pandemic, the majority of our revenue comes from clients whose laboratories are regarded as "essential businesses" and therefore remain active, with many working on COVID-19 related vaccines and therapies. Consequently, we have remained very busy, have good visibility over a strong H1 2020 performance and continue to have confidence in the longer term outlook for the business, supported by a strong cash balance at the end of April 2020 of £8.3m. Our staff are currently working effectively from home and are highly motivated by our work which is directly contributing to COVID-19 research and development.

P J Reason
Chief Executive

"Our performance for the full year builds on the momentum achieved during the first half, with the Company producing strong results across all business areas whilst strengthening its overall offering via the acquisition of Leadscope."

D Gare
Non-Executive Chairman

Chairman's Statement

Our performance for the full year builds on the momentum achieved during the first half, with the Company producing strong results across all business areas whilst strengthening its overall offering via the acquisition of Leadscope.

We are delighted to report a 13% increase in total revenues year-on-year. Our strategic move towards high quality SaaS revenues contributed to a 9% growth in recurring revenues for the period, providing increased levels of certainty and visibility. Importantly, the proportional reduction in perpetual licence revenues makes the business less susceptible to the unpredictable nature of relying on significant contract wins to meet forecast expectations.

The cash balance at the year-end was £6.0m (2018: £3.6m).

FIRM FOUNDATIONS

Given the successful and ongoing transition to SaaS-based revenues the Company is benefiting from increasing levels of predictability whereby revenues are recognised on a monthly basis over the subscription period. This form of contract is proving attractive to both existing and new clients. The Company has proven its ability to manage this strategic change in revenue mix with SaaS-based orders and revenue growth exceeding the Board's expectations during the period.

The combination of organic and acquisitive growth during the period has resulted in a further diversification of revenue streams while also providing opportunities for the Company to cross-sell and upsell to existing clients. November's acquisition of Leadscope strengthened the Company's Artificial Intelligence ("AI") offering. We see the AI sector as an increasingly important part of our business and are extremely excited by the growth potential, albeit from a low base.

STRATEGIC DIRECTION

The business has a number of key growth drivers and we believe that the momentum achieved during the period provides validation of its strategic potential. We were delighted to have made notable progress on a number of fronts during the period, namely:

- Continued growth in SaaS-based revenues both through new business wins and via the ongoing conversion of existing clients. As such, SaaS-based revenue increased 16% to £6.4m during the period;
- The expansion of "technology enabled outsourced services", where 2019 revenue was £5.6m (2018: £3.3m):
  - Our market leading offering for the SEND services business continued to perform well during the period.
  - We strengthened our AI services with increased demand for Target Safety Assessment ("TSA") driving revenue growth and the acquisition of Leadscope broadening our offering. This has provided a new entry point for the Company, consequently strengthening growth opportunities within our existing client base whilst at the same time increasing our attraction to new clients.

We have made a non-cash impairment provision of £3.2m against goodwill and other intangible assets in our Alphadas early phase clinical data collection business, which is commented on in more detail in the Strategic Report. The proportion of revenue associated with the clinical business is immaterial in the context of the Group as a whole.

In light of COVID-19, the Instem Board decided in March 2020 that until any material business risk from the pandemic is behind us, our 2020 objectives would be moderated so that we can successfully navigate the crisis. We will strive to ensure that we retain a global, leading and enthusiastic set of employees, clients and investors, who will enable us to capitalise on opportunities as the world recovers. Consequently, our revised focus will be to:

- Ensure our staff and their families stay safe, engaged and effective;
- Provide the products and services that our clients need to continue their important work; and
- Take appropriate action where necessary to safeguard our strong and stable financial position.

Notwithstanding COVID-19, our non-organic growth ambitions remain intact; we continue to evaluate acquisition opportunities and our strategy to consolidate our fragmented industry is a key focus. We will maintain our rigorous approach to appraisal and diligence of any acquisition targets. I remain confident that our objective to acquire complementary technologies or enter adjacent markets will be successfully executed, particularly given our balance sheet strength.

I am pleased to report that our staff have safely and effectively transitioned to home working, our clients have, on the whole, continued to operate and Instem is increasingly playing an important role in contributing directly to their COVID-19 related research and development activities.

I am extremely satisfied with the Company's performance during the period as we continued to grow the business organically whilst providing an increasingly stable revenue model with improved quality of earnings. So far in 2020, business has been strong, we anticipate a robust H1 2020 performance and we are cautiously optimistic that this will continue through the remainder of the year. In summary we have a highly scalable platform and are excited by both organic and acquisitive growth opportunities.

D Gare
Non-Executive Chairman

STRATEGIC DEVELOPMENT

During the period under review Instem generated positive returns across the Group with key momentum drivers being:

- increased levels of recurring revenues;
- the ongoing transition to high-quality subscription-based SaaS revenues;
- continued expansion of 'technology enabled outsourced services';
- growing regulatory-backed opportunities;
- strong organic growth; and
- further broadening of our product portfolio via the earnings enhancing acquisition of Leadscope.

Importantly, the Company delivered increased profit whilst investing in its products and personnel. This provided capacity and scope to increase the Company's market share at the same time as increasing cross-selling and upselling opportunities within the existing client base.

There was a 78% increase in new business SaaS subscription order value over the prior year, with the proportion of SaaS subscription orders compared with perpetual software licenses increasing from 33% in 2018 to 64% in 2019. Some of this increased order value benefited SaaS revenue in 2019 but the first full year impact will be realised in 2020.

COVID-19

With both staff and customers based in China, some directly in Wuhan, Instem's Business Continuity team was engaged at the early stages of the pandemic. Our first priority was to address personal safety and to then ensure business continuity for both Instem and our clients. Our Business Continuity team has continued to spearhead our response as the crisis has escalated and spread worldwide.

Like most businesses, we have been closely following and implementing the advice of agencies, such as the World Health Organization and US Centers for Disease Control & Prevention, and quickly introduced international and domestic travel bans, as well as policies to increase hygiene and social distancing. We required staff with even mild symptoms to stay at, or work from home and thus far our operations have not been materially impacted.

While these measures have had some impact on client-related site work, we have worked collaboratively with our customers to find ways to complete much of this work remotely. In some cases, this is increasing efficiency as we save on both the time and expense of international travel and we hope to see some enduring benefits as we, and our clients, realise how much can be achieved in this way.

Instem is fortunate to have invested heavily over the last 5 years in technology that supports our widely dispersed workforce and the many staff that already work entirely, or frequently, from home. Our regulatory compliant framework, certification to quality standard ISO 9001 and information security management standard ISO 27001, all require us to have a risk management and business continuity mindset embedded in the organisation. We also reflect these requirements with the operational partners on whom we rely, and they have confirmed their ability to continue to support Instem and our clients during this crisis.

We have quickly, but carefully, moved to a position where all of our staff are working from home, keeping ahead of those locations where governmental mandatory "work from home" and/or "shelter at home" is now in place. As a business supporting critical, life enhancing/sustaining scientific research and development such as the activities we are now routinely undertaking to produce SEND submissions for COVID-19 related drugs and vaccines, we believe that we will likely retain the right to attend our offices; however our personnel are only doing so in exceptional circumstances. We are starting to see some limited domestic travel to sites in China, to satisfy prior client commitments, as business there returns to a "new normal".

While most of our staff are working equally efficiently remotely, we are addressing situations where staff need to balance home working with caring for children at home or other dependents, and also occasions where external network connectivity is challenged as entire regions are restricted to home working and schooling.

The immediate disruption to client operations, as they determined how to adopt safe working practices for their essential laboratory staff and transitioned other staff to home working, seems to be largely behind us. Some new business opportunities have been delayed, principally those in the early phase clinical and academic sectors, although most 2020 opportunities remain within the year and, to date, no pipeline opportunities have been cancelled altogether by clients.

While we cannot be certain what the impact will be of a sustained period of global business disruption, at this point, we believe that Instem and the majority of our clients are well positioned to successfully manage their way through it.

One particularly beneficial impact of the extensive work-from-home restrictions has been a significant improvement in the ability for our boutique corporate finance partner to contact principals in potential acquisition targets, as part of their target identification and qualification assignment. It has also facilitated follow-on meetings for the Instem team with those businesses deemed interesting, with ongoing dialogue across a number of potentially interesting opportunities. Surveys of strategic and financial buyers are suggesting that acquisition valuation multiples have reduced as a consequence of COVID-19, which may help unlock some opportunities for Instem.

SECTION 172 STATEMENT

In accordance with section 172 of the Companies Act 2006 the Directors, collectively and individually, confirm that during the year ended 31 December 2019, they acted in good faith and have upheld their 'duty to promote the success of the company' to the benefit of its stakeholder groups.

Instem identifies five key stakeholder groups associated with our business:

- Employees
- Clients
- Shareholders
- Partners
- Communities in which we operate

Employees

We recognise that our employees are critical to the success of our business and we focus considerable attention on their positive engagement. This commences from their initial induction into the company where new joiners are introduced to our Company Values and our Culture Handbook, which provide a framework for ensuring an alignment between company and employee interests. There is frequent and open communication with employees, who are encouraged to share their opinions, informally and through regular surveys, both attributable and anonymous. We have consistently used the Gallup Q12 engagement questions in our surveys to identify trends and our survey questions have been expanded over recent years to align with those used by the Great Place to Work® organization. Employee-led, location specific Action Groups propose and implement changes to address employee identified opportunities for improvement.

Clients

We are fortunate to operate in an industry that has a highly collaborative culture with many businesses and scientific related societies and organisations. Instem participates widely in these groups, networking closely with our clients and prospects, often taking a leadership role based on the considerable expertise of our staff and the broad experience we gain from working with many clients. In addition, Instem organizes multiple client engagement forums related to sectors of our market, specific products and common industry practices or regulation. These Special Interest Groups provide input to strategy and operations, allowing us to ensure that our products and services meet the needs of the entire client (and prospect) community.

We survey our clients annually and, more regularly, at the completion of each project and as we address each client support call. These surveys also help us to plan and prioritise changes to our products, services and the broader engagement we have with clients across our business.

In February 2019 we held the first meeting of our new Client Strategic Advisory Board ("SAB"), comprising senior staff, with a broad industry perspective, from a variety of client organisations. The SAB, which meets twice per year, is tasked with informing/validating Instem high-level business, product and service strategy to ensure we maximise our mission to enable our clients to bring their life enhancing products to market faster.

Shareholders

With the professional guidance of our broker and nominated adviser, N+1 Singer, and our financial public relations advisers, Walbrook PR, the Group engages with shareholders through multiple channels, aiming to provide clear and informative updates. Regulated News Service releases are provided regularly, both those required as an AIM-listed business and additional releases to keep shareholders, and the wider market, informed about interesting business developments. We undertake multi-day institutional investor roadshows following the announcement of interim and full-year results, which provides an opportunity to also engage with a wider group of financial analysts and media. We typically also organise or attend retail investor events, to ensure all shareholders have access to executive management on a regular basis.

As broker research is typically not available to all shareholders, we engage Progressive Equity Research to produce additional analyst research, which is freely available from the Instem Investor Centre website and through other investor channels. In addition, we subscribe for services from Proactive Investor who make a range of Instem video and audio interviews available for shareholder and wider investor consumption, aggregated with their own financial journalist coverage of Instem news.

While our annual general meeting typically attracts very few independent shareholders, voting on shareholder resolutions provides a formal avenue to receive shareholder feedback and an opportunity for us to consider the implications should resolutions not pass unanimously. We also take note of feedback from shareholder representative groups, who typically provide structured feedback ahead of annual general meetings.

Partners

Instem has a number of strategic partners, with whom we actively engage to enhance our portfolio of world-leading products and services. Formal agreements govern these relationships and nominated Instem employees are responsible for maintaining a regular and open dialogue to ensure ongoing alignment of interests. We frequently engage our partners in the wide variety of methods of client engagement described above to ensure they have a direct two-way line of communication with the end-users.

Communities

Instem has several offices around the world and many employees who work from home. We recognise our role as responsible employers and community representatives and encourage and support our staff in this regard, regularly providing matching funding for charitable activities. There are regular staff organised fund raising events and other activities to support local causes that occur within our offices.

With only office (and home) based activities, our environmental impact is generally quite modest although we do encourage efficient energy usage and recycling in office locations. We also consider energy usage with our external data centre partners as our clients increasingly adopt our SaaS solutions increasing our data centre footprint. Through investment in technology, staff in the right places and changing business practices, we are also striving to reduce the amount of air travel for staff between our international offices and to our globally dispersed client-base.

Significantly, from a global community perspective, we also recognise the considerable role we play in helping our clients to provide their life enhancing products across the world. We continually assess how we can optimize what we do to accelerate the availability of safe and effective drugs, vaccines and medical devices, as well as safer and more effective agrochemicals, that help to increase production to feed an ever-growing world population.

MARKET REVIEW

The market backdrop continues to be favourable for the Company given global population growth and life expectancy underpinning increased demand for successful innovation in life sciences. Increasing amounts are being invested in the biotech industry with the pharmaceuticals sector investing heavily in drug development.

In the pharmaceutical industry, which represents the largest proportion of Instem's revenue, we refer again to the Pharma R&D Annual Review, the 2020 version of which was released by Pharma Intelligence in March this year. This report shows that the industry grew strongly in the last 12 months with a 9.6% increase (2019: 6%) in the total number of drugs in the regulatory stages of global R&D, continuing a multi-year growth trend that, subject to the potential impact of COVID-19, sees no sign of abating. Most relevant to Instem is the 13.2% increase (2019: 6%) in the number of drugs at the pre-clinical (or non-clinical) phase of drug development, that accounts for much of our business.

With Instem's suite of products providing faster and more cost-effective routes to market by enabling clients to analyse, report and submit data to regulatory agencies, the Company continues to benefit from growing demand for its products and services. The regulatory-backed Standard for the Exchange of Non-clinical Data ("SEND") market is estimated to be worth approximately $50m in 2021 and Instem remains well placed to continue to take a meaningful share of this growing market with evolving regulation set to underpin the longer-term opportunity.

November's acquisition of Leadscope provides further regulatory-backed growth opportunities given that a number of the world's major regulatory agencies, including the FDA and the European Medicines Agency, adopted a standard known as ICH M7 (R1) for the assessment and control of DNA reactive (mutagenic) impurities in pharmaceuticals to limit potential carcinogenic risk.

Importantly, Leadscope is especially well-placed for growth having worked extensively through research collaboration agreements ("RCAs") with the FDA, and in collaboration with other agencies, to develop both predictive and expert review solutions for ICH M7 (R1) and has licensed the software widely in the industry.

STUDY MANAGEMENT

Instem's focus here is on automating processes associated with pre-clinical and early phase clinical study planning, data collection, analysis and reporting. The move of long-standing clients to SaaS deployment continued during the period while the addition of a number of new clients utilising the SaaS model contributed strongly to the changing revenue mix with 28% of the Company's study management business now aligned to this revenue model. Importantly, the Company continues to work closely with its clients as part of its carefully managed programme to transfer all clients to a SaaS-dominated deployment model.

This area includes Instem's market leading Provantis product suite, which enjoyed record new client wins with thirteen additional customers, nine of whom chose SaaS deployment. Once again, growth was particularly strong in the Asia-Pacific region, with nine new Provantis clients.

INFORMATICS

Instem utilises a range of bioinformatics tools to extract, analyse and compile actionable information from across the R&D spectrum. The growing use of AI, in particular across the Target Safety Assessment ("TSA") process, has driven the majority of growth in this area.

Revenue from the Company's informatics services grew rapidly during the period with a 101% increase compared with the prior period.

Added to the strong organic growth, Instem completed the earnings enhancing acquisition of Leadscope Inc in November 2019, further extending its product portfolio and cross-selling opportunities. Provided on a subscription or pay-per-use basis, Leadscope's software employs sophisticated artificial intelligence and machine-learning algorithms to predict potential safety outcomes and to enable scientists to perform expert reviews. Deployed Software-as-a-Service, or on client premises, Leadscope's software allows clients to extract knowledge from both public data and their own proprietary sources.

Importantly, Informatics brings Instem into contact with customers at an early stage in the drug development process, helping to cement client relationships through its range of solutions.

REGULATORY SOLUTIONS

The Company continued to benefit from FDA-driven demand for SEND conversion work, with the industry focused on addressing both the study backlog and growing current study volume. Outsourced services, whereby Instem leverages its technology to deliver fully compliant SEND packages ready for electronic regulatory submission, generated strong repeat business.

With over fifty revenue generating SEND services staff, Instem has by far the largest team in the industry focused purely on SEND outsourcing. The team comprises several of the world's leading SEND experts, who continue to contribute to the industry consortium developing and maintaining the standard. Instem has highly qualified SEND staff in Europe and North America, close to the largest client concentrations, but with around two thirds of the team in Instem's Pune, India office, which in aggregate provides a very cost effective and scalable approach. This has enabled Instem to grow SEND outsourced services revenue to £4.5m in 2019 (2018: £2.8m).

Industry consolidation by the two dominant non-clinical contract research organisations ("CROs"), Charles River and Covance, who each has a strategy to undertake SEND production in-house, is expected to moderate growth in demand for SEND Services for regulatory submission. However, with a significant volume of SEND data sets now in existence, the opportunity to use SEND for data exploitation is growing and we expect that area of Instem's solutions suite to benefit.

IMPAIRMENT OF GOODWILL AND OTHER INTANGIBLE ASSETS

Although our Alphadas early phase clinical data collection business performed well for the first few years following the May 2013 acquisition of Logos Technologies "Logos", that sector of the pharmaceutical development market has been going through considerable structural change, impacting many of the contract research organisations that represent the majority of the market opportunity. Consequently, little new data collection software business has been placed in this sector over the last 18 months.

Furthermore, it appears the early phase clinical CROs have been negatively impacted by COVID-19. We envisage further slippage in the pipeline of new opportunities, with no certainty regarding the timing of new business awards.

We have therefore made a combined £3.2m impairment provision (2018: £nil) to the goodwill arising on the Logos acquisition (£2.5m) and to other intangible assets related to our Alphadas business (£0.7m). We remain committed to supporting our existing Alphadas clients and to securing new business as suitable opportunities arise. There is no impact from this to any other area of our business, where end user markets remain robust.

FINANCIAL REVIEW

Key Performance Indicators (KPIs)

The directors review monthly revenue and operating costs to ensure that sufficient cash resources are available for the working capital requirements of the Group. Primary KPIs at the year end were:

	12 mths to 31 Dec 2019 £000	12 mths to 31 Dec 2018 £000
Total revenue	**25,717**	22,705
Recurring revenue	**14,862**	13,669
Recurring revenue as a percentage of total revenue	**58%**	60%
Adjusted EBITDA	**4,864**	4,052
Cash and cash equivalents	**5,957**	3,572

In addition, non-financial KPIs are periodically reviewed and assessed, including customer retention and staff retention rates.

Instem's revenue model consists of perpetual licence income with annual support and maintenance contracts, professional fees, technology enabled outsourced services fees and SaaS subscriptions.

Total revenues increased by 13% to £25.7m (2018: £22.7m). Recurring revenue, derived from support & maintenance contracts and SaaS subscriptions, increased during the year by 9% to £14.9m (2018: £13.7m). Recurring revenue as a percentage of total revenue was 58% (2018: 60%). In absolute terms recurring revenue increased over the prior year by £1.2m but its percentage of the total decreased due to the growth in technology enabled outsourced services, which is currently all shown as non-recurring. Revenue from technology enabled outsourced services increased to £5.6m (2018: £3.3m). Operating expenses increased by 12% in the period reflecting the ongoing investment in operational teams. The revenue mix also attracted higher direct costs linked to the higher revenue.

Earnings before interest, tax, depreciation, amortisation, impairment of goodwill and capitalised development and non-recurring items (Adjusted EBITDA) increased by 20% to £4.9m (2018: £4.1m). For this measure of earnings, the margin as a percentage of revenue increased in the year to 18.9% from 17.8% in 2018.

Non-recurring costs in the year included £0.2m of acquisition costs linked to the purchase of Leadscope Inc. and legal costs associated with historical contract disputes of £0.1m (2018: £0.05m).

The reported loss before tax for the year was £0.9m (2018: profit of £1.7m). Adjusted profit before tax (i.e. adjusting for the effect of foreign currency exchange on the revaluation of inter-company balances included in finance income/(costs), non-recurring items, impairment of goodwill and capitalised development and amortisation of intangibles on acquisitions) was £3.2m (2018: £2.8m).

The Group continues to maintain its investment in its product portfolio. Development costs incurred during the year were £3.1m (2018: £3.1m), of which £1.3m (2018: £1.5m) was capitalised. The Group claimed research and development tax credits in respect of the prior year 2018 of £0.6m (2018 in respect of 2017: £0.5m).

The Group acquired Leadscope Inc on 15 November 2019. The acquisition extends the Group's currently small but rapidly growing Informatics business. The total consideration payable will be up to $4.7m, satisfied by a combination of cash and new ordinary shares in Instem plc. The consideration comprises an initial $3.35m, $0.1m working capital adjustment payable in Q1 2020, $0.75m of deferred consideration payable in two equal instalments in November 2020 and November 2021 and up to a further $0.5m, contingent upon the future financial performance of Leadscope, which would be payable in H1 2022. The initial consideration was satisfied in 2019 by $2.25m in cash and $1.1m in new ordinary shares of 10 pence each equating to 231,966 shares. The cash was funded from existing resources.

In 2019 the Group has adopted new guidance for the recognition of leases (note 7). The new standard has been applied using the modified retrospective approach, with the cumulative effect of adoption as at 1 January 2019 being recognised as a single adjustment to retained earnings. IFRS16 removes the operating and finance lease classification in IAS17 Leases and replaces them with the concept of right of use assets and associated financial liabilities. This change results in the recognition of a liability on the statement of financial position for all leases which convey a right to use the asset for the period of the contract. The lease liability reflects the present value of the future rental payments and interest, discounted using either the effective interest rate or the incremental borrowing rate of the entity. In 2019 the right of use assets recognised were primarily the leases for the Company's global offices.

The change in accounting policy affected the following items in the balance sheet on 1 January 2019:

- Right of use assets – increase by £3.002m
- Lease liabilities – increase by £3.042m

The net impact on retained earnings on 1 January 2019 was a decrease of £0.068m. Prior periods have not been restated. For the year ended 31 December 2019, the impact on adjusted EBITDA of adopting IFRS16 is an increase of £0.7m. Amortisation of right of use assets in the period amounted to £0.6m, with an interest expense of £0.1m charged to finance costs.

Basic and diluted earnings per share calculated on an adjusted basis were 19.3p and 18.4p respectively (2018: 16.4p basic and 15.5p diluted). The reported basic and diluted earnings per share were (5.7p) and (5.7p) respectively (2018: 9.2p basic and 8.7p diluted). The diluted loss per share in 2019 is the same as basic loss per share as losses have an anti-dilutive effect.

The period saw strong net cash generated from operating activities of £5.4m (2018: £2.2m), largely due to cash inflow from key contracts, outsourced services, working capital management and a £0.5m R&D tax credit claimed in respect of 2017. Cash balance increased to £6.0m at 31 December 2019, compared with £3.6m as at 31 December 2018, after making the initial cash consideration for the acquisition of Leadscope Inc from existing resources, net of cash acquired, of £1.3m in the period.

The Group's legacy defined benefit pension scheme has remained closed to new members since October 2001. The most recent comprehensive actuarial valuation was carried out at 5 April 2017 and the next triennial valuation will be calculated as at 5 April 2020. At 31 December 2019, the pension deficit decreased by £0.4m to £1.8m (2018: £2.2m). The future agreed cash contributions will remain around an annual level of £0.5m payable through to October 2024, by when the funding liability is scheduled to be eliminated. The deficit at the year-end of £1.8m (2018: £2.2m) is represented by the fair value of assets of £12.0m (2018: £10.4m) and the present value of funded obligations of £13.8m (2018: £12.6m), after applying a discount rate of 2.20% (2018: 3.00%).

The table below provides the data for certain performance measures mentioned above:

	2019 £000	2018 £000
Annual support fees	**8,418**	8,160
SaaS subscription and support fees	**6,444**	5,509
Recurring revenue	**14,862**	13,669
Licence fees	**3,501**	3,491
Professional services	**1,773**	2,204
Technology enabled outsourced services	**5,581**	3,341
Total revenue	**25,717**	22,705
EBITDA	**4,562**	3,513
Non recurring costs (see note 3)	**302**	539
***Adjusted EBITDA**	**4,864**	4,052
(Loss)/Profit before tax	**(901)**	1,677
Amortisation of intangibles arising on acquisition	**523**	788
Impairment of goodwill and capitalised development	**3,175**	-
Non recurring costs (see note 3)	**302**	539
Intercompany foreign exchange loss/(gain)	**61**	(186)
****Adjusted profit before tax**	**3,160**	2,818
Tax	**(22)**	(207)
Adjusted profit after tax	**3,138**	2,611
Weighted average number of shares (000's)	**17,053**	16,849
Adjusted diluted earnings per share	**18.4p**	15.5p
Cash at bank	**14,955**	12,570
Bank overdraft	**(8,998)**	(8,998)
Cash balance	**5,957**	3,572

* Earnings before interest, tax, depreciation, amortisation, impairment of goodwill and capitalised development and non-recurring costs.
**After adjusting for the effect of foreign currency exchange on the revaluation of inter-company balances included in finance income/(costs), non-recurring items, impairment of goodwill and capitalised development and amortisation of intangibles on acquisitions.

UPDATE ON HISTORICAL CONTRACT DISPUTE

An historical contractual licence dispute, which does not affect the ongoing operations of the Group, is in the process of being heard by the German courts. The initial hearing was held in early 2019. An expert witness was appointed by the court to review the case and report their findings. That report was submitted to the court in January 2020 and the Company has commented in response. The Company is defending the action and strongly believes that the claim should be dismissed. Notwithstanding this, the cost provision made in 2017 has been maintained in the 2019 financial statements. Further announcements will be made as and when appropriate. To date all legal expenses have been expensed.

PRINCIPAL RISKS AND UNCERTAINTIES

The directors consider that the global pharmaceutical market is likely to continue to provide growth opportunities for the business. The combination of the high level of annual support renewals and low levels of customer attrition provides revenue visibility to underpin the Group strategy on product and market development.

The Group seeks to mitigate exposure to all forms of risk through a combination of regular performance review and a comprehensive insurance programme.

Foreign currency risk

The Group operates internationally and is exposed to foreign currency risk on transactions denominated in a currency other than the functional currency and on the translation of the statement of financial position and statement of comprehensive income of foreign operations into sterling. The main currency giving rise to this risk is US dollars. The Group has both cash inflows and outflows in this currency that create a natural hedge. The Group also generates material cash reserves through its Chinese subsidiary that are not readily available to the UK Group at short notice and, as such, the Group has to maintain sufficient working capital headroom to accommodate any delays in repatriating cash from China. In managing currency risks the Group aims to reduce the impact of short-term fluctuations on the Group's cash inflows and outflows in a foreign currency. The Group continually assesses the most appropriate approach to managing its currency exposure in line with the overall goal of achieving predictable earnings growth. Over the longer term, changes in foreign exchange could have an impact on consolidation of foreign subsidiaries earnings. A 10% decrease in the average value of Sterling against the US dollar would have resulted in an increase in the Group's profit before tax by approximately £0.1m (2018: £0.1m).

Credit risk

Management aims to minimise the risk of credit losses.

The Group's financial assets are bank balances and cash and trade and other receivables, which represent the Group's maximum exposure to credit risk in relation to financial assets.

The Group's credit risk is primarily attributable to its trade receivables and the Group has policies in place to ensure that sales of products and services are made to customers with appropriate creditworthiness. The Group generates external revenue from no customers which individually amount to more than 10% of the Group revenue. At the 2019 year end the Group had a maximum credit risk exposure of £6.9m (2018: £7.8m).

The amounts presented in the statement of financial position are net of impairment provisions.

The Group's exposure to losses from defaults on trade receivables is reduced due to contractual terms which require installation, training, annual licensing and support fees to be invoiced and paid annually in advance.

Note 16 sets out the impairment provision for credit losses on trade receivables and the ageing analysis of overdue trade receivables. There were no impairment losses recognised on other financial assets.

Liquidity risk

Liquidity risk is the risk that the Group will not be able to meet its financial commitments as they fall due. The Group manages liquidity risk through regular cash flow forecasting and monitoring through management review, including a regular review of working capital and costs. The Group's principal costs are staff related, that are primarily salaries and related benefits paid monthly. The Group monitors daily its available headroom under its borrowing facilities. At 31 December 2019, its £0.5m net overdraft bank facility was undrawn (2018: £0.5m facility undrawn). This facility is provided to the Group by the Group's UK based bankers, with no other debt facilities in place in any other global territories. The Group is focused on repatriating as much cash to the UK as possible to minimise the use of the facility, whilst ensuring there is sufficient working capital available in each territory in which it operates. The Group had positive cash reserves of £6.0m at the 2019 year end, in addition to the £0.5m undrawn working capital facility, although £1.9m of the cash was held in bank accounts in China, where it has been traditionally harder to repatriate funds quickly. There are no long term restrictions on the transfer of funds from the Group bank accounts in China.

Interest rate risk

The Group operates an interest rate policy designed to minimise interest costs and reduce volatility in reported earnings. The Group's bank facility does not allow the US Dollar cash balances to generate interest therefore the Group transfers funds from the US dollar account into the sterling account. Currency transfers have been utilised to maximise the interest gains whilst minimising foreign exchange risks. As at 31 December 2019, the indications are that the UK bank base interest rate will not materially differ over the next 12 months. On the basis of the net cash position at 31 December 2019 and assuming no other changes occur (such as material changes in currency exchange rates) the change in interest rates will not have a material impact on net interest income/(expense).

Cyber risk

The Group handles much data electronically and is therefore extremely aware of the risks that a cyber-attack could have on its business. It has robust standards in place for establishing and maintaining systems and processes to ensure that the highest standards of data protection are in place. This also applies to any third party who is handling data on behalf of the Group and its customers, such as third-party hosting providers.

Technology risk

Due to the evolving nature of technology platforms there is a risk of obsolescence. The Group monitors this risk and develops strategic development plans to ensure it remains compliant with technological advances.

Acquisition risk

Any corporate acquisition has associated integration risk. In respect of every acquisition the Group creates an integration plan with assigned responsibilities to a team led by an appointed project manager for delivering against an agreed timetable. This is monitored closely throughout the integration process and any deviations against the plan are flagged and actioned accordingly.

Recruitment and retention risk

As its people are the Group's major asset, it is critical to ensure that it recruits the best staff possible and that these individuals are rewarded and developed appropriately. The Group has a global HR team that manages the process of ensuring the staff benefit and reward packages are incentivising for both recruitment and retention purposes. This includes benchmarking against peers and industry norms and considering staff feedback through regular performance review. During 2020 the Group will be implementing an all-staff share scheme for the first time.

Brexit

The UK withdrew from the EU on 31 January 2020 and has entered a transition period until the end of 2020. Trade negotiations with the EU are planned for 2020 and whilst the outcome remains uncertain, there is always the associated risk of adverse implications for the business, including the impact on exchange rate fluctuations. However, the Group has to its knowledge experienced no negative impact on its business to date and does not expect to do so in the future. Instem operates in a global market with a multinational customer base and its revenues and costs spread around the globe without over reliance on Europe or exposure to it. The 2016 acquisition of Notocord in France provides the Group with a presence in Europe that we expect to help mitigate any impact that might arise from the Brexit outcome. The Group will continue to monitor the progress of the UK/EU trade negotiations and any potential implications for the business.

Coronavirus (COVID-19)

Like most businesses worldwide the Group is having to deal with the impact of COVID-19, with its primary concern being for the safety and wellbeing of its staff and their families. The Group has the benefit of operating in a sector where significant worldwide focus is on identifying vaccines and therapies for COVID-19, with a number of our customers directly involved in this work. While the Group expects some disruption to demand for its products and services there is also expected to be some increases in customer demand. Whilst approximately half of the Group's revenues are generated from North America, the remaining revenues are spread across the world and therefore there is no dependence on one territory thus spreading the risk. The Group benefits from having no supply chain or distribution network to rely on. The Group has the added benefit of having systems and processes established to enable its workforce to work effectively from home across all of its sites worldwide.

The Group continues to follow and adhere to the advice of the government authorities in each territory in which its staff are based. The situation is being closely monitored with all appropriate and proportionate measures taken wherever possible.

OUTLOOK

We are delighted with our performance during the period, with our proven business model generating improvements across all of our key performance metrics. We have an established base from which to grow, both organically and via acquisition, and have established long-term relationships with our blue-chip client base. Importantly, we are well positioned to add new clients and generate increasing revenues from existing clients while our transition to a SaaS model increases visibility.

Increased revenue predictability and high retention rates provide a strong foundation from which the business can grow as it builds on the momentum achieved during 2019. While some future uncertainty inevitably remains, the majority of our revenue comes from clients whose laboratories are regarded as "essential businesses" and therefore remain active, with many working on COVID-19 related vaccines and therapies. Consequently, we have remained very busy, have good visibility over a strong H1 2020 performance and continue to have confidence in the longer term outlook for the business, supported by a strong cash balance at the end of April 2020 of £8.3m. Our staff are currently working effectively from home and are highly motivated by the work that we are directly contributing to COVID-19 research and development.

P J Reason

Chief Executive

2 June 2020

BOARD OF DIRECTORS

Non-executive Chairman

David Gare

David was a founder member of the Company's former parent, Instem Limited, and led the resulting businesses through most of their history. David successfully achieved a succession of strategic developments for Instem Limited, including its sale to Kratos Inc. in 1976, its MBO in 1983, its flotation on the USM in 1984, its flotation on the Official List in 1996, its public to private and demerger in 1998 and the buyout of Instem LSS Limited from Alchemy Partners in 2002. Throughout, David has concentrated on value creation through achievement of a strong market position.

Chief Executive Officer

Phil Reason

Phil is an experienced chief executive who has developed a number of IT businesses in the life sciences and nuclear industries, both organically and through acquisition. Phil joined the former parent Company, Instem Limited, in 1982 and was appointed Managing Director of the Life Sciences division in 1995 and Chief Executive Officer of Instem LSS Limited on the demerger from Instem Limited. Given the importance of the North American market to Instem's organic and acquisitive growth, Phil relocated from the UK to the US in 2003 and established a new headquarters in the Philadelphia area. Phil previously ran Instem Limited's Nuclear and Laboratory Information Management Systems integration businesses.

Chief Financial Officer

Nigel Goldsmith

Nigel, who joined Instem in November 2011, has a wealth of experience in senior financial roles, at both public and private companies within the pharmaceutical industry. After qualifying as a Chartered Accountant, Nigel spent over nine years at KPMG prior to moving into industry. Nigel was Finance Director for three years at AIM listed, pharmaceutical and medical device company, IS Pharma plc. He also spent a seven-year tenure as CFO at Almedica International Inc, a privately held supplier of clinical trial materials to the pharmaceutical and biotech industry in Europe and the US and two years as European Controller for the sales and marketing division of laboratory equipment manufacturer, Life Sciences International plc.

Non-executive Director

Mike McGoun

Mike has a wealth of management experience within the IT industry. He spent 10 years at IBM prior to co-founding a successful ComputerLand franchise in 1984. In 1994, Mike moved to SkillsGroup plc as a main board director, with responsibility for corporate development and later as a non-executive director. Mike was founder and non-executive Chairman of Tikit Group plc prior to its disposal to BT plc in 2012.

Non-executive Director

David Sherwin

David is a qualified Management Accountant and holds an MBA from Staffordshire University. He joined Instem Limited as a trainee accountant in 1973 and was appointed Chief Financial Officer in 1979. He has worked closely with David Gare on all of the subsequent transactions involving Instem Limited and Instem LSS Limited including participating in the management buyout of Instem Limited in 1983, the flotation on the USM in 1984, the flotation on the Official List in 1996 and the demerger of the business in 1998.

In accordance with AIM Notice 50 issued by the London Stock Exchange, 8 March 2018, the Group has adopted the Corporate Governance Guidelines for Small and Medium Size Quoted Companies published by the Quoted Companies Alliance (the QCA Code). The main features of the Group's corporate governance procedures, in relation to the 10 Principles of the QCA Code, are set out in the full *QCA Code Compliance* at https://investors.instem.com/corporate/governance.php.

Given the size of the Group the Board has decided to follow the code issued by the Quoted Companies Alliance as a framework as it seeks to maintain a strong governance ethos throughout the Group. The Board recognises its overall responsibility for the Group's systems of internal control and for monitoring their effectiveness.

The main features of the Group's corporate governance procedures are as follows:

a. the Board has one independent non-executive director who takes an active role in Board matters;
b. the Group has an Audit Committee, a Remuneration Committee and a Nomination Committee, each of which consists of the non-executive directors, and meets regularly with executive directors in attendance by invitation. The Audit Committee has unrestricted access to the Group's auditor and ensures that auditor independence has not been compromised;
c. all business activity is organised within a defined structure with formal lines of responsibility and delegation of authority, including a schedule of "matters referred to the Board"; and
d. regular monitoring of key performance indicators (KPIs) and financial results together with comparison of these against expectations. KPIs assessed are both financial and non-financial.

AUDIT COMMITTEE

The Audit Committee comprises M F McGoun (Chairman), D Gare and D M Sherwin, all of whom are non-executive directors of the Company. The Board is satisfied that the Audit Committee has all the recent and relevant financial experience required to fulfil the role.

The Audit Committee undertook an audit tender process during the year and Grant Thornton UK LLP were appointed as auditors, replacing RSM UK Audit LLP.

Appointments to the Audit Committee are made by the Board in consultation with the Nomination Committee and the chairman of the Audit Committee. The Audit Committee has met once during the year and may meet at any other time as required by either the chairman of the Audit Committee, the Chief Financial Officer of the Group or the external auditor of the Group. In addition, the Audit Committee shall meet with the external auditor of the Group (without any of the executives attending) at any time during the year as it deems fit.

The Audit Committee:

a. monitors the financial reporting and internal financial control principles of the Group;
b. maintains appropriate relationships with the external auditor including considering the appointment and remuneration of the external auditor and reviews and monitors the external auditor's independence and objectivity and the effectiveness of the audit process;
c. reviews all financial results of the Group and financial statements, including all announcements in respect thereof before submission of the relevant documents to the Board;
d. reviews and discusses (where necessary) any issues and recommendations of the external auditor including reviewing the external auditor's management letter and management's response;
e. considers all major findings of internal operational audit reviews and management's response to ensure co-ordination between internal and external auditor;
f. reviews the Board's statement on internal reporting systems and keeps the effectiveness of such systems under review; and
g. considers all other relevant findings and audit programmes of the Group.

The Audit Committee is authorised to:

a. investigate any activity within its terms of reference;
b. seek any information it requires from any employee of the Group; and
c. obtain, at the Group's expense, outside legal or other independent professional advice and to secure the attendance of such persons to meetings as it considers necessary and appropriate.

ATTENDANCE AT BOARD AND COMMITTEE MEETINGS

Attendances of directors at Board and Committee meetings convened in the period, along with the number of meetings they were invited to attend, are set out below:

	No. of meetings attended / No. of meetings invited to attend			
	Board Meetings	Audit Committee	Remuneration Committee	Nomination Committee
Executive Directors				
P J Reason	14/14	2/2	0/0	0/0
N J Goldsmith	14/14	2/2	0/0	0/0
Non-Executive Directors				
D Gare	14/14	2/2	3/3	1/1
D M Sherwin	14/14	2/2	3/3	1/1
M F McGoun	14/14	2/2	3/3	1/1

REMUNERATION COMMITTEE

The Remuneration Committee comprises M F McGoun (Chairman), D Gare and D M Sherwin, all of whom are non-executive directors of the Company.

The members of the Remuneration Committee are appointed by the Board on recommendation from the Nomination Committee, in consultation with the Chairman of the Remuneration Committee. The Chief Executive Officer of the Group is normally invited to meetings of the Remuneration Committee to discuss the performance of other executive directors but is not involved in any of the decisions. The Remuneration Committee invites any person it thinks appropriate to join the members of the Remuneration Committee at its meetings. The Remuneration Committee meets at least once a year and any other time as required by either the Chairman of the Remuneration Committee or the Chief Financial Officer of the Group.

The Remuneration Committee:

a. ensures that the executive directors are fairly rewarded for their individual contributions to the overall performance of the Group but also ensures that the Group avoids paying more than is necessary for this purpose;

b. considers the remuneration packages of the executive directors and any recommendations made by the Chief Executive Officer for changes to their remuneration packages including in respect of bonuses (including associated performance criteria), other benefits, pension arrangements and other terms of their service contracts and any other matters relating to the remuneration of or terms of employment applicable to the executive directors that may be referred to the Remuneration Committee by the Board;

c. oversees and reviews all aspects of the Group's share option schemes including the selection of eligible directors and other employees and the terms of any options granted;

d. demonstrates to the Group's shareholders that the remuneration of the executive directors is set by an independent committee of the Board; and

e. considers and makes recommendations to the Board about the public disclosure of information about the executive directors' remuneration packages and structures in addition to those required by law or by the London Stock Exchange.

The Chairman of the Remuneration Committee reports formally to the Board on its proceedings after each meeting on all matters within its duties and responsibilities. The Remuneration Committee produces an annual report which is included in the Group's annual report and accounts.

The Remuneration Committee is authorised to:

a. investigate any activity within its terms of reference;

b. seek any information it requires from any employee of the Group;

c. assess the remuneration paid by other UK listed companies of a similar size in any comparable industry sector and to assess whether changes to the executive directors' remuneration is appropriate for the purpose of making their remuneration competitive or otherwise comparable with the remuneration paid by such companies; and

d. obtain, at the Group's expense, outside legal or other independent professional advice, including independent remuneration consultants, when the Remuneration Committee reasonably believes it is necessary to do so and secure the attendance of such persons to meetings as it considers necessary and appropriate.

NOMINATION COMMITTEE

The Nomination Committee comprises D Gare (Chairman), M F McGoun and D M Sherwin, all of whom are non-executive directors of the Company.

Appointments to the Nomination Committee are made by the Board, in consultation with the Chairman of the Nomination Committee.

The Nomination Committee may invite any person it thinks appropriate to join the members of the Nomination Committee at its meetings.

The Nomination Committee:

a. reviews the structure, size and composition (including skills, knowledge and experience) required of the Board compared to its current position and makes recommendations to the Board with regard to any changes;
b. gives full consideration to succession planning for directors and other senior executives in the course of its work, taking into account the challenges and opportunities facing the Group, and what skills and expertise are needed on the Board in the future;
c. is responsible for identifying and nominating for the approval of the Board, candidates to fill Board vacancies as and when they arise; and
d. evaluates the balance of skills, knowledge and experience on the Board before an appointment is made and, in light of this evaluation, prepares a description of the role and capabilities required for a particular appointment.

The Chairman of the Nomination Committee reports formally to the Board on its proceedings after each meeting on all matters within its duties and responsibilities.

The Nomination Committee also makes recommendations to the Board concerning:

a. formulating plans for succession for both executive and non-executive directors and in particular the key roles of Chairman of the Board and Chief Executive Officer;
b. membership of the Audit and Remuneration Committees, in consultation with the chairmen of those committees;
c. the re-appointment of any non-executive director at the conclusion of their specified term of office having given due regard to their performance and ability to continue to contribute to the Board in the light of the knowledge, skills and experience required;
d. the re-election by shareholders of any director under the "retirement by rotation" provisions in the Company's articles of association having due regard to their performance and ability to continue to contribute to the Board in the light of the knowledge, skills and experience required;
e. matters relating to the continuation in office of any director at any time including the suspension or termination of service of an executive director as an employee of the Group subject to the provisions of the law and his/her service contract; and
f. the appointment of any director to executive or other office other than to the positions of Chairman of the Board and Chief Executive Officer, the recommendation for which would be considered at a meeting of the full Board.

The Nomination Committee is authorised to:

a. investigate any activity within its terms of reference;
b. seek any information it requires from any employee;
c. obtain outside legal or other independent professional advice at the Group's expense when the Nomination Committee reasonably believes it is necessary to do so; and
d. instruct external professional advisors to attend any meeting at the Group's expense if the Nomination Committee considers this reasonably necessary and appropriate.

INTERNAL CONTROLS

The directors are responsible for establishing and maintaining the Group's system of internal control and reviewing its effectiveness. The system of internal control is designed to manage rather than eliminate the risk of failure to achieve business objectives and can only provide reasonable but not absolute assurance against material misstatement or loss.

The Board and senior executives meet to review both the risks facing the business and the controls established to minimise those risks and their effectiveness in operation on an ongoing basis. The aim of these reviews is to provide reasonable assurance that material risks and problems are identified and appropriate action taken at an early stage.

On behalf of the Board

M F McGoun

Independent Non-Executive Director

The Board recognises its overall responsibility for the Group's systems of internal control and for monitoring their effectiveness.

Instem plc is a company listed on AIM and it is not required to comply with Schedule 8 of the Large and Medium Sized Companies and Groups (Accounts and Reports) Regulations 2008 relating to directors' remuneration reports or the Listing Rules. The disclosures contained within this report are, therefore, made on a voluntary basis and in keeping with the Board's commitment to best practice.

REMUNERATION COMMITTEE

The Remuneration Committee ('the Committee') is composed entirely of non-executive directors. The Committee was formed upon the public listing of the Company on 13 October 2010. The Chairman of the Committee is M F McGoun. The terms of reference for the Committee are to determine the Group's policy on executive remuneration and to consider and approve the remuneration packages for directors and key executives of the Group, subject to ratification by the Board. During the year, the Committee met on two occasions. Full details of the elements of each director's remuneration are set out on the following page. Details of share-based payment are shown in note 8 to the financial statements.

POLICY ON EXECUTIVE DIRECTOR REMUNERATION

The Group's current and ongoing policy aims to ensure that executive directors are rewarded fairly for their individual contributions to the Group's overall performance and is designed to attract, retain and motivate executives of the right calibre. The Committee is responsible for recommendations on all elements of executive remuneration including, in particular, basic salary, annual bonus, share options and any other incentive awards. In implementing the remuneration policy, the Committee has regard to factors specific to the Group, such as salary and other benefit arrangements within the Group and the achievement of the Group's strategic objectives. The Committee determines the Group's Policy on executive remuneration with reference to comparable companies of similar market capitalisation, location and business sector.

BASIC SALARY

The basic salaries of executive directors are reviewed annually having regard to individual performance and position within the Group and are intended to be competitive but fair using information provided from both internal and external sources.

PERFORMANCE RELATED ANNUAL BONUS

Executive directors are eligible for a performance related bonus based on Group performance, in particular, the achievement of profit targets. The performance related annual bonus forms a significant part of the level of remuneration considered appropriate by the Committee. In addition to the formal bonus scheme, the Committee has the discretion to recommend the payment of ad hoc awards to reflect exceptional performance. Bonuses amounting to £nil were payable to executive directors in respect of the year ended 31 December 2019 (2018: £nil).

PENSIONS

Company contributions are made to the executive directors' personal pension schemes up to a maximum of 16.5% of basic salary.

BENEFITS

Benefits comprise car and fuel allowance, private healthcare and critical illness cover. No executive director receives additional remuneration or benefits in relation to being a director of the Board of the Company or any subsidiary of the Company.

SERVICE CONTRACTS

The Executive directors have contracts with notice periods between six and twelve months.

The Board determines the Group's policy on non-executive directors' remuneration.

D Gare, D M Sherwin and M F McGoun each have a letter of appointment that had an initial three year term commencing October 2010. These were renewed in December 2013, each with a notice period of three months.

The emoluments paid or payable to directors in respect of the year ended 31 December 2019 were as follows:

	Salary and Fees	Bonus	Benefits	Pension	2019 Total	2018 Total
Executives						
P J Reason*	223	-	7	31	261	243
N J Goldsmith	115	-	14	12	141	133
Non-executives						
D Gare	60	-	-	-	60	60
D M Sherwin	30	-	-	-	30	30
M F McGoun	30	-	-	-	30	30
Total	**458**	**-**	**21**	**43**	**522**	**496**

* The remuneration in respect of P J Reason is payable in US Dollars and translated at the average rates as disclosed on page 50. The total remuneration paid in the year was USD 332,000 (2018: 324,000)

DIRECTORS' AND EMPLOYEES' SHARE OPTIONS

	Exercise price (£)	Issue date	Held at 31 Dec 2018	Granted during year	Exercised during year	Lapsed during year	Held at 31 Dec 2019
P J Reason Ordinary shares	1.750	13/10/2010	187,427	-	-	-	187,427
	0.900	14/01/2013	23,429	-	-	-	23,429
	0.100	29/07/2015	93,750	-	(93,750)	-	-
	NIL	22/02/2018	80,000	-	-	-	80,000
							290,856
N J Goldsmith Ordinary shares	2.215	29/11/2011	40,000	-	(40,000)	-	-
	1.760	07/02/2012	20,000	-	-	-	20,000
	0.900	14/01/2013	15,000	-	-	-	15,000
	0.100	29/07/2015	62,500	-	-	-	62,500
	NIL	22/02/2018	80,000	-	-	-	80,000
							177,500
Employees Ordinary shares	1.750	13/10/2010	227,255	-	(176,541)	-	50,714
	2.220	03/03/2011	93,844	-	(93,844)	-	-
	2.220	17/10/2011	14,667	-	(6,000)	-	8,667
	0.900	14/01/2013	39,146	-	(16,171)	-	22,975
	0.100	11/02/2015	40,584	-	-	-	40,584
	0.100	29/07/2015	125,000	-	(46,875)	-	78,125
	0.100	21/11/2015	25,258	-	-	-	25,258
	0.100	27/05/2016	15,120	-	-	(8,640)	6,480
	0.100	03/05/2017	37,500	-	-	-	37,500
	NIL	22/02/2018	240,000	-	-	-	240,000
	0.100	30/07/2018	5,068	-	-	(5,096)	-
	0.100	22/02/2019	-	7,740	-	(3,096)	4,644
							514,947
Total			**1,465,548**	**7,740**	**(473,181)**	**(16,804)**	**983,303**

On 13th February 2020 it was announced that a member of the senior management team had exercised share options over 50,714 ordinary shares of 10p each in the Company.

In January 2020 the Group informed its staff of its intention to implement an all-staff share and option scheme. The scheme has subsequently been formally launched with staff receiving the right to 386,686 ordinary shares of 10p each in the Company that will vest in April 2023.

Approved by the Board and signed on its behalf by:

M F McGoun
Independent Non-Executive Director

The directors submit their report and the Group and Company financial statements of Instem plc for the year ended 31 December 2019.

Instem plc is a public limited company, incorporated and domiciled in England, and quoted on AIM.

PRINCIPAL ACTIVITIES

Instem is a leading supplier of IT applications to the life sciences healthcare market, delivering compelling solutions for data collection, management and analysis across the R&D continuum. Instem applications are in use by customers worldwide, meeting the rapidly expanding needs of life science and healthcare organisations for data-driven decision making leading to safer, more effective products.

Instem's portfolio of software solutions increases client productivity by automating study-related processes while offering the unique ability to generate new knowledge through the extraction and harmonisation of actionable scientific information.

REVIEW OF THE BUSINESS

A detailed review of the development and performance of the Group's business during the year and its position at the end of the year is set out in the Chairman's Statement and the Strategic Report on pages 10 to 19.

STRATEGIC REPORT

The Group has chosen in accordance with Companies Act 2006, section 414C (11) to set out in the Group's strategic report on pages 10 to 19 information required to be contained in the Directors' Report by Large and Medium-sized Companies and Groups (Accounts and Reports) Regulations 2008, Sch. 7, where not already disclosed in the Directors' Report.

DIRECTORS' RESPONSIBILITY UNDER SECTION 172

The Group's response to the requirements of section 172 of the Companies Act 2006 is included within the Strategic Report.

FUTURE DEVELOPMENTS

The directors consider that the continued investment in product and market development will allow the business to grow organically in its core markets. Investment in business growth initiatives will also allow the business to move into new product and market areas. The combination of organic growth along with strategic acquisitions will support the expected growth as outlined in the Chairman's Statement and the Strategic Report.

Like most businesses worldwide the Group is having to deal with the impact of COVID-19, with its primary concern being for the safety and wellbeing of its staff and their families. The Group has the benefit of operating in a sector where significant worldwide focus is on identifying vaccines and therapies for COVID-19, with a number of our customers directly involved in this work. While the Group expects some disruption to demand for its products and services there is also expected to be some increases in customer demand. Whilst approximately half of the Group's revenues are generated from North America, the remaining revenues are spread across the world and so there is no dependence on one territory thus spreading the risk. The Group benefits from having no supply chain and no distribution network to rely on and has the added benefit of having systems and processes established to enable its workforce to work effectively from home across all of its sites worldwide.

The uncertainty as to the future impact on the Group of the recent COVID-19 outbreak has been considered as part of the Group's adoption of the going concern basis. Thus far we have not observed any material impact on our overall existing business or in the level of new business opportunities that are being presented to us in the markets in which we operate. We have seen a little slippage in customers placing new business during the first quarter of 2020, but at this stage it is too early to determine whether this is likely to be a long term issue or merely a temporary matter whilst our customers are focused on managing their own businesses, with changes from introducing staff self-isolation and working from home.

RESEARCH AND DEVELOPMENT ACTIVITIES

The Group continues its development programme of software for the global pharmaceutical market including the research and development of new products and enhancement to existing products. The directors consider the investment in research and development to be fundamental to the success of the business in the future.

DIVIDENDS

The directors do not recommend the payment of a dividend.

DIRECTORS

The following directors held office during the year:

D Gare

M F McGoun

D M Sherwin

P J Reason

N J Goldsmith

Details of the directors' service contracts and their respective notice terms are detailed in the Directors' Remuneration report on pages 26 to 28.

DIRECTORS AND THEIR INTERESTS

The interests of the directors who held office at 31 December 2019 (2018: as at 25 April 2019) were as follows:

	2019 No. of Shares	2018 No. of Shares
D Gare	578,427	578,427
D M Sherwin	1,180,066	1,180,066
P J Reason	685,287	685,287
M F McGoun	-	36,786
N J Goldsmith	-	-

Directors' interests in share options are detailed in the Remuneration report on pages 26 to 28.

POLITICAL DONATIONS

The Group made no political donations in 2019 or 2018.

FINANCIAL INSTRUMENTS

The Group's objectives and policies on financial instruments are set out in note 22 to the financial statements.

INDEMNITY OF OFFICERS AND DIRECTORS

Under the Company's Articles of Association and subject to the provisions of the Companies Act, the Group may and has indemnified all directors and other officers against liability incurred in the execution or discharge of their duties or the exercise of their powers, including but not limited to any liability for the costs of any legal proceedings. The Group has purchased and maintains appropriate insurance cover against legal action brought against directors or officers.

ANNUAL GENERAL MEETING

The Annual General Meeting ('AGM') of the Company will be held on 30 June 2020. The resolutions to be proposed at the AGM, together with explanatory notes, appear in a separate notice of AGM which is sent to all shareholders. A proxy card for registered shareholders is distributed along with the notice.

AUDITOR

During the year Grant Thornton UK LLP were appointed as auditor. Pursuant to s489 of the Companies Act 2006, a resolution to re-appoint Grant Thornton as auditor will be put to the members at the forthcoming Annual General Meeting.

On behalf of the Board

P J Reason

Director

2 June 2020

The directors are responsible for preparing the Strategic Report and Directors' Report, the Directors' Remuneration Report and the financial statements in accordance with applicable law and regulations.

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

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

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

The directors confirm that:

- so far as each director is aware, there is no relevant audit information of which the company's auditor is unaware; and
- the directors have taken all 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 auditor is aware of that information.

The directors are responsible for preparing the annual report in accordance with applicable law and regulations. Having taken advice from the Audit Committee, the directors consider the annual report and the financial statements, taken as a whole, provides the information necessary to assess the company's performance, business model and strategy and is fair, balanced and understandable.

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

OPINION

Our opinion on the financial statements is unmodified

We have audited the financial statements of Instem plc (the 'parent company') and its subsidiaries (the 'group') for the year ended 31 December 2019 which comprise the Consolidated Statement of Comprehensive Income, the Consolidated and Company Statements of Financial Position, the Consolidated and Company Statements of Cash Flows, the Consolidated and Company Statements of Changes in Equity, the accounting policies and notes to the financial statements. The financial reporting framework that has been applied in their preparation is applicable law and International Financial Reporting Standards (IFRSs) as adopted by the European Union and, as regards the parent company financial statements, as applied in accordance with the provisions of the Companies Act 2006.

In our opinion:

- the financial statements give a true and fair view of the state of the group's and of the parent company's affairs as at 31 December 2019 and of the group's profit for the year then ended;
- the group financial statements have been properly prepared in accordance with IFRSs as adopted by the European Union;
- the parent company financial statements have been properly prepared in accordance with IFRSs as adopted by the European Union and as applied in accordance with the provisions of the Companies Act 2006; and
- the financial statements have been prepared in accordance with the requirements of the Companies Act 2006.

BASIS FOR OPINION

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

THE IMPACT OF UNCERTAINTIES ARISING FROM THE UK EXITING THE EUROPEAN UNION ON OUR AUDIT

Our audit of the financial statements requires us to obtain an understanding of all relevant uncertainties, including those arising as a consequence of the effects of Brexit. All audits assess and challenge the reasonableness of estimates made by the directors and the related disclosures and the appropriateness of the going concern basis of preparation of the financial statements. All of these depend on assessments of the future economic environment and the group's future prospects and performance.

Brexit is one of the most significant economic events for the UK, and at the date of this report its effects are subject to unprecedented levels of uncertainty, with the full range of possible outcomes and their impacts unknown. We applied a standardised firm-wide approach in response to these uncertainties when assessing the group's future prospects and performance. However, no audit should be expected to predict the unknowable factors or all possible future implications for a group associated with a course of action such as Brexit.

MATERIAL UNCERTAINTY RELATED TO GOING CONCERN

We draw attention to the accounting policies, which state that the uncertainty as to the future impact on the group of the recent COVID-19 outbreak has been considered as part of the group's adoption of the going concern basis. In the downside scenario analysis performed, the Board considered a more extreme situation whereby the significant negative impact of COVID-19 continued for an extended period of time into 2021. This would result in the group exhausting its cash reserves and exceeding its bank facility in November 2020. As stated in the accounting policies, these events or conditions, along with the other matters as set forth therein indicate that a material uncertainty exists that may cast significant doubt on the group's and parent company's ability to continue as a going concern. Our opinion is not modified in respect of this matter.

AUDIT WORK PERFORMED

To respond to risks relating to going concern, our procedures evaluated management's assessment of the impact of COVID-19 on the group's working capital by performing the following procedures:

- Obtained management's base case forecasts by covering the period to May 2021. We assessed how these forecasts were compiled and assessed the appropriateness of management's forecasts by applying appropriate sensitivities to the underlying assumptions which were also challenged;
- Assessed the accuracy of management's forecasting by comparing the reliability of past forecasts to the base case forecast;
- Obtained management's more extreme case scenario prepared to assess the potential impact of COVID-19. We evaluated the assumptions regarding the impact of no new business, no hiring of new staff and reduction in recurring revenue. We considered whether the assumptions are consistent with our understanding of the business derived from other detailed work undertaken;
- Assessed the impact of the mitigating factors available to management in respect of the ability to restrict cash impact, including the level of available facilities;
- Considered the forecasts prepared in respect of the most likely impact of COVID-19 and whether these still give rise to a material uncertainty; and
- Assessed the adequacy of related disclosures within the Annual Report and Financial Statements.

OVERVIEW OF OUR AUDIT APPROACH

- Overall materiality: £257,000, which represents 1% of the group's revenues
- Key audit matters were identified as: The revenue cycle includes the risk of fraudulent transactions and the carrying value of the group's goodwill and acquired intangibles
- We performed full scope audit procedures on the financial information of the significant group components, including Instem Plc (the parent company) and specified or analytical procedures on the financial statements of the non-significant components.

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

In addition to the matter described in the 'material uncertainty related to going concern' section, we have determined the matters described below to be the key audit matters to be communicated in our report.

KEY AUDIT MATTER – GROUP

The revenue cycle includes the risk of fraudulent transactions

The group's revenue totaled £25.7m for the year ended 31 December 2019 (2018: £22.7m).

There is a risk that revenue has been misstated through fraudulent entries and due to the complexity of the revenue streams there is a risk that revenue recognition criteria is not being properly applied.

There is a management judgement involved in determining the amount of revenue that is accrued at year end (service revenue) and it is unpredictable in nature (non-recurring revenue). We consider the risk to be heightened around non-recurring revenue and service revenue and this has formed the focus of our work.

This is considered to be a key audit matter given the importance of reported revenue to key stakeholders. We therefore identified this risk as a significant risk, which was one of the most significant assessed risks of material misstatement.

HOW THE MATTER WAS ADDRESSED IN THE AUDIT – GROUP

Our audit work included, but was not restricted to:

- Assessing the group's accounting policies to confirm compliance with IFRS 15 'Revenue from Contracts with Customers', following prior year implementation, and in particular, that any transition adjustments have been appropriately disclosed in respect of the newly acquired group component, Leadscope Inc;
- Undertaking analytical procedures on monthly recurring revenue to identify incorrectly classified non-recurring or service revenue; investigating movements outside of expectation and corroborating responses from management to supporting documentation;
- Testing a sample of revenue to customer contracts, to determine whether the revenue has been recognised in accordance with the terms of the contract;
- Testing a sample of service revenue contracts, focusing on contracts which remain open at the year end. We performed recalculations of the element of service revenue to be recognised as completed, and any accrued or deferred income balances at the year end. For each contract selected we then tested the occurrence and accuracy of revenue recognised during the year by agreeing to supporting documentation; and
- Testing of cut off across all revenue streams on an individual component basis by confirming the appropriate allocation of sales to the correct period. Proof of revenue occurrence was obtained by agreeing to proof of delivery.

The group's accounting policy on revenue recognition is shown on pages 48-49 in the financial statements and related disclosures are included in note 1.

Key observations

No material misstatement was identified as a result of the work performed.

KEY AUDIT MATTER – GROUP	HOW THE MATTER WAS ADDRESSED IN THE AUDIT – GROUP
Carrying value of the group's goodwill and acquired intangibles The group carried £14.4m of goodwill and acquired intangibles in its consolidated statement of financial position at 31 December 2019 (2018: £13.5m). The group has material levels of intangible assets arising from previous business combinations. The judgements made in respect of the valuation of the intangible assets and the impairment review comprise significant measurement uncertainty. As a consequence, there is a significant risk that these are impaired and their carrying value written down. The group has undertaken an acquisition, Leadscope Inc during the year and performed an assessment of the nature and value of the intangible assets acquired in the business combination. The techniques involved in valuing these assets require a high degree of judgment, with estimates including future sales and discount rates. We therefore identified carrying value of the group's goodwill and acquired intangibles as a significant risk, which was one of the most significant assessed risks of material misstatement.	Our audit work included, but was not restricted to: • Evaluating the group's accounting policies to determine their compliance with the requirements of International Accounting Standard (IAS) 38 'Intangible Assets' and IAS 36 'Impairment of Assets'; • Consideration of the accounting for the business combination in the period including assessment of the fair value of consideration and net assets acquired; • Challenging the appropriateness of management's assumptions and sensitivities, including the growth rate and discount rate used to assess the level of headroom; • Assessing and challenging the carrying value of goodwill and acquired intangibles in management's impairment assessments. Our challenge focused around the assumptions regarding future revenues from the underlying cash generating unit relative to historic performance, including whether the supporting cash flow forecasts are in accordance with Board forecasts; and • Assessing whether the group's disclosures are adequate and key assumptions are disclosed. The group's accounting policy on goodwill and intangibles is shown on page 52 in the financial statements and related disclosures are included in note 12. **Key observations** As a result of our work, we concluded that the carrying value of the group's goodwill and acquired intangibles was acceptable, including the recognition of the impairment charge in the year.
	There are no key audit matters in relation to the parent company.

OUR APPLICATION OF MATERIALITY

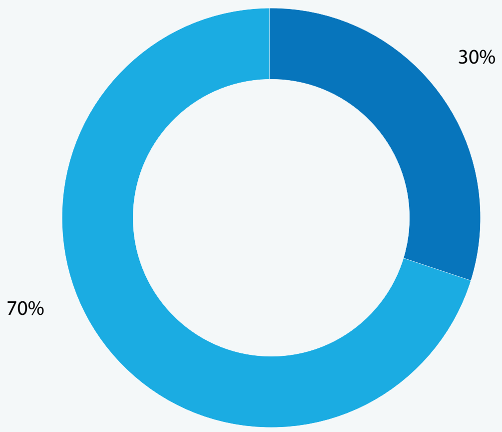
We define materiality as the magnitude of misstatement in the financial statements that makes it probable that the economic decisions of a reasonably knowledgeable person would be changed or influenced. We use materiality in determining the nature, timing and extent of our audit work and in evaluating the results of that work.

Materiality was determined as follows:

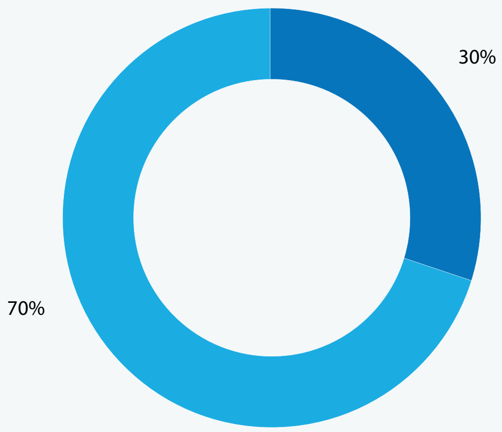
Materiality measure	Group	Parent
Financial statements as a whole	£257,000 which is 1% of group revenue. Revenue is considered a key driver of the business performance and therefore considered an appropriate benchmark on which to base materiality.	£133,000, which is 1% of parent company total assets, capped by component materiality. Total assets is considered the most appropriate because the parent company does not trade and largely holds investments in the subsidiary entities.
Performance materiality used to drive the extent of our testing	70% of financial statement materiality.	70% of financial statement materiality.
Specific materiality	We also determine a lower level of specific materiality for certain areas such as directors' remuneration and related party transactions.	We also determine a lower level of specific materiality for certain areas such as directors' remuneration and related party transactions.
Communication of misstatements to the audit committee	£12,850 and misstatements below that threshold that, in our view, warrant reporting on qualitative grounds.	£9,750 and misstatements below that threshold that, in our view, warrant reporting on qualitative grounds.

The graph below illustrates how performance materiality interacts with our overall materiality and the tolerance for potential uncorrected misstatements.

Overall materiality – Group



Overall materiality – Parent



Tolerance for potential uncorrected mis-statements

Performance materiality

AN OVERVIEW OF THE SCOPE OF OUR AUDIT

Our audit approach was a risk-based approach founded on a thorough understanding of the group's business, its environment and risk profile and in particular included:

- evaluation by the group audit team of identified components to assess the significance of that component and to determine the planned audit response based on a measure of materiality calculated by considering the component's significance as a percentage of the group's total assets, revenues and profit before taxation;
- a full-scope audit of the financial information of the parent company, Instem plc;
- full scope audit procedures on the financial information of seven of the group's components. The components on which full scope audits were performed were selected based upon their significance to the group's assets, revenues and EBITDA
- our full scope and specific procedures comprised coverage of 100% of total revenue, 86% of EBITDA and 90% of total assets; Instem Clinical Holdings Limited, Instem Scientific Solutions Limited and Instem Life Science Systems Limited have been audited to group materiality as Instem Plc have provided a parental guarantee as disclosed on page 45 in the accounts;
- performance of specific and analytical procedures on non-significant components in the group;
- an evaluation of significant management estimates and judgements;
- an assessment of material accounting policies for compliance with the financial reporting framework; and
- all audit work has been undertaken by the group audit team at the group head office in Stone.

OTHER INFORMATION

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

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

We have nothing to report in this regard.

OUR OPINION ON OTHER MATTERS PRESCRIBED BY THE COMPANIES ACT 2006 IS UNMODIFIED

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

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

MATTERS ON WHICH WE ARE REQUIRED TO REPORT UNDER THE COMPANIES ACT 2006

In the light of the knowledge and understanding of the group and the parent company and its environment obtained in the course of the audit, we have not identified material misstatements in the strategic report or the directors' report.

MATTERS ON WHICH WE ARE REQUIRED TO REPORT BY EXCEPTION

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

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

RESPONSIBILITIES OF DIRECTORS FOR THE FINANCIAL STATEMENTS

As explained more fully in the directors' responsibility statement, set out on page 31, the directors are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view and for such internal control as the directors determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

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

AUDITOR'S RESPONSIBILITIES FOR THE AUDIT OF THE FINANCIAL STATEMENTS

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

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

USE OF OUR REPORT

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

Michael Frankish
Senior Statutory Auditor
for and on behalf of Grant Thornton UK LLP
Statutory Auditor, Chartered Accountants
Manchester
2 June 2020

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

For the year ended 31 December 2019

	Note	**Year ended 31 December 2019 £000**	Year ended 31 December 2018 £000
REVENUE	1	**25,717**	22,705
Employee benefits expense	2	**(13,609)**	(12,436)
Other expenses	2	**(7,244)**	(6,217)
EARNINGS BEFORE INTEREST, TAXATION, DEPRECIATION, AMORTISATION AND NON-RECURRING COSTS (ADJUSTED EBITDA)		**4,864**	4,052
Depreciation	14	**(155)**	(144)
Amortisation of intangibles arising on acquisition	12	**(523)**	(788)
Amortisation of internally generated intangibles	12	**(755)**	(738)
Amortisation of right of use assets	7	**(607)**	-
Impairment of goodwill and capitalised development	12	**(3,175)**	-
(LOSS)/PROFIT BEFORE NON-RECURRING COSTS	2	**(351)**	2,382
Non-recurring costs	3	**(302)**	(539)
(LOSS)/PROFIT AFTER NON-RECURRING COSTS		**(653)**	1,843
Finance income	4	**7**	33
Finance costs	5	**(255)**	(199)
(LOSS)/PROFIT BEFORE TAXATION		**(901)**	1,677
Taxation	10	**(22)**	(207)
(LOSS)/PROFIT FOR THE YEAR		**(923)**	1,470
OTHER COMPREHENSIVE INCOME/(EXPENSE)			
Items that will not be reclassified to profit and loss account:			
Actuarial gain on retirement benefit obligations		**30**	1,300
Deferred tax on actuarial gain		**(6)**	(221)
		24	1,079
Items that may be reclassified to profit and loss account:			
Exchange differences on translating foreign operations		**(208)**	(193)
OTHER COMPREHENSIVE (EXPENSE)/INCOME FOR THE YEAR		**(184)**	886
TOTAL COMPREHENSIVE (EXPENSE)/INCOME FOR THE YEAR		**(1,107)**	2,356
(LOSS)/PROFIT ATTRIBUTABLE TO OWNERS OF THE PARENT COMPANY		**(923)**	1,470
TOTAL COMPREHENSIVE (EXPENSE)/INCOME ATTRIBUTABLE TO OWNERS OF THE PARENT COMPANY		**(1,107)**	2,356
Earnings per share			
Basic	27	**(5.7p)**	9.2p
Diluted	27	**(5.7p)**	8.7p

The notes on pages 58 to 99 form part of these financial statements.

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

At 31 December 2019 Company Registration No. 07148099

	Note	2019 £000	2019 £000	2018 £000	2018 £000
ASSETS					
NON-CURRENT ASSETS					
Intangible assets	12	**18,108**		17,411	
Property, plant and equipment	14	**237**		300	
Right of use assets	7	**2,165**		-	
Finance lease receivables	7	**175**		-	
TOTAL NON-CURRENT ASSETS			**20,685**		17,711
CURRENT ASSETS					
Inventories	15	**36**		37	
Trade and other receivables	16	**6,921**		7,807	
Finance lease receivables	7	**39**		-	
Tax receivable	20	**1,158**		1,013	
Cash and cash equivalents	17	**5,957**		3,572	
TOTAL CURRENT ASSETS			**14,111**		12,429
TOTAL ASSETS			**34,796**		30,140
LIABILITIES					
CURRENT LIABILITIES					
Trade and other payables	18	**2,662**		2,156	
Deferred income	19	**8,942**		8,625	
Tax payable	10	**404**		401	
Financial liabilities	21	**301**		34	
Lease liabilities	7	**565**		-	
Deferred tax liabilities	23	**506**		12	
TOTAL CURRENT LIABILITIES			**13,380**		11,228
NON-CURRENT LIABILITIES					
Financial liabilities	21	**559**		18	
Retirement benefit obligations	24	**1,804**		2,249	
Provision for liabilities	25	**250**		250	
Lease liabilities	7	**2,004**		-	
TOTAL NON-CURRENT LIABILITIES			**4,617**		2,517
TOTAL LIABILITIES			**17,997**		13,745
EQUITY					
Share capital	26	**1,662**		1,592	
Share premium	28	**13,135**		12,535	
Merger reserve	28	**2,432**		1,598	
Share based payment reserve	28	**654**		1,010	
Translation reserve	28	**82**		290	
Retained earnings	28	**(1,166)**		(630)	
TOTAL EQUITY ATTRIBUTABLE TO OWNERS OF THE PARENT			**16,799**		16,395
TOTAL EQUITY AND LIABILITIES			**34,796**		30,140

The financial statements on pages 39 to 99 were approved by the board of directors and authorised for issue on 2 June 2020 and are signed on its behalf by:

P J Reason
Director

N J Goldsmith
Director

COMPANY STATEMENT OF FINANCIAL POSITION

At 31 December 2019 Company Registration No. 07148099

		2019		2018	
	Note	**£000**	**£000**	£000	£000
ASSETS					
NON-CURRENT ASSETS					
Investments	13	**26,192**		28,927	
TOTAL NON-CURRENT ASSETS			**26,192**		28,927
CURRENT ASSETS					
Trade and other receivables	16	**5,001**		3,131	
Cash and cash equivalents	17	**1,128**		643	
TOTAL CURRENT ASSETS			**6,129**		3,774
TOTAL ASSETS			**32,321**		32,701
LIABILITIES					
CURRENT LIABILITIES					
Trade and other payables	18	**6,659**		4,595	
TOTAL CURRENT LIABILITIES			**6,659**		4,595
TOTAL LIABILITIES			**6,659**		4,595
EQUITY					
Share capital	26	**1,662**		1,592	
Share premium	28	**13,135**		12,535	
Merger reserve	28	**14,066**		13,232	
Share based payment reserve	28	**654**		1,010	
Retained earnings	28	**(3,855)**		(263)	
TOTAL EQUITY ATTRIBUTABLE TO OWNERS OF THE PARENT			**25,662**		28,106
TOTAL EQUITY AND LIABILITIES			**32,321**		32,701

As permitted by Section 408 of the Companies Act 2006, the Company has not presented its own statement of comprehensive income and related notes. The Company's loss for the year was £4,023,000 (2018: £89,000).

The notes on pages 58 to 99 form part of these financial statements.

The financial statements on pages 39 to 99 were approved by the board of directors and authorised for issue on 2 June 2020 and are signed on its behalf by:

P J Reason
Director

N J Goldsmith
Director

CONSOLIDATED STATEMENT OF CASH FLOWS

For the year ended 31 December 2019

	Note	2019 £000	2019 £000	2018 £000	2018 £000
CASH FLOWS FROM OPERATING ACTIVITIES					
(Loss)/profit before taxation			**(901)**		1,677
Adjustments for:					
Depreciation	14		**155**		144
Amortisation of intangibles	12		**1,278**		1,526
Amortisation of right of use assets	7		**607**		-
Impairment of goodwill and capitalised development	12		**3,175**		-
Share based payment charge	2		**75**		216
Retirement benefit obligations	24		**(475)**		(499)
Finance income	4		**(7)**		(33)
Finance costs	5		**255**		199
CASH FLOWS FROM OPERATIONS BEFORE MOVEMENTS IN WORKING CAPITAL			**4,162**		3,230
Movements in working capital:					
Decrease/(Increase) in inventories			**1**		(7)
Decrease in trade and other receivables			**790**		1,997
Increase/(Decrease) in trade, other payables and deferred income			**693**		(3,448)
NET CASH GENERATED FROM OPERATIONS			**5,646**		1,772
Finance income	4		**7**		33
Finance costs	5		**(255)**		(11)
Income taxes			**25**		408
NET CASH GENERATED FROM OPERATING ACTIVITIES			**5,423**		2,202
CASH FLOWS FROM INVESTING ACTIVITIES					
Capitalisation of development costs	12	**(1,344)**		(1,490)	
Purchase of property, plant and equipment	14	**(91)**		(145)	
Payment of contingent consideration		**-**		(200)	
Purchase of subsidiary undertakings (net of cash acquired)		**(1,268)**		-	
NET CASH USED IN INVESTING ACTIVITIES			**(2,703)**		(1,835)
CASH FLOWS FROM FINANCING ACTIVITIES					
Proceeds from issue of share capital		**648**		50	
Lease interest payment		**(2)**		(4)	
Repayment of lease liabilities	7	**(693)**		-	
Receipts from sublease of asset	7	**7**		-	
Repayment of lease capital		**(34)**		(31)	
NET CASH GENERATED FROM FINANCING ACTIVITIES			**(74)**		15
NET INCREASE IN CASH AND CASH EQUIVALENTS			**2,646**		382
Cash and cash equivalents at start of year			**3,572**		3,064
Effects of exchange rate changes on the balance of cash held in foreign currencies			**(261)**		126
CASH AND CASH EQUIVALENTS AT END OF YEAR	17		**5,957**		3,572

The notes on pages 58 to 99 form part of these financial statements.

COMPANY STATEMENT OF CASH FLOWS

For the year ended 31 December 2019

	Note	2019		2018	
		£000	**£000**	£000	£000
CASH FLOWS FROM OPERATING ACTIVITIES					
Loss before taxation			**(4,023)**		(89)
Adjustments for:					
Finance income			**-**		(81)
Finance cost			**243**		20
Impairment of investment	13		**2,810**		-
CASH FLOWS USED IN OPERATIONS BEFORE MOVEMENTS IN WORKING CAPITAL			**(970)**		(150)
Movements in working capital:					
Increase in trade and other receivables			**(1,014)**		(885)
Increase in trade and other payables			**2,064**		719
NET CASH USED IN OPERATIONS			**80**		(316)
Finance income			**-**		81
Finance costs			**(243)**		(8)
NET CASH USED IN OPERATING ACTIVITIES			**(163)**		(243)
CASH FLOWS FROM INVESTING ACTIVITIES					
Payment of deferred consideration		**-**		(200)	
NET CASH USED IN INVESTING ACTIVITIES			**-**		(200)
CASH FLOWS FROM FINANCING ACTIVITIES					
Proceeds from issue of share capital		**648**		50	
NET CASH GENERATED FROM FINANCING ACTIVITIES			**648**		50
NET INCREASE/(DECREASE) IN CASH AND CASH EQUIVALENTS			**485**		(393)
Cash and cash equivalents at start of year			**643**		1,036
CASH AND CASH EQUIVALENTS AT END OF YEAR	17		**1,128**		643

The notes on pages 58 to 99 form part of these financial statements.

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

ATTRIBUTABLE TO OWNERS OF THE COMPANY

	Share capital £000	Share premium £000	Merger reserve £000	Shares based payment reserve £000	Translation reserve £000	Retained earnings £000	Total equity £000
Balance as at 1 January 2018	**1,589**	**12,488**	**1,598**	**794**	**483**	**(3,179)**	**13,773**
Profit for the year	-	-	-	-	-	1,470	1,470
Other comprehensive (expense)/income for the year		-	-	-	(193)	1,079	886
Total comprehensive (expense)/income	-	-	-	-	(193)	2,549	2,356
Shares issued	3	47	-	-	-	-	50
Share based payment	-	-	-	216	-	-	216
Balance at 31 December 2018	**1,592**	**12,535**	**1,598**	**1,010**	**290**	**(630)**	**16,395**
Adjustment on initial application of IFRS 16	-	-	-	-	-	(68)	(68)
Adjusted balance as at 1 January 2019	**1,592**	**12,535**	**1,598**	**1,010**	**290**	**(698)**	**16,327**
Profit for the year	-	-	-	-	-	(923)	(923)
Other comprehensive income/(expense) for the year	-	-	-	-	(208)	24	(184)
Total comprehensive (expense)/income	-	-	-	-	(208)	(899)	(1,107)
Shares issued	70	600	834	-	-	-	1,504
Share based payment	-	-	-	75	-	-	75
Reserve transfer on exercise of share options	-	-	-	(431)	-	431	-
Balance as at 31 December 2019	**1,662**	**13,135**	**2,432**	**654**	**82**	**(1,166)**	**16,799**

COMPANY STATEMENT OF CHANGES IN EQUITY

ATTRIBUTABLE TO OWNERS OF THE COMPANY

	Share capital £000	Share premium £000	Merger reserve £000	Share based payment reserve issued £000	Retained earnings £000	Total equity £000
Balance as at 1 January 2018	**1,589**	**12,488**	**13,232**	**794**	**(174)**	**27,929**
Loss for the year	-	-	-	-	(89)	(89)
Shares issued	3	47	-	-	-	50
Share based payment	-	-	-	216	-	216
Balance as at 31 December 2018	**1,592**	**12,535**	**13,232**	**1,010**	**(263)**	**28,106**
Loss for the year	-	-	-	-	(4,023)	(4,023)
Shares issued	70	600	834	-	-	1,504
Share based payment	-	-	-	75	-	75
Reserve transfer on exercise of share options	-	-	-	(431)	431	-
Balance as at 31 December 2019	**1,662**	**13,135**	**14,066**	**654**	**(3,855)**	**25,662**

The notes on pages 58 to 99 form part of these financial statements.

GENERAL INFORMATION

The principal activity and nature of operations of the Group is the provision of world class IT solutions to the life sciences market. Instem's solutions for data collection, management and analysis are used by customers worldwide to meet the needs of life science and healthcare organisations for data-driven decision making leading to safer, more effective products. Instem plc is a public limited company, listed on AIM, and incorporated in England and Wales under the Companies Act 2006 and domiciled in England and Wales. The registered office is Diamond Way, Stone Business Park, Stone, Staffordshire, ST15 0SD.

STATEMENT OF COMPLIANCE

The financial statements of the Group and Company have been prepared in accordance with International Financial Reporting Standards (IFRS's), as adopted for use in the European Union, IFRS Interpretation Committee (IFRIC) interpretations, issued by the International Accounting Standards Board (IASB), and the Companies Act 2006.

BASIS OF PREPARATION

The Group's accounting reference date is 31 December.

The consolidated financial statements have been prepared on a going concern basis and prepared on the historical cost basis.

The Company has taken advantage of the audit exemption for three of its subsidiaries, Instem Life Science Systems Limited (company number 04339129), Instem Scientific Solutions Limited (company number 03598020) and Instem Clinical Holdings Limited (company number 05840032), by virtue of s479A of Companies Act 2006. The Company has provided parent guarantees to these three subsidiaries which have taken advantage of the exemption from audit. Under this guarantee, the Company has a contingent liability of £9.0m.

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

ADOPTION OF IFRS

The Group and Company financial statements have been prepared in accordance with IFRS, IAS and International Financial Reporting Interpretations Committee (IFRICs) effective as at 31 December 2019. The Group and Company have chosen not to adopt any amendments or revised standards early.

IFRSs ADOPTED IN THE YEAR

The following IFRSs, IASs and IFRICs have been adopted for the first time in the year:

The Group has adopted IFRS 16 Leases from 1 January 2019 using the modified retrospective approach and has not restated comparatives for the 2018 reporting period as permitted under the specific transition provisions in the standard.

On adoption of IFRS 16, the Group recognised lease liabilities on the statement of financial position in relation to leases which had previously been classified as 'operating leases' under the principles of IAS 17 Leases. These liabilities were measured at the present value of the remaining lease payments, discounted using the lessee's incremental borrowing rate as of 1 January 2019. The weighted average lessee's incremental borrowing rate applied to the lease liabilities on 1 January 2019 was 4.0%. For longer leases of over 5 years a discount rate of 5% has been applied. Any prepaid or accrued lease payments relating to leases recognised in the statement of financial position as at 31 December 2018 have been adjusted against the value of right of use assets as at the 1 January 2019.

Instead of recognising an operating expense for its operating lease payments, the Group now instead recognises interest on its lease liabilities and amortisation on its right of use assets.

Right of use assets increased by £3,002,000 on 1 January 2019, comprising land & buildings of £2,978,000 and motor vehicles of £24,000. Lease liabilities for land & buildings on 1 January 2019 are £3,020,000 and motor vehicles £22,000. The net impact on retained earnings on 1 January 2019 was a decrease of £68,000.

In applying the modified retrospective approach, the Group has taken advantage of the following practical expedients:

- A single discount rate has been applied to portfolios of leases with reasonably similar characteristics.
- Impairment losses on right of use assets as at 1 January 2019 have been measured by reference to the amount of any onerous lease provision recognised on 31 December 2018.

- Leases with a remaining term of 12 months or less from the date of initial application have not been recognised on the statement of financial position with payments instead recognised as an expense over the lease term on a straight-line basis,
- The Group has not reassessed whether contracts are, or contain, a lease as at the date of initial application. The Group has therefore not applied the requirements of IFRS 16 to contracts that were not previously identified as containing a lease under IAS 17 and IFRIC 4.
- For the purposes of measuring the right of use asset hindsight has been used. Therefore, it has been measured based on prevailing estimates at the date of initial application and not retrospectively.

Management have concluded that the interest rate implicit in the leases cannot not be readily determined therefore the leases held have been discounted by the incremental borrowing rate (IBR), being the rate of interest that the Group would have to pay to borrow over a similar term, and with a similar security, the funds necessary to obtain assets of a similar value to the right of use assets in a similar economic environment.

IFRSs ISSUED BUT NOT YET EFFECTIVE

There are a number of standards, amendments to standards, and interpretations which have been issued by the IASB that are effective in future accounting periods that the Group has decided not to adopt early. The most significant of these is are as follows, which are all effective for the period beginning 1 January 2020:

- IAS 1 Presentation of Financial Statements and IAS 8 Accounting Policies, Changes in Accounting Estimates and Errors (Amendment – Definition of Material)
- IFRS 3 Business Combinations (Amendment – Definition of Business)
- Revised Conceptual Framework for Financial Reporting

These standards are not expected to have a material impact on the entity in the current or future reporting periods and on foreseeable future transactions.

BASIS OF CONSOLIDATION

The consolidated financial statements incorporate those of the parent company, Instem plc, and its subsidiary undertakings made up to 31 December 2019 and 31 December 2018.

In preparing the consolidated financial statements, any intra-group balances, unrealised gains and losses or income and expenses arising from intra-group trading are eliminated. Where accounting policies used in individual financial statements of a subsidiary company differ from Group policies, adjustments are made to bring these policies in line with Group policies.

Subsidiaries

Subsidiaries are entities in which the Group has rights to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. Subsidiaries are consolidated from the date on which control is transferred to the Group up until the date that control ceases.

All subsidiary companies within the Group have a financial year end date of 31 December, with the exception of Instem India Pvt Limited which has a financial year end date of 31 March.

BUSINESS COMBINATIONS

Acquisitions of businesses are accounted for using the acquisition method. The consideration transferred in a business combination is measured at fair value, which is calculated as the sum of the acquisition date fair values of the assets transferred by the Group, liabilities incurred by the Group to the former owners of the acquiree and the equity interests issued by the Group in exchange for control of the acquiree. Acquisition related costs are recognised in profit or loss as incurred.

At the acquisition date, the identifiable assets acquired and the liabilities assumed are recognised at their fair value, except that deferred tax assets or liabilities are recognised and measured in accordance with IAS 12 'Income taxes'.

Consideration may consist of deferred consideration and contingent consideration. Deferred consideration is not based on any performance related conditions and is payable on an agreed future date. Contingent consideration is based on certain performance related conditions and payable on an agreed future date, if those conditions are met.

Deferred consideration and contingent consideration is measured at their acquisition-date fair value and are taken into account in the determination of goodwill. Changes in the fair value of the contingent consideration that qualify as measurement period adjustments are adjusted retrospectively, with corresponding adjustments against goodwill. The subsequent accounting for changes in the fair value of the contingent consideration that do not qualify as measurement period adjustments depends on how the contingent consideration is classified. Contingent consideration that is classified as an asset or a liability is re-measured at subsequent reporting dates with the corresponding gain or loss being recognised in statement of comprehensive income.

GOING CONCERN

The financial position of the Group, its cash flows and liquidity position are set out in the primary statements within these financial statements.

The Group's financing arrangements consist of a committed net overdraft facility of £0.5m with NatWest Bank plc to support the Group's working capital needs. At 31 December 2019 the facility was undrawn (2018: undrawn). There are no material covenants associated with the facility.

In November 2019 the Company acquired the earnings enhancing, cash generative business of Leadscope Inc, the results of which are included in the Group's forecast cash flows for 2020 and beyond. The only financial obligation associated with this acquisition during 2020 is a deferred consideration payment of $0.4m due in November 2020.

The Group's detailed forecasts and projections, taking account of reasonably possible changes in trading performance through sensitivity analysis, show that the Group has adequate resources to be able it to continue in operation for at least twelve months from the approval date of these Consolidated Financial Statements. Accordingly, the Group continues to adopt the going concern basis in preparing its Consolidated Financial Statements.

The uncertainty as to the future impact on the Group of the recent COVID-19 outbreak has been considered as part of the Group's adoption of the going concern basis. Thus far we have not observed any material impact on our overall existing business or in the level of new business opportunities that are being presented to us in the markets in which we operate. We have seen a little slippage in customers placing new business during the first quarter of 2020, but at this stage it is too early to determine whether this is likely to be a long term issue or merely a temporary matter whilst our customers are focused on managing their own businesses, with changes from introducing staff self-isolation and working from home.

The Group has a significant proportion of recurring revenue (circa 60% of total) from annual support & maintenance and SaaS contracts from a well-established global customer base. Experience from the last financial crisis showed there was no material increase in recurring revenue attrition, although annual inflationary increases were harder to secure. Revenue is supported by a largely fixed cost base comprising staff and offices.

The Group had net current assets (excluding deferred income) of £10.0m at 31 December 2019 (2018: £9.8m). The deferred income recurs each year on renewal of contracts and in general the Group has either received the related cash or has raised invoices for the services. The Group had positive cash reserves of £6.0m at the 2019 year end, in addition to the £0.5m undrawn working capital facility, although £1.9m of the cash was held in bank accounts in China, where it has been traditionally harder to repatriate funds quickly. There are however no long-term restrictions on the transfer of funds from the Group bank accounts in China.

In the downside scenario analysis performed, the Board has considered the potential impact of the COVID-19 outbreak on the Group's results. In preparing this analysis the following key assumptions were used: the impact of a 25% loss of new business for the next twelve months, no hiring of new staff for twelve months and a weakening of the USD against GBP. This resulted in reduced profitability and cash over the next twelve months, but the Company remained viable. We then considered a more extreme situation, if the significant negative impact of COVID-19 continued for an extended period of time into 2021. We assumed there would be no new business. and up to 25% erosion of the existing customer base for recurring revenues. This would result in the Company exhausting its cash reserves and exceeding its bank facility in November 2020.

The Company would take remedial action to counter the dramatic reduction in profit and cash through a cost cutting and fund-raising exercise that would include staff redundancies, general cost control measures, office space reduction and seeking alternative sources of funding from banks and investors.

These downside scenarios are considered unlikely. However, it is difficult to predict the overall impact and outcome of COVID-19 at this stage, particularly if there was a second wave towards the end of 2020. The Board acknowledges that based on the difficulty in determining when sufficient relief funding may become available and when the full benefit of cost cutting measures is realised there is material uncertainty in the Group's future as a result of a long-term negative impact of the COVID-19 pandemic.

The directors have concluded that current circumstances represent a material uncertainty that may cast significant doubt upon the company's ability to continue as a going concern and, therefore, that it may be unable to realise its assets and discharge its liabilities in the ordinary course of business. Nevertheless, after making enquiries, and considering the uncertainties described above, the directors have a reasonable expectation that the company has adequate resources to continue in operational existence for the foreseeable future. For these reasons, they continue to adopt the going concern basis in preparing the annual report and accounts.

REVENUE RECOGNITION

The Group generates revenue from the provision of software licences, annual support, SaaS subscriptions, professional services and technology enabled outsourced services.

At contract inception, an assessment is completed to identify the performance obligations in each contract. Performance obligations in a contract are either goods or services that are distinct or part of a series of goods or services that are substantially the same and have the same pattern of transfer to the customer. Promises that are not distinct are combined with other promised goods or services in the contract, until a performance obligation is satisfied.

At contract inception, the transaction price is determined, being the amount that the Group expects to receive for transferring the promised goods or services. The transaction price is allocated to the performance obligations in the contract based on their relative standalone selling prices. The Group has determined that the contractually stated price represents the standalone selling price for each performance obligation.

Revenue is recognised when a performance obligation has been satisfied by transferring the promised product or service to the customer.

Software licences

Revenue from the sale of the software licences is recognised when the customer takes possession of the software which is usually when the license key is provided to the customer. This is because the software is functional at the time the licence transfers to the customer and the Group is not required or expected to undertake activities that significantly affect the utility of the intellectual property by the customer.

Annual support

Customers typically enter into a support contract for a period of twelve months. This contract provides the customer with access to technical support and software upgrades. The promises in these contracts are a single performance obligation, which is satisfied over time as the customer consumes the benefits of the service. Revenue in respect of the single performance obligation is recognised evenly over the contract term.

SaaS subscription and support

Customers typically enter into a SaaS contract for a period of twelve months and pay a fixed amount in exchange for the usage of software on a hosted server over a specified period of time along with access to maintenance and support. Initial SaaS contracts may also include some installation or customisation of the software and training for staff. The promises in this contract are considered to be a single performance obligation as the subscription and support are highly interdependent on one another given that the customers are required to take the full package of both the software and support services i.e Instem would not be able to provide the support services without the provision of the software nor provide the software without the support services.

The revenue is recognised over the period of the contract on a straight-line basis as the customer simultaneously receives and consumes the benefits of the software and services provided by the Group.

Professional services and technology enabled outsourced services

Customers typically enter into a service contract to provide distinct service work based on clear statements of work. Service work includes, but is not limited to, implementation services, training and outsourced services work relating to SEND and KnowledgeScan. The promises in this contract are considered to be a single performance obligation given the services are interdependent and the revenue is recognised on a percentage completion basis for fixed price contracts or as services are provided in respect of time and materials contracts. The Group has elected to take the practical expedient to apply this policy to its portfolio distinct service contracts given the similar characteristics in these types of contracts.

Bundled contracts

Software licences, professional services - and annual support are often bundled together in a contract.

Where the contract assessment identifies that the sale does not meet the criteria to be a distinct performance obligation, due to a lack of interdependence between performance obligations, promises that are not distinct are combined with other promised goods or services in the contract, until a performance obligation is satisfied. Revenue in respect of this bundled performance obligation is recognised over the period of the contracted obligation on a straight-line basis.

Amounts recoverable on contracts and deferred income

In most cases, customers are invoiced and payment is received in advance of revenue being recognised in the income statement. Amounts recoverable on contracts and deferred income is the difference between amounts invoiced to customers and revenue recognised under the policy described above. If the amount of revenue recognised exceeds the amounts invoiced the excess amount is included within amounts recoverable on contracts.

Contract costs

The incremental costs associated with obtaining a contract are recognised as an asset if the Group expects to recover the costs. Costs that are not incremental to a contract are expensed as incurred. Management determine which costs are incremental and meet the criteria for capitalisation.

Costs to fulfil a contract, which are not in the scope of another standard, are recognised separately as a contract fulfilment asset to the extent that they relate directly to a contract which can be specifically identified; the costs generate or enhance resources that will be used to satisfy the performance obligation and the costs are expected to be recovered. Management applies judgement to determine which contract fulfilment costs meet the recognition criteria, and in particular if the costs generate or enhance resources used to satisfy the performance obligation.

Costs to fulfil a contract which do not meet the criteria above are expensed as incurred.

Contract fulfilment asset

Contract fulfilment assets are amortised over the expected contract period on a systematic basis representing the pattern in which control of the associated service is transferred to the customer.

Practical exemptions

The Group has taken advantage of the following practical exemptions:

- not to account for significant financing components where the time difference between receiving consideration and transferring control of goods (or services) to its customer is one year or less;
- expense the incremental costs of obtaining a contract when the amortisation period of the asset otherwise recognised would have been one year or less; and
- to not disclose information relating to performance obligations for contracts that had an original expected duration of one year or less or where the right to consideration from a customer is an amount that corresponds directly with the value of the completed performance obligations.

EARNINGS BEFORE INTEREST, TAXATION, DEPRECIATION, AMORTISATION AND NON-RECURRING COSTS (EBITDA)

Adjusted EBITDA is profit/(loss) arising from the Group's normal trading activities stated before interest, tax, depreciation, amortisation, impairment of goodwill and capitalised development costs and non-recurring items.

It is shown in this way to provide a clearer measure of underlying operating performance.

SEGMENTAL DISCLOSURES

In prior years, the Group reported its business as one operating segment; Global Life Sciences. The Board managed the Group by monitoring its revenue streams and considered the cost base as a whole. During 2019 the business was divided into three operating segments to better manage and report revenues; Study Management, Regulatory Solutions and Informatics.

Historically the Group have recorded costs centrally and have managed costs in this way. During the final quarter of 2019 certain direct costs were allocated to the revenue streams whilst the majority of costs were still recorded and reported centrally. The treatment in 2019 is a new disclosure based on information that was provided to the Instem Board, the Company's Chief Operating Decision Maker, at the end of the year.

Whilst the expectation in future years is to allocate more centrally held operational costs to the individual segments, it will take time for the allocations to be sufficiently accurate for the Board to use segmental cost information for meaningful decision making. Until that time, cost allocations will not be provided to the Board as part of the monthly management information.

The operations of the Group are managed centrally with group-wide functions including sales and marketing, development, customer support, human resources and finance & administration.

FOREIGN CURRENCIES

Transactions in foreign currencies are translated at the foreign exchange rate ruling at the date of the transaction. Monetary assets and liabilities denominated in foreign currencies at the reporting date are translated at the foreign exchange rate ruling at that date. Foreign exchange differences arising on translation are recognised in profit or loss. Non-monetary assets and liabilities that are measured in terms of historical cost in a foreign currency are translated using the exchange rate at the date of the transaction. Non-monetary assets and liabilities denominated in foreign currencies that are stated at fair value are translated at foreign exchange rates ruling at the date the fair value was determined.

The assets and liabilities of foreign operations, including goodwill and fair value adjustments arising on consolidation, are translated at foreign exchange rates ruling at the reporting date. The revenue and expenses of foreign operations are translated at an average rate for the year where this rate approximates to the foreign exchange rates ruling at the dates of the transactions, or otherwise at the exchange rate ruling at the date of each transaction.

Exchange differences arising from the translation of foreign operations are taken directly to the translation reserve. They are released into profit or loss upon disposal of the foreign operation.

The consolidated financial statements are presented in Sterling (GBP), which is also the functional currency of the Parent Company. The functional currencies of each of the companies in the Group are as follows:

Instem plc	Sterling (GBP)
Instem Life Science Systems Limited	Sterling (GBP)
Instem LSS Limited	Sterling (GBP)
Instem LSS (North America) Limited	US Dollars (USD)
Instem LSS Asia Limited	Hong Kong Dollars (HKD)
Instem Information Systems (Shanghai) Limited	Renminbi (RMB)
Instem Scientific Limited	Sterling (GBP)
Instem Scientific Solutions Limited	Sterling (GBP)
Instem Scientific Inc	US Dollars (USD)
Instem India Pvt Limited	Indian Rupees (INR)
Instem Clinical Holdings Limited	Sterling (GBP)
Instem Clinical Limited	Sterling (GBP)
Instem Clinical Inc	US Dollars (USD)
Perceptive Instruments Limited	Sterling (GBP)
Instem Japan K.K	Japanese Yen (JPY)
Samarind Limited	Sterling (GBP)
Notocord Systems S.A.	Euro (EUR)
Notocord Inc.	US Dollars (USD)
Leadscope Inc.	US Dollars (USD)

The exchange rates used to translate the financial statements into Sterling (GBP) are as follows:

	US Dollar (USD)	Hong Kong Dollar (HKD)	Chinese Renminbi (RMB)	Indian Rupee (INR)	Japanese Yen (JPY)	Euro (EUR)
Average rate for year ended 31 December 2018	1.3354	10.4662	8.8201	91.1933	147.3546	1.1301
Closing rate at 31 December 2018	1.2735	9.9761	8.7611	88.8707	140.3243	1.1138
Average rate for year ended 31 December 2019	1.2739	9.9825	8.7841	89.3413	138.8451	1.1389
Closing rate at 31 December 2019	1.3159	10.2457	9.1621	93.8148	142.9249	1.1735

NON RECURRING ITEMS

Non recurring items are gains or losses which are infrequent or abnormal and are not part of the ongoing operations of the business. Non recurring items may include restructuring costs, legal fees, M&A costs and other unusual gains or losses.

FINANCE INCOME

Interest income is accrued on a time basis, by reference to the principal outstanding and at the effective interest rate applicable, which is the rate that exactly discounts estimated future cash receipts through the expected life of the financial asset to that asset's net carrying amount. Finance income includes exchange gains (including exchange gains on the translation of intra-group funding balances).

FINANCE COSTS

Net finance costs include interest payable, arrangement and service fees, exchange losses (including exchange losses on the translation of inter-company funding balances), unwinding discount from future deferred consideration payments, finance charges on leases and net interest on pension scheme liabilities. Interest payable is recognised in the statement of comprehensive income as it accrues, using the effective interest method.

SHARE-BASED PAYMENT TRANSACTIONS

The Group issues equity-settled share-based payments to certain employees. Equity-settled share-based payments are measured at fair value at the date of grant by reference to the fair value of the equity instruments granted. The fair value determined at the grant date of equity-settled share-based payments is expensed on a straight-line basis over the vesting period, based on the Group's estimate of the number of instruments that will eventually vest with a corresponding adjustment to equity. Fair values are measured by use of the Binomial, Monte Carlo or Black Scholes models. The expected life used in the model has been adjusted, based on management's best estimate, for the effect of non-transferability, exercise restrictions, and behavioural considerations.

Non-vesting and market vesting conditions are taken into account when estimating the fair value of the option at grant date. Service and non-market vesting conditions are taken into account by adjusting the number of options expected to vest at each reporting date. Market vesting conditions are linked to the Group's share price performance. Non-market vesting conditions are linked to trading performance and service over defined time periods.

Cancelled or settled options are accounted for as an acceleration of vesting. The unrecognised grant date fair value is recognised in profit or loss in the year that the options are cancelled or settled. Where the terms of the options are modified and the modification increases the fair value or number of equity instruments granted, measured immediately before and after the modification, the incremental fair value is spread over the remaining vesting period.

Options over the Company's shares granted to employees of subsidiaries are recognised as a capital contribution in the subsidiaries and added to the cost of investment within Instem plc.

TAXATION

Taxation expense includes the amount of current income tax payable and the charge for the year in respect of deferred taxation.

The income tax payable is based on an estimation of the amount due on the taxable profit for the year. Taxable profit is different from profit before tax as reported in the statement of comprehensive income because it excludes items of income or expenditure which are not taxable or deductible in the year as a result of either the nature of the item or the fact that it is taxable or deductible in another year. The Group's liability for current tax is calculated by using tax rates that have been enacted or substantively enacted by the reporting date.

Income tax credits for research and development activities are recognised on a cash basis or when their receipt is reasonably certain.

Deferred tax is accounted for on the basis of temporary differences arising from the differences between the tax base and accounting base of assets and liabilities.

Deferred tax is recognised for all taxable temporary differences, except to the extent where it arises from the initial recognition of an asset or liability in a transaction that is not a business combination. Deferred tax assets are recognised only to the extent that it is probable that future taxable profits will be available against which temporary differences can be utilised. Deferred tax is recognised on income or expenses from subsidiaries that will be assessed or allow for tax in future periods except where the Group is able to control the reversal of the timing difference and it is probable that the timing difference will not reverse in the foreseeable future.

Deferred tax is charged or credited to the statement of comprehensive income, except when it relates to items charged or credited directly to equity, in which case it is dealt with within equity. It is calculated at the tax rates that are expected to apply to the period when the asset is realised or the liability is settled.

INTANGIBLE ASSETS

Intangible assets purchased separately from a business are capitalised at their cost.

Intellectual Property, Customer Relationships, Brand Names and Patents

The Group makes an assessment of the fair value of intangible assets arising on acquisitions. These include Intellectual Property, Customer Relationships, Brand Names and Patents. An intangible asset will be recognised as long as the asset is identifiable and its fair value can be measured reliably. An intangible asset is identifiable if it is separable or if it was obtained through contractual or legal rights. Amortisation is provided on the fair value of the asset and is calculated on a straight-line basis over its useful life. The useful life for Intellectual Property, Customer Relationships, Brand Names and Patents is between five and ten years. Amortisation is recognised within the statement of comprehensive income. All intangible assets except Goodwill are amortised.

Goodwill

Goodwill on acquisitions, being the excess of the fair value of the cost of acquisition over the Group's interest in the fair value of the identifiable assets and liabilities acquired, is capitalised and tested for impairment on an annual basis.

Any impairment is recognised immediately in profit or loss and is not subsequently reversed. For the purpose of impairment testing goodwill is allocated to cash generating units of Instem plc, which represent the smallest identifiable group of assets that generates cash inflows that are largely independent of the cash inflows from other assets or groups of assets.

Computer Software

Computer software is carried at cost less accumulated amortisation and any impairment loss. Externally acquired computer software and software licences are capitalised and amortised on a straight-line basis over their useful economic lives of three years. Costs relating to development of computer software for internal use are capitalised once the recognition criteria of IAS 38 "Intangible Assets" are met. When the software is available for its use, these costs are amortised over the estimated useful life of the software.

Internally generated intangible assets

Expenditure on research activities is recognised in the statement of comprehensive income as incurred.

Expenditure arising from the Group's development of software for sale to third parties is recognised only if all of the following conditions are met:

- an asset is created that can be identified;
- it is probable that the asset created will generate future economic benefits;
- the development cost of the asset can be measured reliably;
- the Group has the intention to complete the asset and the ability and intention to use or sell it;
- the product or process is technically and commercially feasible; and
- sufficient resources are available to complete the development and to either sell or use the asset.

Capitalised development costs are those which are directly attributable to the development activity and include employee costs, overheads and direct third party costs.

Where the criteria have not been achieved, development expenditure is recognised in profit or loss in the period in which it is incurred.

Internally-generated intangible assets are amortised, once the product is available for use, on a straight-line basis over their useful lives (five to eight years).

Gains or losses arising from derecognition of an intangible asset are measured as the difference between the net disposal proceeds and the carrying amount of the asset and are recognised in profit or loss when the asset is derecognised.

PROPERTY, PLANT & EQUIPMENT

Property, plant and equipment are stated in the statement of financial position at cost less accumulated depreciation and provision for impairments.

Depreciation is provided on all assets so as to write off the cost less estimated residual value on a straight-line basis as follows:

- Short leasehold property - Over term of lease
- IT hardware and software - 12½% - 33% per annum

The expected useful lives and residual values of property, plant and equipment are reviewed on an annual basis and, if necessary, changes in useful lives are accounted for prospectively.

The gain or loss arising on the disposal or retirement of an asset is determined as the difference between the sales proceeds and the carrying amount of the asset and is recognised in the statement of comprehensive income.

LEASING

All leases are accounted for by recognising a right of use asset and a lease liability except for:

- Leases of low value assets; and
- Leases with a term of 12 months or less.

Lease liabilities are measured at the present value of the contractual payments due to the lessor over the lease term, with the discount rate determined by reference to the rate inherent in the lease unless (as is typically the case) this is not readily determinable, in which case the group's incremental borrowing rate on commencement of the lease is used. Variable lease payments are only included in the measurement of the lease liability if they depend on an index or rate. In such cases, the initial measurement of the lease liability assumes the variable element will remain unchanged throughout the lease term. Other variable lease payments are expensed in the period to which they relate.

On initial recognition, the carrying value of the lease liability also includes:

- amounts expected to be payable under any residual value guarantee;
- the exercise price of any purchase option granted in favour of the Group if it is reasonably certain to assess that option;
- any penalties payable for terminating the lease, if the term of the lease has been estimated on the basis of termination option being exercised.

Right of use assets are initially measured at the amount of the lease liability, reduced for any lease incentives received, and increased for:

- lease payments made at or before commencement of the lease;
- initial direct costs incurred; and
- the amount of any provision recognised where the Group is contractually required to dismantle, remove or restore the leased asset (typically leasehold dilapidations).

Subsequent to initial measurement lease liabilities increase as a result of interest charged at a constant rate on the balance outstanding and are reduced for lease payments made. Right of use assets are amortised on a straight-line basis over the remaining term of the lease or over the remaining economic life of the asset if, rarely, this is judged to be shorter than the lease term.

When the Group revises its estimate of the term of any lease (because, for example, it re-assesses the probability of a lessee extension or termination option being exercised), it adjusts the carrying amount of the lease liability to reflect the payments to make over the revised term, which are discounted at the same discount rate that applied on lease commencement. The carrying value of lease liabilities is similarly revised when the variable element of future lease payments dependent on a rate or index is revised. In both cases an equivalent adjustment is made to the carrying value of the right of use asset, with the revised carrying amount being amortised over the remaining (revised) lease term.

When the Group renegotiates the contractual terms of a lease with the lessor, the accounting depends on the nature of the modification:

- if the renegotiation results in one or more additional assets being leased for an amount commensurate with the standalone price for the additional rights-of-use obtained, the modification is accounted for as a separate lease in accordance with the above policy
- in all other cases where the renegotiated increases the scope of the lease (whether that is an extension to the lease term, or one or more additional assets being leased), the lease liability is remeasured using the discount rate applicable on the modification date, with the right of use asset being adjusted by the same amount
- if the renegotiation results in a decrease in the scope of the lease, both the carrying amount of the lease liability and right of use asset are reduced by the same proportion to reflect the partial of full termination of the lease with any difference recognised in profit or loss. The lease liability is then further adjusted to ensure its carrying amount reflects the amount of the renegotiated payments over the renegotiated term, with the modified lease payments discounted at the rate applicable on the modification date. The right of use asset is adjusted by the same amount.

In determining the lease term, the Group assesses whether it is reasonably certain to exercise, or not to exercise, options to extend or terminate a lease. This assessment is made at the start of the lease and is re-assessed if significant events or changes in circumstances occur that are within the lessee's control.

For contracts that both convey a right to the Group to use an identified asset and require services to be provided to the Group by the lessor, the Group has elected to account for the entire contract as a lease, i.e. it does allocate any amount of the contractual payments to, and account separately for, any services provided by the supplier as part of the contract.

The Group applies judgement in determining whether individual leases can be accounted for as a portfolio. The judgements include an assessment of whether the leases share similar characteristics and whether the financial statements would be materially different if each lease was accounted for individually.

The Group leases a number of properties in the jurisdictions from which it operates. In these jurisdictions the periodic rent is fixed over the lease term, with inflationary increases incorporated into the fixed payments stipulated in the lease agreements.

Where rental agreements include market rate escalations, the lease liability is re-measured when the change in cash payments takes affect.

The Group also leases certain vehicles. Leases of vehicles comprise only fixed payments over the lease terms.

The Group acts as a lessor in relation to a sublease of part of one of the properties rented. As the lease term is for the major part of the economic life of the underlying right of use asset this has been treated as a finance lease. The right of use asset has therefore been derecognised and a net investment in the lease recognised instead. Interest income is recognised on the lease receivable.

As explained previously, the Company has changed its accounting policy for leases where the Company is the lessee. The impact of the change is explained above. Prior to this change, leases of property, plant and equipment where the Company, as lessee, had substantially all the risks and rewards of ownership were classified as finance leases. Finance leases were capitalised at the lease's inception at the fair value of the leased property or, if lower, the present value of the minimum lease payments. The corresponding rental obligations, net of finance charges, were included in creditors: amounts falling due within 12 months and the long-term component was included in creditors: amounts falling due after more than one year. Each lease payment was allocated between the liability and finance cost. The finance cost was charged to profit or loss over the lease period so as to produce a constant periodic rate of interest on the remaining balance of the liability for each period. The property, plant and equipment acquired under finance leases was depreciated over the asset's useful life, or over the shorter of the asset's useful life and the lease term if there was no reasonable certainty that the company would obtain ownership at the end of the lease term.

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

IMPAIRMENT OF ASSETS EXCLUDING GOODWILL

The carrying value of property, plant and equipment and intangible assets (excluding goodwill) is reviewed for impairment whenever events or changes in circumstances indicate the carrying value may not be recoverable.

At each reporting date the Group reviews the carrying value of its property, plant and equipment and intangible assets to determine whether there is any indication that those assets have suffered an impairment loss. If any such indication exists the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss.

Where the asset does not generate cash flows that are independent from other assets the Group estimates the recoverable amount of the cash generating unit ('CGU') to which the asset belongs. A CGU is the smallest identifiable group of assets that generates cash inflows that are largely independent of the cash inflows from other assets or groups of assets.

Recoverable amount is the higher of fair value less costs to sell and value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset, for which the estimates of future cash flows have not been adjusted.

If the recoverable amount of an asset is estimated to be less than its carrying amount, the carrying amount of the asset is reduced to its recoverable amount. An impairment loss is recognised as an expense immediately.

Where an impairment loss subsequently reverses, the carrying amount of the assets is increased to the revised estimate of its recoverable amount, but so that the increased carrying amount does not exceed the carrying amount that would have been determined had no impairment loss been recognised for the asset in prior years. A reversal of an impairment loss is recognised in profit or loss immediately.

INVENTORY

Inventory is stated at the lower of cost and net realisable value. The cost of work in progress comprises direct labour and other direct costs and includes billable employee expenses.

Provision is made where necessary for obsolete and slow-moving inventory.

PROVISION FOR LIABILITIES

Provisions are recognised when there is a present legal or constructive obligation as a result of a past event, for which it is probable that an outflow of economic benefit will be required to settle the obligation and where the amount can be reliably estimated.

FINANCIAL INSTRUMENTS

Financial assets

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

Financial assets at amortised cost

These assets arise principally from the provision of goods and services to customers (eg trade receivables), but also incorporate other types of financial assets where the objective is to hold these assets in order to collect contractual cash flows and the contractual cash flows are solely payments of principal and interest. They are initially recognised at fair value plus transaction costs that are directly attributable to their acquisition or issue, and are subsequently carried at amortised cost, less provision for impairment.

The Group's financial assets measured at amortised cost comprise trade and other receivables and cash and cash equivalents in the consolidated statement of financial position.

Trade receivables

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

Trade and other receivables are measured at the transaction price in accordance with IFRS 15.

The Group applies the IFRS 9 simplified approach to measuring expected credit losses which uses a lifetime expected loss allowance for all trade receivables and contract assets. To measure the expected credit losses, trade receivables and contract assets 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 5 years before 31 December 2019 (2018: 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 contract assets relate to unbilled revenue, which have performance obligations to be completed. The contract assets have substantially the same risk characteristics as the trade receivables for the same types of contracts. The Group has therefore concluded that the expected loss rates for trade receivables are a reasonable approximation of the loss rates for the contract assets.

At each reporting date management assesses whether any events have occurred which have had a detrimental effect on the estimated future cash flows of the asset causing a financial asset to become credit-impaired. If the credit risk is significant a provision is posted based on the recoverable amount the Group is expected to receive per management's assessment. Specific provisions of this nature are excluded from the simplified credit loss calculation using the provision matrix.

Cash and cash equivalents

Cash and cash equivalents comprise cash in hand and cash deposits which are readily convertible to a known amount of cash. Cash and cash equivalents in the statement of financial position include bank overdrafts. An offset position is reported as the Group has a legal right to set off and any settlement would be on a net basis. For the purposes of the cash flow statement, cash and cash equivalents include bank overdrafts which are repayable on demand and are an integral part of Group cash management.

Investments

Investments in subsidiaries are recorded at cost in the statement of financial position. They are tested for impairment when there is objective evidence of impairment. Any impairment losses are recognised in the statement of comprehensive income in the period they occur.

Intercompany receivables

Impairment provisions for receivables from related parties and loans to related parties are recognised based on a forward looking expected credit loss model. The methodology used to determine the amount of the provision is based on whether there has been a significant increase in credit risk since initial recognition of the financial asset. For those where the credit risk has not increased significantly since initial recognition of the financial asset, twelve month expected credit losses along with gross interest income are recognised. For those for which credit risk has increased significantly, lifetime expected credit losses along with the gross interest income are recognised. For those that are determined to be credit impaired, lifetime expected credit losses along with interest income on a net basis are recognised.

Financial liabilities and equity

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

Bank borrowings and loan notes

Interest-bearing loan notes and bank overdrafts are recorded initially at their fair value, net of direct transaction costs. Such instruments are subsequently carried at their amortised cost and finance charges are recognised in the statement of comprehensive income over the term of the instrument using an effective rate of interest.

Finance charges are accounted for on an accruals basis to the statement of comprehensive income. Overdrafts are offset against cash and cash equivalents when the Group has a legal right of off-set.

Trade and other payables

Trade and other payables are not interest bearing and are initially recognised at fair value and subsequently at amortised cost.

Ordinary share capital

For ordinary share capital, the par value is recognised in share capital and the premium in the share premium reserve.

RETIREMENT BENEFITS

Defined contribution schemes

A defined contribution scheme is a pension plan under which the Group pays a fixed contribution to a scheme with an external provider. The amount charged to the statement of comprehensive income in respect of pension costs and other post-retirement benefits is the total of contributions payable in the year. Differences between contributions payable in the year and contributions actually paid are shown as either other payables or other receivables in the statement of financial position. The Group has no further payment obligations once the contributions have been paid.

Defined benefit scheme

A defined benefit scheme is a pension plan under which the Group pays contributions in order to fund a defined amount of pension that the employees under the scheme will receive on retirement. The cost of providing the benefits is determined using the projected unit credit method with actuarial valuations being carried out regularly.

An asset or liability is recognised equal to the present value of the defined benefit obligation, adjusted for unrecognised past service costs and reduced by the fair value of plan assets.

Actuarial gains and losses are recognised in the statement of other comprehensive income in the year in which they occur, whilst expected returns on plan assets, servicing costs and financing costs are recognised in the statement of comprehensive income.

The rate used to discount the benefit obligations is based on market yields for high quality corporate bonds with terms and currencies consistent with those of the benefit obligations.

SIGNIFICANT JUDGEMENTS AND ESTIMATES

In the process of applying the Group's accounting policies, which are described above, management have made judgements and estimations about the future that have the most significant effect on the amounts recognised in the financial statements. The estimates and underlying assumptions are reviewed on an on-going basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised if the revision affects only that period or in the period of revision and future periods if the revision affects both current and future periods.

Significant judgements

The following judgments have the most significant effect on the financial statements.

Revenue Recognition

The Group generates revenue from the provision of software licences, annual support, SaaS subscriptions, professional services and technology enabled outsourced services. Judgement is applied in determining how many performance obligations there are within each contract and the period in which these obligations will be fulfilled and recognised as revenue, based on the Group's accounting policies.

Estimation uncertainty

Information about estimations and assumptions that may have the most significant affect on recognition and measurement of assets, liabilities, income and expenses is provided below. Actual results may be substantially different.

Provision for liabilities

Provisions are recognised when the Group has a present obligation (legal or constructive) as a result of a past event, it is probable that the Group will be required to settle the probable outflow of resources, and a reliable estimate can be made of the amount of the obligation. As at 31 December 2019, the Group has a provision of £0.25m (2018: £0.25m) in respect of historical contract disputes as the directors have considered that the above provision conditions have been met. The provision represents the best estimate of the risks and considers all information and legal input received by the Group.

Impairment of goodwill

The carrying value of goodwill must be assessed for impairment annually. This requires a value in use estimate which is dependant on estimation of future cashflows and the use of an appropriate discount rate to discount those cash flows to their present value. The carrying value of goodwill as at 31 December 2019 is £9,864,000 (2018: £10,590,000). There was an impairment charge of £2,482,000 during the year. Refer to note 12 for further detail.

Impairment of other intangible assets

Other intangibles assets consist of assets acquired (customer relationships, intellectual property and brand names) as part of the net assets of certain subsidiaries and software, being mainly capitalised development costs. Impairment testing requires a value in use estimate which is dependant on an estimation of future cashflows and the use of an appropriate discount rate to discount those cash flows to their present value. The carrying amounts of acquired intangibles and software at the reporting date was £4,241,000 and £3,692,000 respectively (2018: £2,934,000 and £3,887,000). There was an impairment charge of £693,000 during the year. Refer to note 12 for further detail.

Leases - Incremental borrowing rate

Management have concluded that that the interest rate implicit in the leases cannot not be readily determined therefore the leases held have been discounted by the incremental borrowing rate (IBR), being the rate of interest that the Group would have to pay to borrow over a similar term, and with a similar security, the funds necessary to obtain assets of a similar value to the right of use assets in a similar economic environment. To determine the IBR, management approached a number of banks and has used the lending rate and margin offered of 4.00%, being a lending rate of 0.75% (base rate at 31 December 2019) and margin of 3.25%. For longer leases of over 5 years management considers a discount rate of 5% to be a more accurate reflection.

Pension scheme

As stated above the Group operates a defined benefit pension scheme. At the end of each six monthly reporting period the Group seeks external expert actuarial advice on the assumptions to apply to the calculation of the scheme's liabilities. The Group then engages a separate, independent firm of pension advisors to calculate the scheme surplus or deficit at the reporting date for accounting purposes. The scheme deficit at 31 December 2019 is £1,804,000 (2018: £2,249,000).

Contingent consideration

Where acquisition consideration includes consideration contingent on performance outcomes being met, the consideration is valued at the acquisition date based on performance forecasts available at the time. Those forecasts are reviewed at the reporting date and the consideration revised where materially different.

1. REVENUE FROM CONTRACTS WITH CUSTOMERS

a. Segmental Reporting

The Group has disaggregated revenue into various categories in the following tables which are intended to depict how the nature, amount, timing and uncertainty of revenue and cash flows are affected by economic factors.

In prior years, the Group reported its business as one operating segment; Global Life Sciences. The Board managed the Group by monitoring its revenue streams and considered the cost base as a whole. Historically the Group's finance systems have recorded costs centrally and have managed costs in this way. Without systems capable of allocating costs accurately, the Board concluded that there was only one operating segment in which revenues and costs were reported. Over recent years the Group has expanded both organically and through acquisition, increasing the number of products and services. During 2019 the business was divided into three operating segments to better manage and report revenues; Study Management, Regulatory Solutions and Informatics.

There has been an ongoing project to enhance the quality of management information (MI) following the implementation of a new finance system. During the final quarter of 2019 certain direct costs were allocated to the revenue streams whilst the majority of costs were still recorded and reported centrally. The treatment in 2019 is a new disclosure based on information that was provided to the Instem Board, the Company's Chief Operating Decision Maker, at the end of the year.

Whilst the expectation in future years is to allocate more centrally held operational costs to the individual segments, it will take time for the allocations to be sufficiently accurate for the Board to use segmental cost information for meaningful decision making.

The operations of the Group are managed centrally with group-wide functions including sales and marketing, development, customer support, human resources and finance & administration.

The analysis provided below reflects costs directly attributable to the respective segments in 2019, which are primarily third party costs of sale and costs of allocated employees. The remaining indirect operational costs are accounted for centrally and are not allocated to specific segments.

There are no comparative cost numbers shown for 2018 as data was not recorded in this way and so numbers were not available. Set out below is a split of revenue in 2018 between the three business segments identified in 2019. This information is provided to aid comparability not as a restatement of prior year disclosures.

1. REVENUE FROM CONTRACTS WITH CUSTOMERS (CONTINUED)

SEGMENTAL REPORTING **2019**	**Study Management £000**	**Regulatory Solutions £000**	**Informatics £000**	**Total £000**
Total revenue	15,188	9,037	1,492	25,717
Direct attributable costs	(4,370)	(2,111)	(660)	(7,141)
Contribution to indirect overheads	10,818	6,926	832	18,576
Central unallocated indirect costs				(13,712)
Adjusted EBITDA				4,864
Depreciation				(155)
Amortisation of intangibles arising on acquisition				(523)
Amortisation of internally generated intangibles				(755)
Amortisation of right of use assets				(607)
Impairment of goodwill and capitalised development				(3,175)
LOSS BEFORE NON-RECURRING COSTS				(351)
Non-recurring costs				(302)
LOSS AFTER NON-RECURRING COSTS				(653)
Finance income				7
Finance costs				(255)
LOSS BEFORE TAXATION				(901)

SEGMENTAL REPORTING **2018**	**Study Management £000**	**Regulatory Solutions £000**	**Informatics £000**	**Total £000**
Total revenue	14,451	7,513	741	22,705
Central unallocated indirect costs				(18,653)
Adjusted EBITDA				4,052
Depreciation				(144)
Amortisation of intangibles arising on acquisition				(788)
Amortisation of internally generated intangibles				(738)
PROFIT BEFORE NON-RECURRING COSTS				2,382
Non-recurring costs				(539)
PROFIT AFTER NON-RECURRING COSTS				1,843
Finance income				33
Finance costs				(199)
PROFIT BEFORE TAXATION				1,677

1. REVENUE FROM CONTRACTS WITH CUSTOMERS (CONTINUED)

REVENUE BY PRODUCT TYPE	**2019 £000**	2018 £000
Licence fees	**3,501**	3,491
Annual support fees	**8,418**	8,160
SaaS subscription and support fees	**6,444**	5,509
Professional services	**1,773**	2,204
Technology enabled outsourced services	**5,581**	3,341
	25,717	22,705

REVENUE BY GEOGRAPHICAL LOCATION	**2019 £000**	2018 £000
UK	**3,414**	3,504
Rest of Europe	**5,051**	4,534
USA and Canada	**12,701**	11,507
Rest of World	**4,551**	3,160
	25,717	22,705

NON-CURRENT ASSETS EXCLUDING DEFERRED TAXATION BY GEOGRAPHICAL LOCATION	**2019 £000**	2018 £000
UK	**17,779**	16,896
Rest of Europe	**1,107**	624
USA and Canada	**432**	133
Rest of World	**881**	58
	20,199	17,711

There were no customers which represented more than 10% of the Group revenue in 2019 (2018: none).

1. REVENUE FROM CONTRACTS WITH CUSTOMERS (CONTINUED)

b. Contract Balances

	2019		2018	
£000	**Amounts recoverable on contracts**	**Deferred income**	Amounts recoverable on contracts	Deferred income
At 1 January	**2,807**	**(8,625)**	2,389	(10,967)
Transfer in the period from amounts recoverable on contracts to trade receivables	**(2,807)**	-	(2,389)	-
Amounts included in deferred income that was recognised as revenue during the period	-	**8,625**	-	10,967
Deferred income on acquisition of Leadscope Inc.		**(818)**		-
Cash received in advance of performance and not recognised as revenue during the period	-	**(8,124)**	-	(8,625)
Excess of revenue recognised over cash being recognised during the period	**1,365**	-	2,807	-
At 31 December	**1,365**	**(8,942)**	2,807	(8,625)

Amounts recoverable on contracts and deferred income are included within “trade and other receivables” and “deferred income” respectively on the face of the statement of financial position.

Amounts recoverable on contracts predominately relate to fulfilled obligations on service contracts where billing is in arrears. At the point where completed work is invoiced, the contract asset is derecognised and a corresponding receivable recognised.

Deferred income relates to consideration received from customers in advance of work being completed plus maintenance and support which is invoiced in advance.

c. Remaining performance obligations

The vast majority of the Group’s contracts are for the delivery of software and services within the next 12 months for which the practical expedient in paragraph 121(a) of IFRS 15 applies. However, certain bundled contracts have been entered into for which both the original contract was greater than 12 months and the Group’s right to consideration does not correspond directly with the performance.

The amount of revenue that will be recognised in future periods on these contracts is as follows:

	2020 £000	2021 £000	2022 £000
Revenue	**283**	**48**	**9**

d. Contract Costs

It is expected that commissions paid are recoverable. These have therefore been capitalised as an asset and are amortised over the term of the contract.

The carrying value of costs to obtain contracts with customers which have been capitalised is an amount of £nil (2018: £0.01m). Amortisation of £0.1m (2018: £0.02m) was recognised during the year.

The entity has applied the practical expedient available in paragraph 94 of IFRS 15 to recognise the incremental costs of obtaining a contract as an expense when incurred where the amortisation period of the asset that the entity otherwise would have recognised is one year or less.

2. PROFIT BEFORE NON-RECURRING COSTS

	2019 £000	2018 £000
Profit from operations includes the following significant items:		
Depreciation and amounts written off property, plant and equipment - owned assets	**155**	114
Amortisation of intangible assets	**1,278**	1,526
Amortisation of right to use assets	**607**	-
Research and development costs	**1,711**	1,623
Impairment of goodwill	**2,482**	-
Impairment of capitalised development	**693**	-
Operating lease rentals:		
Plant and machinery	-	37
Land and buildings	-	527
Short life lease expenses	**21**	-
Amounts payable to Grant Thornton UK LLP and their associates in respect of both audit and non-audit services:		
Audit	**108**	-
Non-audit services:		
Taxation services - Compliance	**27**	-
Taxation services - Advisory	**69**	-
Corporate finance services	**30**	-
Amounts payable to RSM UK Audit LLP and their associates in respect of both audit and non-audit services		
Audit	-	93
Non-audit services:		
Assurance services	-	22
Taxation services - Compliance	-	22
Taxation services - Advisory	-	26
	234	163

2. PROFIT BEFORE NON-RECURRING COSTS (CONTINUED)

The following tables analyse employee benefits operating expense and other expenses:

	2019 £000	2018 £000
Employee benefits expense		
Staff costs (see note 6)	**13,534**	12,220
Share based payments	**75**	216
	13,609	12,436
Other expenses		
Operating lease rentals	**28**	564
Software maintenance charges	**731**	561
Licence costs	**1,457**	1,109
Third party costs	**2,812**	2,299
Other expenses	**2,216**	1,684
	7,244	6,217

3. NON-RECURRING COSTS

	2019 £000	2018 £000
Professional fees	-	364
Guaranteed Minimum Pension (GMP) equalisation provision	-	126
Legal costs relating to historical contract disputes	**106**	49
Acquisition costs	**196**	-
	302	539

Acquisition costs incurred in the period relate to the purchase of Leadscope Inc. on 15 November 2019. The costs incurred were directly linked to the acquisition and consisted of legal, accounting and commercial advice.

4. FINANCE INCOME

	2019 £000	2018 £000
Foreign exchange gains	-	25
Other interest	**7**	8
	7	33

5. FINANCE COSTS

	2019 £000	2018 £000
Bank loans and overdrafts	**34**	11
Unwinding discount on deferred consideration	-	12
Net interest charge on pension scheme	**60**	172
Lease interest cost	**2**	4
Right of use asset interest cost	**118**	-
Foreign exchange losses	**41**	-
	255	199

6. EMPLOYEES

Group	**2019 Number**	2018 Number
Average monthly number (including non-executive directors)		
By role:		
Directors, administration and supervision	**39**	39
Software design, sales and customer service	**229**	199
	268	238
Employment costs:		
Wages and salaries	**11,444**	10,416
Social security costs	**1,148**	1,031
Other pension costs	**942**	773
	13,534	12,220

Company	**2019 Number**	2018 Number
Average monthly number (including non-executive directors)		
By role:		
Non-executive directors	**3**	3
Employment costs:		
Wages and salaries	**120**	120
Social security costs	**13**	10
	133	130

7. LEASES

Lease liabilities are presented in the statement of financial position as follows:

	2019 £000	2018 £000
Current	**565**	-
Non current	**2,004**	-
	2,569	-

Nature of leasing activities in the capacity of lessee

The Group leases a number of offices in the jurisdictions from which it operates. In these jurisdictions the periodic rent is fixed over the lease term, with inflationary increases incorporated into the fixed payments stipulated in the lease agreements. Where rental agreements include market rate escalations, the lease liability is re-measured when the change in cash payments takes effect. The Group also leases certain vehicles. Leases of vehicles comprise only fixed payments over the lease terms. With the exception of short term leases, leases of low value underlying assets, leases held by the newly acquired Leadscope Inc and a lease held for a telephone system, with less than twelve months remaining on the lease as at 31 December 2019, each lease is reflected on the balance sheet as a right of use asset and a lease liability.

Each lease generally imposes a restriction that, unless there is a contractual right for the Group to sublet the asset to another party, the right of use asset can only be used by the Group. Leases are either non cancellable or may only be cancelled by incurring a termination fee. Some leases contain an option to extend the lease for a further term. For office leases the Group must keep those properties in a good state of repair and return the properties in their original condition at the end of the lease.

The table below describes the nature of the Groups leasing activities by type of right of use asset recognised on the balance sheet:

Right of use assets	No of right of use assets leased	Range of remaining term	No of leases with extension options	No of leases with options to purchase	No of leases with payments linked to an index	No of leases with termination options
Office buildings	9	3.5 years	9	0	1	0
Vehicles	2	0.4 years	0	0	0	0

7. LEASES (CONTINUED)

The aggregate lease liability recognised in the statement of financial position at 1 January 2019 and the Group's operating lease commitment at 31 December 2018 can be reconciled as follows:

	2019 £000
Operating lease commitment as at 31 December 2018	**3,363**
Effect of foreign exchange on brought forward balance	**(104)**
Effect of discounting those lease commitments	**(358)**
Recognition of variable lease payments	**83**
Effect of electing to account for short-term and low value leases off statement of financial position	**(6)**
Effect of lease extended during 2019	**24**
At 1 January 2019	**3,002**

Right of use assets	Land & buildings £000	Motor vehicles £000	Total £000
As at 1 January 2019	**2,978**	**24**	**3,002**
Derecognition of sublease	(249)	-	(249)
Amortisation	(590)	(17)	(607)
Exchange adjustment	19	-	19
As at 31 December 2019	**2,158**	**7**	**2,165**
Lease liabilities			
As at 1 January 2019	**3,020**	**22**	**3,042**
Interest expense	117	1	118
Lease payments	(676)	(17)	(693)
Exchange adjustment	102	-	102
As at 31 December 2019	**2,563**	**6**	**2,569**

Lease liability maturity analysis:

As at 31 December 2019	**1 year or less £000**	**2 to 5 years £000**	**After five years £000**	**Total £000**
Lease liabilities	565	1,950	54	2,569

7. LEASES (CONTINUED)

The following amounts in respect of leases, where the company is a lessee, have been recognised in consolidated statement of comprehensive income:

	2019 £000
Expenses relating to short-term leases	**21**
Low value lease expense	**7**
Interest expense	**118**
Amortisation of right of use assets	**607**

The total cash outflow for leases in 2019 was £0.7m.

Finance lease receivable

Nature of leasing activities in the capacity of lessor

The Group also acts as a lessor in relation to a sublease of part of one of the properties rented. As the lease term is for the major part of the economic life of the underlying right of use asset this has been treated as a finance lease. The right of use asset has therefore been derecognised and a net investment in the lease recognised instead. Interest income is recognised on the lease receivable.

Movement in net investment in leases in relation to sub leases during the year ended 31 December 2019 is as follows:

As at 1 January 2019	2019 £000
Addition	**221**
Interest earned	**1**
Less: Rental Income received	**(8)**
At 31 December 2019	**214**

Minimum undiscounted lease payments receivable are as follows:

	2019 £000
Within 1 year	**47**
Between 1 and 2 years	**48**
Between 2 and 3 years	**50**
Between 3 and 4 years	**51**
Later than 5 years	**40**
	236

7. LEASES (CONTINUED)

Reconciliation of minimum undiscounted lease payments to net investment in the lease:

	2019 £000
Total minimum undiscounted lease payments receivable as at 31 December 2019	**236**
Unearned finance income	**(22)**
Net investment in the lease as at 31 December 2019	**214**

Finance lease receivable maturity analysis:

As at 31 December 2019	1 year or less £000	2 to 5 years £000	After five years £000	Total £000
Finance lease receivable	39	175	-	214

8. SHARE BASED PAYMENT

Equity-Settled Share Option Plan

Under the approved and unapproved share option schemes, the Remuneration Committee can grant options to employees of the Group. Options are granted with a fixed exercise price at the date of grant. The contractual life is generally ten years from the date of grant. Options generally vest and become exercisable after three years where certain performance criteria have been met. Share options issued to directors and senior employees carry profitability (EBITDA) or market based performance conditions.

	2019		2018	
	Number	**Weighted average exercise price (£)**	Number	Weighted average exercise price (£)
Outstanding at the beginning of the year	**1,465,548**	**0.85**	1,098,230	1.14
Granted	**7,740**	**0.10**	408,446	0.10
Lapsed	**(16,804)**	**0.10**	(9,857)	0.10
Exercised	**(473,181)**	**1.37**	(31,271)	1.60
Outstanding at end of the year	**983,303**	**0.60**	1,465,548	0.85
Exercisable at end of year	**678,659**	**0.83**	1,014,341	1.18

The options outstanding at 31 December 2019 and 31 December 2018 had exercise prices of £0.10, £0.90, £1.75, £1.76 and £2.22 and a weighted average remaining contractual life of 5 years 3 months (2018: 5 years 3 months).

A charge of £0.075m (2018: £0.2m) arose in respect of share based payments.

New options for 7,740 shares were granted in the year which are valued using the Monte-Carlo option-pricing model.

Options over 7,740 shares (2018: 8,446) incorporate a condition based on the performance of either the Group or the individual performance of a subsidiary.

The fair value of options granted in the year was £0.02m (2018: £0.2m).

During the year, the average share price in respect of share options exercised was £3.17 (2018: £2.09)

9. DIRECTORS' EMOLUMENTS

	2019 £000	2018 £000
Amounts payable by Instem plc:		
Emoluments	**120**	120
Amounts payable by subsidiary companies:		
Emoluments	**359**	335
Defined contribution pension contributions	**43**	41
Total emoluments	**522**	496

	2019 Number	2018 Number
Number of directors to whom retirement benefits are accruing under:		
Defined contribution schemes	**2**	2

The remuneration of the highest paid director during the year ended 31 December 2019 was £261,000 (2018: £243,000). Directors' remuneration analysed by director is shown on page 29.

10. TAXATION

Income taxes recognised in profit or loss:	**2019 £000**	2018 £000
Current tax:		
UK corporation tax on profit of the year	-	-
UK corporation tax in respect of previous years	**28**	(85)
Adjustments in respect of R&D tax credit	**464**	477
Foreign tax	**(404)**	(403)
Foreign tax in respect of previous years	**67**	(12)
Total current tax credit/(charge)	**155**	(23)
Deferred tax:		
Current year charge	**(96)**	(67)
Adjustment in respect of previous years	**(11)**	(83)
Retirement benefit obligation	**(70)**	(34)
Total deferred tax charge	**(177)**	(184)
Total income tax charge recognised in the current year	**(22)**	(207)

10. TAXATION (CONTINUED)

The income tax (expense)/credit can be reconciled to the accounting profit as follows:	**2019 £000**	2018 £000
(Loss)/Profit before tax	**(901)**	1,677
Profit before tax multiplied by standard rate of corporation tax in the UK 19.0% (2018: 19.0%)	**171**	(319)
Effects of:		
Expenses not allowable for tax purposes	**34**	172
Enhanced R&D tax relief	**454**	438
Losses surrendered for R&D tax credit	**(599)**	(660)
R&D tax credit accrual	**572**	477
Impairment of goodwill and capitalised development	**(604)**	-
Double tax relief	**110**	-
Tax losses utilised	**18**	31
Difference in overseas tax rates	**(128)**	(187)
Adjustments in respect of prior years	**(68)**	(180)
Other differences	**18**	21
Total income tax charge recognised in consolidated statement of comprehensive income	**(22)**	(207)

11. ACQUISITION OF LEADSCOPE INC

Company	Principal activity	Date of acquisition	Proportion of voting equity interests acquired %	Consideration £000
Leadscope Inc	Provider of Regulatory Information Management software and services to Life Science sector	15 November 2019	100	3,516

Leadscope Inc was acquired to continue the expansion and development of the Group's capabilities in the Global Life Sciences sector.

Consideration	$000	£000
Initial cash consideration	**2,250**	1,746
Initial share consideration	**1,100**	856
Deferred consideration (14 November 2020) – To be settled in cash	**375**	291
Deferred consideration (14 November 2021) – To be settled in cash	**375**	291
Contingent consideration (1 March 2022) – To be settled in cash	**500**	388
Working capital adjustment – (Q1 2020) – To be settled in cash	**95**	73
Total consideration	**4,695**	3,645
Discounting of estimated future cashflows		(129)
Fair value of consideration		3,516

The initial share consideration was satisfied by the issue of 231,966 new Instem plc ordinary shares at a value of £856,000. The premium arising on the share issue of £834,000 has been credited to the merger relief reserve.

The deferred consideration is not based on any performance related conditions and is payable in two equal instalments in November 2020 and 2021. The contingent consideration is based on certain performance related conditions in respect of the financial year ending 31 December 2021. The contingent consideration in the table above is based on the forecast estimate that the performance related conditions will be fully met and the full consideration will be payable. The contingent consideration was re-measured at the reporting date.

Acquisition related costs amounting to £0.2m have been excluded from the consideration transferred and have been recognised as an expense in the current year, within non-recurring items in the Consolidated Statement of Comprehensive Income.

11. ACQUISITION OF LEADSCOPE INC (CONTINUED)

Fair value of assets acquired and liabilities recognised at the date of acquisition	Fair Value £000
Non-Current Assets	
Intellectual property	1,185
Customer relationships	264
Brand names	380
Property, plant and equipment	5
Current Assets	-
Trade and other receivables	408
Cash and cash equivalents	451
Current Liabilities	
Trade and other payables	(116)
Deferred income	(818)
Non-Current Liabilities	
Deferred tax on acquisition	(311)
Fair value of identifiable net assets acquired	1,448

Goodwill arising on acquisition	£000
Consideration transferred	3,516
Less: fair value of identifiable net assets	(1,448)
Goodwill arising on acquisition	2,068

Goodwill

Goodwill of £2,068,000 is primarily related to expected profitability, the significant skill and expertise of Leadscope's staff, and cross-selling opportunities achieved by combining the acquired customer bases.

Identifiable net assets

A provisional fair value exercise to determine the fair value of assets and liabilities acquired has been carried out. Fair values are provisional as they are within the twelve month hindsight period to adjust fair values. No fair value adjustments have been made to the assets and liabilities acquired.

The fair value of intangible assets are:

- Intellectual property of £1,185,000, calculated using the income method (relief from royalty approach). Software and databases form Leadscope's chemoinformatics platform. A suite of tools is available, including informatics software, databases and prediction models, which generate Leadscope's revenue and are vital assets to the company.
- Customer relationships of £264,000, calculated using the income method (excess earnings). The company has a stable and established customer base, which provides a recurring revenue stream, and includes regulatory agencies in the US and other regions.
- Brand names of £380,000, calculated using the income method (relief from royalty approach). The company has a strong brand, reflecting its reputation for providing a high quality product and provides scientific leadership in computational toxicology.

Impact of acquisition on the results of the Group

Profit for the year includes a profit of £0.1m attributable to the additional business generated by Leadscope Inc from the date of acquisition. Revenue for the year includes £0.3m in respect of Leadscope Inc.

If this business combination had been effected at 1 January 2019, the revenue of Leadscope from continuing operations would have been £1.6m, and the profit for the year from continuing operations would have been £0.5m. The directors consider these values to represent an approximate measure of the performance of Leadscope on an annualised basis and to provide a reference point for comparison in future years.

12. INTANGIBLE ASSETS

Group	Goodwill £000	Software £000	Intellectual property £000	Customer relationships £000	Brand Names £000	Patents £000	Total £000
Cost							
At 1 January 2018	10,590	5,432	4,527	2,874	-	21	23,444
Additions	-	1,490	-	-	-	-	1,490
Disposals	-	(96)	-	-	-	-	(96)
Exchange adjustment	-	14	-	-	-	-	14
At 31 December 2018	10,590	6,840	4,527	2,874	-	21	24,852
Additions	-	1,344	-	-	-	-	1,344
Disposals	-	(60)	-	-	-	-	(60)
Acquisition	2,068	18	1,185	264	380	-	3,915
Exchange adjustment	-	(35)	-	-	-	-	(35)
At 31 December 2019	**12,658**	**8,107**	**5,712**	**3,138**	**380**	**21**	**30,016**
Amounts written off							
At 1 January 2018	-	2,304	2,548	1,131	-	21	6,004
Disposals	-	(96)	-	-	-	-	(96)
Amortisation expense	-	738	492	296	-	-	1,526
Exchange adjustment	-	7	-	-	-	-	7
At 31 December 2018	-	2,953	3,040	1,427	-	21	7,441
Amortisation expense	-	755	332	191	-	-	1,278
Impairment charge	2,482	693	-	-	-	-	3,175
Acquisition	-	18	-	-	-	-	18
Exchange adjustment	-	(4)	-	-	-	-	(4)
At 31 December 2019	**2,482**	**4,415**	**3,372**	**1,618**	**-**	**21**	**11,908**
Net book value							
At 31 December 2018	10,590	3,887	1,487	1,447	-	-	17,411
At 31 December 2019	**10,176**	**3,692**	**2,340**	**1,520**	**380**	**-**	**18,108**

The gross carrying amount and accumulated amortisation within Software includes internally generated and externally acquired elements. The cost of internally generated software amounts to £7.4m (2018: 6.1m) with accumulated amortisation of £3.0m (2018: £2.3m). Software additions for the year include £1.3m relating to internal development (2018: £1.5m).

12. INTANGIBLE ASSETS (CONTINUED)

Gross carrying amount of goodwill

Goodwill amounting to £5.9m (2018: £5.9m) relates to a cash generating unit (CGU), being the Instem business acquired on the management buyout of Instem LSS Limited on 27 March 2002. Goodwill amounting to £0.5m (2018: £0.5m), relates to a CGU, being the Instem Scientific Limited business acquired on 3 March 2011. Goodwill amounting to £2.5m (2018: £2.5m), relates to a CGU, being the Instem Clinical Holdings Limited business acquired on 10 May 2013. Goodwill amounting to £0.7m (2018: £0.7m) relates to a CGU, being the Perceptive Instruments Limited business acquired on 21 November 2013. Goodwill amounting to £0.6m (2018: £0.6m) relates to a CGU, being the Samarind Limited business acquired on 27 May 2016. Goodwill amounting to £0.5m (2018: £0.5m) relates to a CGU, being the Notocord SA business acquired on 2 September 2016. Goodwill amounting to £2.1m (2018: £nil) relates to a CGU, being the Leadscope Inc business acquired on 15 November 2019.

Impairment testing

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

Key assumptions

The recoverable amounts of the CGUs are determined from value-in-use calculations. The key assumptions for the value in use calculations are those regarding discount rates, growth rates, margins and cashflows.

Discount rates

Management estimates discount rates using pre-tax rates that reflect current market assessments of the time value of money and any risks specific to the CGUs. The rates used to discount the future cashflows are based on the Group's pre-tax weighted average cost of capital (WACC) of 10.0% (2018: 10.5%). Management's view is that there are no specific risks to be applied to particular CGUs.

Growth rates and terminal values

The revenue growth rates and margins are based on current Board-approved budgets and forecasts covering a period of five years. The Group produces a budget for 2020 and then projects to 2024 based on growth rates of 2.5% (2018: 2.5%), which management estimates as reasonable considering business growth rates, payroll and other cost base increases. A terminal value is calculated using the Gordon Growth Model, to take account of the software development cycle and the high percentage of recurring revenues from the customer base.

Sensitivity analysis

Management has carried out sensitivity analyses on the key assumptions used in recoverable amount calculations. Management does not believe that there are any reasonably possible changes in the assumptions used in the value in use calculations which would result in the carrying amount of any cash generating unit exceeding its recoverable amount.

The carrying amount includes goodwill, other intangible assets and tangible assets. The headroom of recoverable amount over carrying amount and sensitivities are detailed below:

The recoverable amount of the Instem LSS CGU exceeds the carrying amount of this CGU by 757%, for the Instem Scientific CGU by 660%, Perceptive Instruments CGU by 288%, Samarind CGU by 305%, Notocord CGU by 114% and Leadscope CGU by 141%. The directors consider the discount rate and revenues to be the most sensitive assumptions used in the impairment reviews. An additional increase in the discount rate of 64%, or a reduction in certain revenues of in excess of 22%, would result in the recoverable amount of the Instem LSS CGU being equal to its carrying amount. An additional increase of 53% in the Instem Scientific discount rate, or a reduction in revenues of 21% would result in the recoverable amount of the CGU being equal to its carrying amount. An additional increase of 16% in the Perceptive Instruments discount rate, or a reduction in revenues of 14% would result in the recoverable amount of the CGU being equal to its carrying amount. An additional increase of 17% in the Samarind discount rate, or a reduction in revenues by 14% would result in the recoverable amount of the CGU being equal to its carrying value. An additional increase of 2% in the Notocord discount rate, or a reduction in revenues by 2% would result in the recoverable amount of the CGU being equal to its carrying value. Finally, an additional increase of 4% in the Leadscope discount rate, or a reduction in revenues by 8% would result in the recoverable amount of the CGU being equal to its carrying value. The recoverable amount of the Instem Clinical CGU did not exceed the carrying amount of this CGU and an impairment charge has been recognised.

Review of carrying value of goodwill

The recoverable amount for each of the CGU has been measured using a value-in-use calculation and no impairment was required with the exception of the Alphadas early phase clinical data collection business. This market sector has been going through considerable structural change and little new data collection software business has been placed in this sector over the last 18 months. We envisage further slippage in the pipeline of new opportunities, with no certainty regarding the timing of new business awards. A goodwill impairment of £2.5m has been recognised.

The value in use calculations are reliant on the accuracy of management's forecast and the assumptions that underly them as well as the discount rate and growth rates applied.

Net realisable value calculations, based on sales and profitability, have been used by the Group to conclude a goodwill impairment of £2.5m should be recognised in 2019.

Other intangible assets

An impairment loss of £0.7m has been recognised for internally developed software in the Alphadas early phase clinical data collection business. The recoverable amount of the asset has been determined using net realisable value calculations, based on sales and profitability.

13. INVESTMENTS IN SUBSIDIARIES

Cost	£000
At 1 January 2019	28,927
Additions	75
At 31 December 2019	**29,002**

Provisions	£000
At 1 January 2019	-
Additions	2,810
At 31 December 2019	**2,810**

Carrying value	£000
At 31 December 2018	28,927
At 31 December 2019	**26,192**

The Company tests annually for impairment against investments held.

The Company prepares margin and cashflow forecasts based on current Board-approved budgets and forecasts covering a period of five years, applying growth rates of 2.5% (2018: 2.5%), which management estimates as reasonable considering business growth rates, payroll and other cost base increases. A terminal value is calculated using the Gordon Growth Model, to take account of the software development cycle and the high percentage of recurring revenues from the customer base. The rate used to discount the future cashflows is based on the Group's pre-tax weighted average cost of capital (WACC) of 10.0% (2018: 10.5%). Management's view is that there are no specific risks to be applied to a particular entity being reviewed.

An impairment provision of £2.8m has been made during the year against the carrying value of the investment in the Alphadas early phase clinical data collection business.

At the end of the year the Company has six wholly-owned subsidiaries and twelve wholly-owned sub-subsidiaries, details of which are as follows:

Company	Registered Address	Activity	Ownership
Instem Life Science Systems Limited (company number 04339129) England and Wales	Diamond Way Stone Business Park Stone, Staffordshire ST15 0SD	Holding Company	100% by Instem plc
Instem LSS Limited (company number 03548215) England and Wales	Diamond Way Stone Business Park Stone, Staffordshire ST15 0SD	Software development, sales, sales support and administrative support	100% by Instem Life Science Systems Limited
Instem LSS (North America) Limited (company number 02126697) England and Wales	Diamond Way Stone Business Park Stone, Staffordshire ST15 0SD	Sales, sales support and administrative support	100% by Instem LSS Limited
Instem LSS (Asia) Limited (company number 1371107) Hong Kong	Suite 1106-8 11/F Tai Yau Building No 181 Johnston Road Wanchai	Holding Company	100% by Instem LSS Limited
Instem Information Systems (Shanghai) Limited (company number 310115400257075) Shanghai, PRC	Room 205, Building 16 88 Da'erwen Road Zhanjiang, High Tech Park Pudong District 201203	Sales, sales support and service	100% by Instem LSS (Asia) Limited

Company	Registered Address	Activity	Ownership
Instem Scientific Limited (company number 03861669) England and Wales	Diamond Way Stone Business Park Stone, Staffordshire ST15 0SD	Leading provider of software solutions for extracting intelligence from R&D related healthcare data	100% by Instem plc
Instem Scientific Solutions Limited (company number 03598020) England and Wales	Diamond Way Stone Business Park Stone, Staffordshire ST15 0SD	Dormant	100% by Instem Scientific Limited
Instem Scientific Inc. USA	Suite 1550 161 Washington Street 8 Tower Bridge Conshohocken PA 19428	Leading provider of software solutions for extracting intelligence from R&D related healthcare data	100% by Instem Scientific Limited
Instem India Pvt Limited (company number U73100MH2012FTC231951) India	Adisa Icon Mumbai Bangalore Highway Bavdhan Budruk Pune 411021	Software development	99.9% by Instem LSS Limited 0.1% by Instem LSS (NA) Limited
Instem Clinical Holdings Limited (company number 05840032) England and Wales	Diamond Way Stone Business Park Stone, Staffordshire ST15 0SD	Holding of intellectual property rights and investment in group companies	100% by Instem plc
Instem Clinical Limited (company number 06959053) England and Wales	Diamond Way Stone Business Park Stone, Staffordshire ST15 0SD	Provision of electronic data capture and clinical management solutions to the pharmaceutical industry	100% by Instem Clinical Holdings Limited
Instem Clinical Inc. USA	Suite 1550 161 Washington Street 8 Tower Bridge Conshohocken PA 19428	Provision of electronic data capture and clinical management solutions to the pharmaceutical industry	100% by Instem Clinical Holdings Limited
Perceptive Instruments Limited (company number 02498351) England and Wales	Diamond Way Stone Business Park Stone, Staffordshire ST15 0SD	Development, manufacture and supply of software and hardware products for *in vitro* study data collection and study management in the genetic toxicology, microbiology and immunology markets	100% by Instem plc
Instem Japan K.K (company number 0104-01-120355) Japan	Shinagawa Intercity Tower, A Level 28 2-15-1 Konan, Minato-ku Tokyo 108-6028	Sales, sales support and service	100% by Instem LSS Limited
Samarind Limited (company number 02105894) England and Wales	Diamond Way Stone Business Park Stone, Staffordshire ST15 0SD	Provider of regulatory information management software	100% by Instem plc
Notocord Systems S.A. (company number 350927349) France	Parc des Grillons 60, route de Sartrouville 78230 Le Pecq Paris	Software development, sales support and administrative support	100% by Instem plc
Notocord Inc. USA	PO Box 10188 Newark New Jersey 07101-3188	Sales, sales support and administrative support	100% by Notocord Systems S.A.
Leadscope Inc. USA	1393 Dublin Road Columbus Ohio 43215	Leading provider of *in-silico* safety assessment software	100% Instem Scientific Inc

14. PROPERTY, PLANT AND EQUIPMENT

Group	Short leasehold property £000	IT hardware & software £000	Total £000
Cost			
At 1 January 2018	**78**	**893**	**971**
Additions	29	116	145
Disposals	(10)	(32)	(42)
Adjustment	(4)	562	558
Exchange adjustment	1	5	6
At 31 December 2018	**94**	**1,544**	**1,638**
Additions	14	77	91
Disposals	(34)	(1)	(35)
Acquisition	-	79	79
Exchange adjustment	(2)	(17)	(19)
At 31 December 2019	**72**	**1,682**	**1,754**
Depreciation			
At 1 January 2018	**60**	**612**	**672**
Depreciation expense	4	140	144
Disposals	(3)	(32)	(35)
Adjustment	4	549	553
Exchange adjustment	1	3	4
At 31 December 2018	**66**	**1,272**	**1,338**
Depreciation expense	7	148	155
Disposals	(33)	(1)	(34)
Acquisition	-	75	75
Exchange adjustment	(1)	(16)	(17)
At 31 December 2019	**39**	**1,478**	**1,517**
Net book value			
At 31 December 2018	28	272	300
At 31 December 2019	**33**	**204**	**237**

In 2018 there was an adjustment in cost of £0.6m and depreciation of £0.6m to align the financial statements to the underlying asset registers. The impact on net book value was nil.

15. INVENTORIES

Group	**2019 £000**	2018 £000
Work in progress	**36**	37
	36	37

	2019 £000	2018 £000
Total gross inventories	**36**	37

The inventory consists of high-quality industrial-standard cameras and associated hardware for the Instem Sorcerer Colony Counter product.

In 2019, a total of £0.02m (2018: £0.04m) of inventory was included in profit or loss as an expense. This includes an amount of £nil (2018: £nil) resulting from write-down of inventories.

16. TRADE AND OTHER RECEIVABLES

Group	**2019 £000**	2018 £000
Trade receivables	**4,376**	3,786
Amounts recoverable on contracts	**1,365**	2,807
Prepayments and accrued income	**1,180**	1,214
	6,921	7,807
Company		
Amounts owed by group companies	**4,861**	3,010
Other receivables	**140**	121
	5,001	3,131

An allowance has been made for estimated credit losses from trade receivable and amounts recoverable on contracts as per below:

An analysis of the provision for impairment of receivables is as follows:	**2019 £000**	2018 £000
Group		
At beginning of year	**54**	73
Increase in provision for impairment	**161**	1
Reversal of provision for impairment	-	(20)
At end of year	**215**	54

16. TRADE AND OTHER RECEIVABLES (CONTINUED)

Definition of default

A loss allowance on all financial assets is measured by considering the probability of default.

Receivables are considered to be in default based on an assessment of past payment practices over a 5 year period prior to 31 December 2019 and the likelihood of such overdue amounts being recovered.

Impairment of trade receivables

The probability of default is determined at the year-end based on the ageing of the receivables and historical data about default rates. That data is adjusted if the Group determines that historical data is not reflective of expected future conditions due to changes in the nature of its customers and how they are affected by external factors such as economic and market conditions.

The calculated simplified expected credit loss of trade receivables is deemed immaterial in the current year (2018: immaterial). The directors therefore do not deem it necessary to increase the impairment provision which is in relation to specific credit-impaired receivables.

The average credit period taken on sale is 61 days (2018: 83 days). No interest has been charged on overdue receivables.

Before accepting any new significant customer, the Group obtains relevant credit references to assess the potential customer's credit quality. Credit limits are defined by customer.

The directors consider that the carrying amount of trade and other receivables approximates to their fair value.

Impairment of amounts owed by group companies

The Company assesses the expected credit loss in respect of group receivables based on their ability to repay and recover the balance. In the absence of agreed terms this consideration is given over the expected period of repayment and any expected credit loss. As at the period end the Company has made a provision of £0.8m for credit impairment of amounts owed by group companies (2018: £nil).

The age profile of the net trade receivables for the Group at the year-end was as follows:

			Debt age		
Group **2019**	**Current**	**0-30 days**	**31-60 days**	**Over 60 days**	**Total**
Trade receivables/Amounts recoverable on contracts					
Value (£000)	**3,654**	**1,063**	**451**	**573**	**5,741**
%	**64**	**18**	**8**	**10**	**100**

			Debt age		
Group 2018	Current	0-30 days	31-60 days	Over 60 days	Total
Trade receivables/Amounts recoverable on contracts					
Value (£000)	**4,061**	**1,904**	**216**	**412**	**6,593**
%	**62**	**29**	**3**	**6**	**100**

The maximum exposure to credit risk at the reporting date is the carrying value of each class of receivables mentioned above. The Group does not hold any collateral as security.

17. CASH AND CASH EQUIVALENTS

Group	2019 £000	2018 £000
Cash at bank	**14,955**	12,570
Bank overdraft	**(8,998)**	(8,998)
	5,957	3,572
Company		
Cash at bank	**1,128**	643

The Group's overdraft facility has a net limit of £0.5m and a gross limit of £9.0m. Interest is charged on the bank overdraft at 3.0% above base rate. The bank overdraft is secured by fixed and floating charges over certain of the Group's assets and is repayable on demand.

Cash and cash equivalents in the statement of financial position includes a bank overdraft of £9.0m (2018: £9.0m) as noted above. An offset position is reported as the Group has a legal right to set off and any settlement would be on a net basis.

There is a debenture in favour of National Westminster Bank Plc, dated 13 April 2011, secured over the assets of the Group by way of fixed and floating charges, in respect of the Group's overdraft facility.

An analysis of cash and cash equivalents by currency is as follows:

Group	2019 £000	2018 £000
Sterling	**355**	(226)
Euro	**737**	105
US Dollar	**1,535**	1,597
Renminbi	**1,924**	1,629
Other	**1,406**	467
	5,957	3,572
Company		
Sterling	**1,128**	643
	1,128	643

The carrying amount of these assets approximates to their fair value.

18. TRADE AND OTHER PAYABLES

	2019 £000	2018 £000
Group - Current		
Trade payables	**912**	589
Other taxation and social security costs	**183**	205
Accruals	**1,567**	1,362
	2,662	2,156
Company - Current		
Trade payables	**275**	165
Amounts owed to group companies	**6,051**	4,271
Accruals	**333**	159
	6,659	4,595

The directors consider that the carrying amount of trade and other payables approximates to fair value due to their short maturities.

19. DEFERRED INCOME

	2019 £000	2018 £000
At beginning of year	**8,625**	10,967
Increase on acquisition of Leadscope Inc.	**818**	-
Increase/(Decrease)	**(501)**	(2,342)
At end of year	**8,942**	8,625

Deferred income relates to consideration received from customers in advance of work being completed plus maintenance and support which is invoiced in advance.

20. CURRENT TAXATION

The Group current tax receivable of £1.2m and payable of £0.4m (2018: receivable of £1.0m and payable of £0.4m) represents the amount of income taxes receivable and payable in respect of current and prior years.

The Company current tax payable is £nil (2018: £nil).

21. FINANCIAL LIABILITIES

An analysis of financial liabilities as presented in the statement of financial position is as follows:

	2019 £000	2018 £000
Lease liability	**18**	34
Deferred consideration	**283**	-
Current liability	**301**	34

	2019 £000	2018 £000
Deferred consideration	**275**	18
Contingent consideration	**284**	-
Non current liability	**559**	18

The deferred consideration and contingent consideration above is in respect of the acquisition of Leadscope Inc, which was purchased on 15 November 2019 (Note 11).

The financial liability maturity analysis is disclosed in the table below.

2019	**1 year or less £000**	**1 to 2 years £000**	**2 to 5 years £000**	**Total £000**
Lease liability	**18**	-	-	**18**
Deferred consideration	**283**	**275**	-	**558**
Contingent consideration	-	-	**284**	**284**
	301	**275**	**284**	**860**

2018	1 year or less £000	1 to 2 years £000	2 to 5 years £000	Total £000
Lease liability	34	18	-	52

22. FINANCIAL INSTRUMENTS

FAIR VALUES OF FINANCIAL INSTRUMENTS

Fair values

The table below analyses financial instruments into a fair value hierarchy based on the valuation technique used to determine fair value

Level 1: Quoted prices (unadjusted) in active markets for identical assets or liabilities.

Level 2: Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices).

Level 3: Inputs for the asset or liability that are not based on observable market data (unobservable input).

2019 Group and Company	**Carrying amount £000**	**Fair value £000**	**Level 3 £000**
Contingent consideration	**284**	**284**	**284**

2018 Group and Company	Carrying amount £000	Fair value £000	Level 3 £000
Contingent consideration	-	-	-

Measurement of fair value of financial instruments

The following valuation technique is used is used for instruments categorised as Level 3:

Contingent consideration (Level 3) – the fair value of contingent consideration related to the acquisition of Leadscope Inc (Note 11) is estimated using a present value technique. The £284,000 fair value is estimated by probability weighting the estimated future cash outflows, adjusting for risk and discounting at 13.4%. The probability weighted cash outflows before discounting are £388,000 and reflect management's estimate of a 100% probability that the contract's target level will be achieved. The discount rate used is 13.4% representing the Group's weighted average cost of capital (WACC), with has been calculated by external valuation specialists.

The reconciliation of the carrying amounts of financial instruments classified as Level 3 is as follows:

	2019 £000	2018 £000
Balance as at 1 January	-	188
Arising on business combination	**284**	-
Payment of contingent consideration	-	(200)
Unwinding discount	-	12
Balance as at 31 December	**284**	-

22. FINANCIAL INSTRUMENTS (CONTINUED)

The Group is exposed to various risks in relation to financial instruments. Each of these is disclosed in the table below.

	Carrying amount 2019 £000	**Fair value 2019 £000**	**Level 3 2019 £000**	Carrying amount 2018 £000	Fair value 2018 £000	Level 3 2018 £000
Loans and receivables						
Cash and cash equivalents	5,957	5,957	-	3,572	3,572	-
Trade and other receivables	6,921	6,921	-	7,807	7,807	-
Financial assets measured at amortised cost	12,878	12,878	-	11,379	11,379	-
Financial assets measured at fair value	-	-	-	-	-	-
Total financial assets	**12,878**	**12,878**	**-**	**11,379**	**11,379**	**-**
Financial liabilities measured at amortised cost						
Trade payables and accruals	(2,479)	(2,479)	-	(1,951)	(1,951)	-
Financial liabilities measured at amortised cost	(2,479)	(2,479)	-	(1,951)	(1,951)	-
Contingent consideration	(284)	(284)	(284)	-	-	-
Financial liabilities measured at fair value	(284)	(284)	(284)	-	-	-
Total financial liabilities	**(2,763)**	**(2,763)**		**(1,951)**	**(1,951)**	
Total financial instruments	**10,115**	**10,115**		**9,428**	**9,428**	

CREDIT RISK

Financial risk management

Management aims to minimise the risk of credit losses.

The Group's financial assets are bank balances and cash and trade and other receivables, which represent the Group's maximum exposure to credit risk in relation to financial assets.

The Group's credit risk is primarily attributable to its trade receivables and the Group has policies in place to ensure that sales of products and services are made to customers with appropriate creditworthiness. The Group generates external revenue from no customer that individually amounts to more than 10% of the Group revenue. At the 2019 year end the Group had a maximum credit risk exposure of £6.9m (2018: £7.8m).

The amounts presented in the statement of financial position are net of impairment provisions.

The Group's exposure to losses from defaults on trade receivables is reduced due to contractual terms which require installation, training, annual licensing and support fees to be invoiced and paid annually in advance. Note 16 sets out the impairment provision for credit losses on trade receivables and the ageing analysis of overdue trade receivables. There were no impairment losses recognised on other financial assets.

The Group undertakes procedures to determine whether there has been a significant increase in the credit risk of its other receivables, including group balances, since their initial recognition. Where these procedures identify a significant increase in credit risk, the loss allowance is measured based on the risk of a default occurring over the expected life of the instrument rather than considering only the default events expected within 12 months of the year-end.

22. FINANCIAL INSTRUMENTS (CONTINUED)

The concentration of credit risk for trade receivables at the balance sheet date by geographical region was:

	2019 £000	2018 £000
UK	**1,766**	2,026
Europe	**146**	83
USA	**1,401**	1,159
China	**644**	505
Rest of World	**419**	13
	4,376	3,786

LIQUIDITY RISK

Financial risk management

Liquidity risk is the risk that the Group will not be able to meet its financial commitments as they fall due.

The Group's objective is to ensure that adequate facilities are available through use of bank overdrafts and leases. The Group manages liquidity risk through regular cash flow forecasting and monitoring of cash flows, management review and regular review of working capital and costs.

The Group regularly monitors its available headroom under its borrowing facilities. At 31 December 2019, its £0.5m bank facility was undrawn (2018: £0.5m undrawn). The Group had positive cash reserves of £6.0m at the 2019 year end, in addition to the £0.5m undrawn working capital facility, although £1.9m of the cash was held in bank accounts in China, where it has been traditionally harder to repatriate funds quickly. There are no long term restrictions on the transfer of funds from the Group bank accounts in China.

The following are the contractual maturities of financial liabilities.

2019 Non derivative financial liabilities	**Carrying amount £000**	**Contractual cashflows £000**	**1 year or less £000**	**2 to 5 years £000**	**After 5 years £000**
Liabilities relating to right of use assets	2,569	2,569	565	1,950	54
Lease liabilities	18	18	18	-	-
Trade payables	912	912	912	-	-
	3,499	**3,499**	**1,495**	**1,950**	**54**

2018 Non derivative financial liabilities	Carrying amount £000	Contractual cashflows £000	1 year or less £000	2 to 5 years £000	After 5 years £000
Lease liabilities	52	52	34	18	-
Trade payables	589	589	589	-	-
	641	**641**	**623**	**18**	**-**

22. FINANCIAL INSTRUMENTS (CONTINUED)

MARKET RISK

Market risk - Foreign currency risk

The Group operates internationally and is exposed to foreign currency risk on transactions denominated in a currency other than the functional currency and on the translation of the statement of financial position and statement of comprehensive income of foreign operations into sterling. The currencies giving rise to this risk are primarily US dollars. The Group has both cash inflows and outflows in this currency that create a natural hedge.

In managing currency risks the Group aims to reduce the impact of short-term fluctuations on the Group's cash inflows and outflows in a foreign currency.

Over the longer term, changes in foreign exchange could have an impact on consolidation of foreign subsidiaries earnings. A 10% decrease in the average value of Sterling against the US dollar would have resulted in an increase in the Group's profit before tax by approximately £0.1m (2018: £0.1m).

The Group's exposure to foreign currency risk is as follows.

2019	**Sterling £000**	**Euro £000**	**US Dollars £000**	**Renminbi £000**	**Other £000**	**Total £000**
Cash and cash equivalents	355	737	1,535	1,924	1,406	5,957
Trade and other receivables	2,804	188	2,636	716	577	6,921
Liabilities relating to right off use assets	(666)	(309)	(730)	(16)	(848)	(2,569)
Lease liabilities	(18)	-	-	-	-	(18)
Trade payables	(574)	(14)	(330)	-	6	(912)
Net exposure	1,901	602	3,111	2,624	1,141	9,379

2018	Sterling £000	Euro £000	US Dollars £000	Renminbi £000	Other £000	Total £000
Cash and cash equivalents	(226)	105	1,597	1,629	467	3,572
Trade and other receivables	2,887	171	3,866	718	165	7,807
Lease liabilities	(52)	-	-	-	-	(52)
Trade payables	(391)	(40)	(155)	-	(3)	(589)
Net exposure	2,218	236	5,308	2,347	629	10,738

Interest rate risk

The Group operates an interest rate policy designed to minimise interest costs and reduce volatility in reported earnings.

The Group's bank facility does not allow the US Dollar cash balances to generate interest therefore the Group transfers funds from the US dollar account into the sterling account. Currency transfers have been utilised to maximise the interest gains whilst minimising foreign exchange risks.

As at 31 December 2019, the indications are that the UK bank base interest rate will not materially differ over the next 12 months. On the basis of the net cash position at 31 December 2019 and assuming no other changes occur (such as material changes in currency exchange rates) the change in interest rates will not have a material impact on net interest income/(expense).

23. DEFERRED TAX (CONTINUED)

Group	2019 £000	2018 £000
Deferred tax asset		
Amounts due to be recovered within 12 months	-	-
Amounts due to be recovered after 12 months	**(506)**	(12)
Total deferred tax liability	**(506)**	(12)

The movement in the year in the Group's net deferred tax position was as follows:

	2019 £000	2018 £000
At beginning of the year	**(12)**	393
Net charge to income for the year	**(166)**	(101)
Net debit to Other Comprehensive Income (OCI)	**(6)**	(221)
Net debit to goodwill arising on acquisitions during the year	**(311)**	-
Adjustments in respect of prior years	**(11)**	(83)
At end of the year	**(506)**	(12)

The following are the major deferred tax assets and liabilities recognised by the Group and the movements thereon during the year:

Deferred tax asset/(liability)	Accelerated tax depreciation £000	Tax losses £000	Retirement benefit obligations £000	Other timing differences £000	Total £000
At 1 January 2018	(658)	694	638	(281)	393
Credit/(charge) to profit or loss for the year	132	(257)	(34)	58	(101)
Debit to OCI for the year	-	-	(221)	-	(221)
Adjustments in respect of prior years	-	-	-	(83)	(83)
At 31 December 2018	**(526)**	**437**	**383**	**(306)**	**(12)**
Credit/(charge) to profit or loss for the year	116	(229)	(70)	17	(166)
Debit to OCI for the year	-	-	(6)	-	(6)
Debit to goodwill arising on acquisitions during the year	(311)	-	-	-	(311)
Adjustments in respect of prior years	-	187	-	(198)	(11)
At 31 December 2019	**(721)**	**395**	**307**	**(487)**	**(506)**

Management have recognised deferred tax assets in relation to tax losses based on forecast profitability of the Group companies concerned.

Unrecognised tax losses not included at 31 December 2019 were £0.2m (2018: £0.3m) due to uncertainty over the timing of the recoverability of these losses.

24. RETIREMENT BENEFIT OBLIGATIONS

The Group has four active defined contribution schemes and a closed defined benefit scheme:

Defined contribution pension schemes

GROUP PERSONAL PENSION PLAN - the Scheme was created on 31 December 2008. The Scheme is a contributory money purchase scheme with the employer matching employee contributions to a maximum of 5%. The employer also contributes to the Scheme for former members of Instem LSS Pension Scheme at rates varying from 5% to 18%. Employer contributions for the year ended 31 December 2019 were £0.65m (2018: £0.53m).

CONTRACTED IN MONEY PURCHASE SCHEME (CIMP) - the Scheme was created on 31 December 2008. The Scheme is a non-contributory scheme created for former members of the Instem LSS Pension Scheme who are US residents. Employer contributions for the year ended 31 December 2019 were £0.03m (2018: £0.03m).

INSTEM LSS (NORTH AMERICA) LIMITED 401K PLAN - the Scheme was created for the benefit of employees of Instem LSS (North America) Limited in the USA. The Scheme is a contributory money purchase scheme with the employer matching contributions to the scheme to a maximum of 4.8%. Employer contributions for the year ended 31 December 2019 were £0.18m (2018: £0.16m).

BIOWISDOM GPP SCHEME - the Scheme is a Group Personal Pension arrangement with AVIVA set up in 2001. Employee members must contribute at least 3% of basic salary and the employer contributes up to a maximum of 6%. Employer contributions for the year ended 31 December 2019 were £0.01m (2018: £0.02m).

Defined benefit pension scheme

The Group also operates a defined benefit pension arrangement called the Instem LSS Pension Scheme (the Scheme). The Scheme provides benefits based on final salary and length of service on retirement, leaving service or death. This scheme was closed to new members with effect from 8 October 2001.

The Scheme is subject to the Statutory Funding Objective under the Pensions Act 2004. A valuation of the Scheme is carried out at least once every three years to determine whether the Statutory Funding Objective is met. As part of the process, the Group must agree with the Trustees of the Scheme the contributions to be paid to meet the Statutory Funding Objective. The future contributions required to meet the Statutory Funding Objective do not currently affect the statement of financial position of the Scheme in these accounts.

The Scheme is managed by a Board of Trustees appointed in part by the Group and part from elections by members of the Scheme. The Trustees have responsibility for obtaining valuations of the Scheme, administering benefit payments and investing the Scheme's assets. The Trustees delegate some of these functions to their professional advisors where appropriate.

The Scheme exposes the Group to a number of risks:

- Investment risk. The Scheme holds investments in asset classes, such as equities, which have volatile market values and while these assets are expected to provide the real returns over the long-term, the short-term volatility can cause additional funding to be required if a deficit emerges.
- Interest rate risk. The Scheme's liabilities are assessed using market yields on high quality corporate bonds to discount the liabilities. As the Scheme holds assets such as equities the value of the assets and liabilities may not move in the same way.
- Inflation risk. A significant proportion of the benefits under the Scheme are linked to inflation. Although the Scheme's assets are expected to provide a good hedge against inflation over the long-term, movements over the short-term could lead to deficits emerging.
- Mortality risk. In the event that members live longer than assumed a deficit will emerge in the Scheme.

There were no Scheme amendments, curtailments or settlements during the year.

The most recent comprehensive actuarial valuation was carried out at 5 April 2017 and the next valuation of the Scheme is due at 5 April 2020. In the event that the valuation reveals a larger deficit than expected the Group may be required to increase contributions above those set out in the existing Schedule of Contributions. Conversely, if the position is better than expected, it is possible that contributions may be reduced.

24. RETIREMENT BENEFIT OBLIGATIONS (CONTINUED)

The following schedule of contributions was prepared by the Trustees of the Scheme after obtaining the advice of the Scheme Actuary appointed by the Trustees and was intended to clear the deficit in the Scheme at the time it was agreed in June 2018:

Period ended	Monthly payment (payable in each month except the final month in each period) £'000	Balancing payment due before period end £'000
31 March 2020	25	237
31 March 2021	25	255
31 March 2022	25	273
31 March 2023	25	293
31 March 2024	25	313
30 October 2024	25	193

The employer pays the Pension Protection Fund levy each year in respect of the scheme. It is intended that all other expenses associated with the running of the Scheme will be met from the Scheme's assets.

The net interest on the net defined benefit liability was determined by considering the expected returns available on the assets underlying the current investment portfolio. Expected yields on bonds are based on gross redemption yields at the reporting date whilst the expected returns on the equity and property investments reflect the long-term real rates of return experienced in the respective markets.

	2019 **%**	2018 %
Discount rate (pa)	**2.20**	3.00
Inflation (RPI) (pa)	**2.80**	3.10
Inflation (CPI) (pa)	**1.80**	2.00
Rate of increase in salaries	**N/A**	N/A
Rate of increase in pensions in payment	**2.70**	3.00
Life Expectancy assumption (number of years from the age of 65)	**Years**	Years
Male currently aged 45	**23.7**	24.1
Female currently aged 45	**24.8**	25.2
Male currently aged 65	**22.7**	23.1
Female currently aged 65	**23.6**	24.0

ANALYSIS OF AMOUNT CHARGED TO FINANCE COSTS	**2019** **£000**	2018 £000
Interest on pension scheme assets	**316**	212
Interest on pension scheme liabilities	**(376)**	(384)
Net finance charge	**(60)**	(172)

24. RETIREMENT BENEFIT OBLIGATIONS (CONTINUED)

Pension schemes are legally required to equalise pension benefits for the effects of unequal Guaranteed Minimum Pensions (GMPs) between males and females that were accrued since May 1990. The Group has included a reserve of £nil in 2019 for the cost of GMP equalisation (2018: £0.1m). This amount is charged to non-recurring costs in the Statement of Comprehensive Income.

ANALYSIS OF AMOUNT RECOGNISED IN OTHER COMPREHENSIVE INCOME/ (EXPENSE)	**2019 £000**	2018 £000
Gains/(losses) on pension scheme assets in excess of interest	**1,003**	(957)
Gains from changes to demographic assumptions	**261**	65
(Losses)/gains from changes to financial assumptions	**(1,234)**	2,192
Actuarial gain recognised in other comprehensive income/(expense)	**30**	1,300

CHANGES IN THE PRESENT VALUE OF THE DEFINED BENEFIT OBLIGATION	**2019 £000**	2018 £000
Opening defined benefit obligation	**12,655**	14,549
Interest cost	**376**	384
Past service cost and GMP reserve	-	203
Benefits paid	**(231)**	(224)
Experience gain on liabilities	-	-
Changes to demographic assumptions	**(261)**	(65)
Changes to financial assumptions	**1,234**	(2,192)
Closing defined benefit obligation	**13,773**	12,655

CHANGES IN THE FAIR VALUE OF PLAN ASSETS	**2019 £000**	2018 £000
Opening plan assets	**10,406**	10,799
Expected return	**316**	289
Return on plan assets less interest	**1,003**	(957)
Contributions by employer	**475**	499
Benefits paid	**(231)**	(224)
Closing plan assets	**11,969**	10,406

The actual return on plan assets was a positive return of £1.3m (2018: negative return £0.67m).

24. RETIREMENT BENEFIT OBLIGATIONS (CONTINUED)

AMOUNT RECOGNISED IN THE CONSOLIDATED STATEMENT OF FINANCIAL POSITION	**2019 £000**	2018 £000
Present value of funded obligations	**(13,773)**	(12,655)
Fair value of plan assets	**11,969**	10,406
Net pension liability	**(1,804)**	(2,249)
Related deferred tax asset	**307**	383
Net pension liability after deferred tax	**(1,497)**	(1,866)

RECONCILIATION OF NET DEFINED BENEFIT LIABILITY	**2019 £000**	2018 £000
Opening net defined benefit liability	**2,249**	3,750
Net interest expense and GMP reserve	**60**	298
Remeasurements	**(30)**	(1,300)
Contributions by employer	**(475)**	(499)
Closing net defined benefit liability	**1,804**	2,249

ANALYSIS OF CUMULATIVE AMOUNT RECOGNISED IN OTHER COMPREHENSIVE INCOME/(EXPENSE)	**Cumulative 2019 £000**	Cumulative 2018 £000
Actual return less expected return on pension scheme assets	**2,094**	1,091
Experience gains and losses arising on scheme liabilities	**(1,628)**	(1,628)
Changes in demographic assumptions	**615**	354
Changes in assumptions underlying the present value of the scheme liabilities	**(4,422)**	(3,188)
Cumulative actuarial loss recognised in other comprehensive expense	**(3,341)**	(3,371)
Actuarial gain recognised in other comprehensive income/(expense) in the period	**30**	1,300

MAJOR CATEGORIES OF PLAN ASSETS AS A PERCENTAGE OF FAIR VALUE OF TOTAL PLAN ASSETS

	2019		2018	
	£000	%	£000	%
Equities	**7,277**	**61**	6,458	62
Property	**655**	**5**	781	8
Bonds	**1,109**	**9**	1,058	10
Corporate Bonds	**1,799**	**15**	1,297	12
Cash	**338**	**3**	86	1
Other	**791**	**7**	726	7
	11,969	**100**	10,406	100

24. RETIREMENT BENEFIT OBLIGATIONS (CONTINUED)

The five-year history of experience adjustments is as follows:

	2019 £000	2018 £000	2017 £000	2016 £000	2015 £000
Present value of defined benefit obligation	**(13,773)**	(12,655)	(14,549)	(14,436)	(11,782)
Fair value of plan assets	**11,969**	10,406	10,799	9,690	7,849
Deficit	**(1,804)**	(2,249)	(3,750)	(4,746)	(3,933)
Experience gains on plan liabilities	-	65	156	-	-
Return on plan assets less interest	**1,003**	(957)	686	1,252	(136)

The Group expects to contribute £0.5m to its defined benefit plan in the next financial year (2018: £0.5m).

The following sensitivities apply to the value placed on the liabilities:

Adjustments to assumptions Approximate effect on liabilities	£000
DISCOUNT RATE	
Plus 0.50% pa	(1,101)
Minus 0.50% pa	1,248
INFLATION	
Plus 0.50% pa	1,213
Minus 0.50% pa	(1,079)
LIFE EXPECTANCY	
Plus 1 year	362
Minus 1 year	(348)

25. PROVISION FOR LIABILITIES

	2019 £000	2018 £000
At 1 January	**250**	250
Increase in provision during the year	-	-
At 31 December	**250**	250

The Group holds a provision of £0.25m (2018: £0.25m) in respect of historical contract disputes against a maximum exposure estimated at approximately £1.5m. There are uncertainties around the outcome of contract disputes and any settlements may be higher or lower than the amount provided. The directors believe the provision represents the best estimate of the risks and considers all information and legal input received by the Group. The assumptions made in relation to the current period are consistent with those in the prior year. The utilisation of this provision is anticipated to be within 2 years.

26. SHARE CAPITAL

ALLOTTED, CALLED UP AND FULLY PAID	**2019 £000**	2018 £000
At 1 January		
15,917,931 ordinary shares of 10p each (2018: 15,886,660)	**1,592**	1,589
705,147 ordinary shares of 10p each (2018: 31,271), issued during the year	**70**	3
At 31 December	**1,662**	1,592

During the year 473,181 (2018: 31,271) shares were issued in respect of the exercise of share options.

27. EARNINGS PER SHARE

Basic and diluted earnings per share

Basic earnings per share are calculated by dividing the profit attributable to ordinary shareholders by the weighted average number of ordinary shares in issue during the year. Diluted earnings per share is calculated by adjusting the weighted number of ordinary shares outstanding to assume conversion of all dilutive potential shares arising from the share option scheme. The dilutive impact of the share options is calculated by determining the number of shares that could have been acquired at fair value (determined as the average market share price of the Company's shares) based on the monetary value of the subscription rights attached to the outstanding share options. The diluted loss per share in 2019 is the same as basic loss per share as losses have an anti-dilutive effect.

	2019			2018		
	Loss after tax (£000)	**Weighted average number of shares (000's)**	**Loss per share (pence)**	Profit after tax (£000)	Weighted average number of shares (000's)	Earnings per share (pence)
Earnings per share - Basic	**(923)**	**16,254**	**(5.7)**	1,470	15,909	9.2
Potentially dilutive shares	-	**799**	-	-	940	-
Earnings per share - Diluted	**(923)**	**17,053**	**(5.7)**	1,470	16,849	8.7

Adjusted earnings per share

Adjusted earnings per share is calculated after adjusting for the effect of foreign currency exchange on the revaluation of inter-group balances included in finance income/(costs), non-recurring items, impairment of goodwill and capitalised development and amortisation of intangibles on acquisitions. Diluted adjusted earnings per share is calculated by adjusting the weighted number of ordinary shares outstanding to assume conversion of all dilutive potential shares arising from the share option scheme. The dilutive impact of the share options is calculated by determining the number of shares that could have been acquired at fair value (determined as the average market share price of the Company's shares) based on the monetary value of the subscription rights attached to the outstanding share options.

	2019			2018		
	Adjusted profit after tax (£000)	**Weighted average number of shares (000's)**	**Adjusted earnings per share (pence)**	Adjusted profit after tax (£000)	Weighted average number of shares (000's)	Adjusted earnings per share (pence)
Earnings per share - Basic	**3,138**	**16,254**	**19.3**	2,611	15,909	16.4
Potentially dilutive shares	-	**799**	-	-	940	-
Earnings per share - Diluted	**3,138**	**17,053**	**18.4**	2,611	16,849	15.5

27. EARNINGS PER SHARE (CONTINUED)

Reconciliation of adjusted profit before tax:	**2019 £000**	2018 £000
Reported (loss)/profit before tax	**(901)**	1,677
Non-recurring costs	**302**	539
Amortisation of acquired intangibles	**523**	788
Impairment of goodwill and capitalised development	**3,175**	-
Foreign exchange differences on revaluation of inter-group balances	**61**	(186)
Adjusted profit before tax	**3,160**	2,818
Tax	(22)	(207)
Adjusted profit after tax	**3,138**	2,611

28. CAPITAL AND RESERVES

Share capital

The share capital account represents the par value for all shares issued. The Company has one class of share and each share rank parri passu and carry equal rights.

Share premium account

The share premium account is used to record amounts received in excess of the nominal value of shares on issue of new shares less the costs of new share issues.

Merger reserve

The merger reserve represents -

- the difference between the consideration payable at the date of acquisition, net of merger relief, and the share capital and share premium of Instem Life Science Systems Limited and
- the difference between the nominal value and share issue price of shares issued as consideration in the purchase of Leadscope Inc

Share based payment reserve

The share based payment reserve represents the fair value of shares options periodically awarded to employees and executive directors, which is charged to the statement of comprehensive income.

Translation reserve

The translation reserve incorporates the cumulative net exchange gains and losses recognised on the translation of subsidiary company financial information to the presentational currency of Sterling (£).

Retained earnings

The retained earnings reserve includes the accumulated profits and losses arising from the consolidated 'Statement of Comprehensive Income' and certain items from 'Other Comprehensive Income' attributable to equity shareholders net of distributions to shareholders.

Capital management

The Group's main objective when managing capital is to protect returns to shareholders by ensuring the Group will continue to trade profitably in the foreseeable future. The Group also aims to maximise the capital structure of debt and equity so as to minimise its cost of capital. The Group manages its capital with regard to the risks inherent in the business and the sector within which it operates by monitoring its gearing ratio on a regular basis.

28. CAPITAL AND RESERVES (CONTINUED)

The Group considers its capital to include share capital, share premium, merger reserve, share based payment reserve, translation reserve, retained earnings and net debt as noted below.

Net debt includes short and long-term borrowings (including overdrafts and lease obligations) net of cash and cash equivalents.

The Group has not made any changes to its capital management during the year.

29. CAPITAL COMMITMENTS

There were no capital commitments at the end of the financial year (2018: £nil).

30. RELATED PARTY TRANSACTIONS

Transactions between Group companies have not been disclosed as these have all been eliminated in the preparation of the consolidated financial statements. During the year, the Company traded with subsidiary companies in its normal course of business. These transactions related to recharges and totalled in aggregate £1.0m (2018: £1.0m). The net intercompany balances due from the Company at the year-end totalled £0.3m (2018: due from: £1.3m).

During the year, the Group traded in its normal course of business with shareholders and consultancy businesses in which Directors have a material interest as follows:

KEY MANAGEMENT COMPENSATION:	**2019 £000**	2018 £000
Group and Company		
Fees for services provided as Non-Executive Directors		
Salaries and short-term benefits	**120**	120
Employer's national insurance & social security costs	**13**	11
	133	131
Group		
Executive Directors		
Salaries and short-term benefits	**359**	335
Post-employment retirement benefits	**43**	41
Employers' national insurance & social security costs	**29**	23
Share based payment charge	**21**	91
	452	490
Group		
Other key management		
Salaries and short-term employee benefits	**1,047**	968
Post-employment retirement benefits	**59**	51
Employers' national insurance & social security costs	**99**	68
Share based payment charge	**54**	125
	1,259	1,212

The Company paid £0.05m (2018: £0.05m) to Instem Ventures Limited, a company owned by A Gare, a shareholder. The balance outstanding at the end of the year was £nil (2018: £nil).

Key management are considered to be the Directors together with the Senior Managers of the business.

31. CONTINGENT LIABILITIES

Instem plc has provided a guarantee to its subsidiaries which have taken advantage of the exemption from audit. Under this guarantee, the company has a contingent liability of £9.0m (2018: £9.0m).

32. SUBSEQUENT EVENTS

No adjusting events have occurred between the 31 December reporting date and the date of approval of these financial statements.

On 13th February 2020 it was announced that a member of the senior management team had exercised share options over 50,714 ordinary shares of 10p each in the Company.

In January 2020 the Group informed its staff of its intention to implement an all-staff share and option scheme. The scheme has subsequently been formally launched with staff receiving the right to 386,686 ordinary shares of 10p each in the Company that will vest in April 2023.

Like most businesses worldwide the Group is having to deal with the impact of COVID-19, with its primary concern being for the safety and wellbeing of its staff and their families. While the Group expects some disruption to demand for its products and services there is also expected to be some increases in customer demand.

The uncertainty as to the future impact on the Group of the recent COVID-19 outbreak has been considered as part of the Group's adoption of the going concern basis. Thus far we have not observed any material impact on our overall existing business or in the level of new business opportunities that are being presented to us in the markets in which we operate. We have seen a little slippage in customers placing new business during the first quarter of 2020, but at this stage it is too early to determine whether this is likely to be a long term issue or merely a temporary matter whilst our customers are focused on managing their own businesses, with changes from introducing staff self-isolation and working from home.

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D Gare (Non-Executive Chairman)
M F McGoun (Independent Non-Executive)
D M Sherwin (Non- Executive)
P J Reason
N J Goldsmith

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N J Goldsmith

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CHUGAI

COVANCE

Our clients include these fine organisations

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