



**FOR RELEASE ON**

**29 March 2018**

**("IP Group" or "the Group" or "the Company")  
IP Group plc Annual Results Release**

IP Group plc (LSE: IPO), the developer of intellectual property-based businesses, today announces its annual financial results for the year ended 31 December 2017.

**Portfolio highlights**

- Net portfolio gains of £94.2m (2016: £6.5m)
- Fair value of portfolio: £1,130.6m (2016: £614.0m) including £352.2m fair value of acquired Touchstone portfolio
- Capital provided by IP Group to portfolio companies and projects: £71.2m (2016: £69.7m), and £13.4m (2016: £nil) by Parkwalk Advisors.
- Portfolio cash realisations: £6.6m (2016: £14.7m)
- Total funds raised by portfolio companies of £315m (2016: £230m)
- Istesso commences Phase 2a clinical trials for its lead programme in Rheumatoid Arthritis and expands its R&D collaboration with Janssen
- Autifony Therapeutics signs €627.5m collaboration agreement with Boehringer Ingelheim
- Diurnal receives positive CHMP opinion for Alkindi®, a precursor to market launch for its first product in Q2 2018

**Financial and operational highlights**

- Net assets £1,508.5m (2016: £768.7m)
- Hard NAV £1,326.2m (2016: £706.5m)
- Return on Hard NAV of £64.1m (2016: negative £7.6m); Return on Hard NAV excluding acquisition and restructuring costs £73.2m (2016: £(£7.6m))
- Profit for the year £53.4m (2016: loss £14.8m)
- Gross cash and deposits £326.3m (2016: £112.3m)
- Increased scale and critical mass through all-share combination with Touchstone, integration progressing well
- Acquisition of Parkwalk Advisors Ltd, UK's leading growth EIS fund manager focused on university spin-outs
- Launch of IP Group Australasia; nine new partnerships signed with leading universities in Australia and New Zealand
- £181.0m (net) capital raise completed, including significant new shareholders from Australia, China, Singapore and the UK

**Post period end highlights**

- Oxford Nanopore completes £100m financing round in March, confirms orders of \$23.5m in 2017 and signals 2018 order book to more than treble to \$75m

**Alan Aubrey, Chief Executive of IP Group**, said: "2017 was a significant year for the Company, with the combination of IP Group and Touchstone Innovations and the acquisition of Parkwalk Advisors helping to create a business with greater resources that is better equipped to find, invest and develop businesses based on science and technology. The signing of new partnerships in Australia and New Zealand extended our reach into new geographies while our capital raise not only strengthened our balance sheet but also saw the introduction of major new institutional investors. Overall, the underlying performance of the Group's enlarged portfolio was strong with a number of key milestones attained. The integration of Touchstone Innovations with IP Group is proceeding to plan and we are confident for the year ahead and beyond."

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## Notes

### *(i) Nature of announcement*

This Annual Results Release was approved by the directors on 29 March 2018.

The financial information set out in this Annual Results Release does not constitute the company's statutory accounts for 2017 or 2016. Statutory accounts for the years ended 31 December 2017 and 31 December 2016 have been reported on by the Independent Auditor. The Independent Auditor's Reports on the Annual Report and Financial Statements for 2017 and 2016 were unqualified, did not draw attention to any matters by way of emphasis, and did not contain a statement under 498(2) or 498(3) of the Companies Act 2006. Statutory accounts for the year ended 31 December 2016 have been filed with the Registrar of Companies. The statutory accounts for the year ended 31 December 2017 will be delivered to the Registrar following the Company's annual general meeting.

The 2017 Annual Report and Accounts will be published in April 2018 and a copy will be posted on the Group's website ([www.ipgroupplc.com](http://www.ipgroupplc.com)). In accordance with Listing Rule 9.6.1 a copy of the Annual Report and Accounts will also be submitted to the National Storage Mechanism on or around this date and will be available for inspection at: [www.Hemscott.com/nsm.do](http://www.Hemscott.com/nsm.do) from that time.

Throughout this Annual Results Release the Group's holdings in portfolio companies reflect the undiluted beneficial equity interest excluding debt, unless otherwise explicitly stated.

### *(ii) Forward looking statements*

This Annual Report and Accounts may contain forward looking statements. These statements reflect the Board's current view, are subject to a number of material risks and uncertainties and could change in the future. Factors which could cause or contribute to such changes include, but are not limited to, the general economic climate and market conditions, as well as specific factors relating to the financial or commercial prospects or performance of individual companies within the Group's portfolio.

## Chairman's summary

I am pleased to report a year of substantial progress at IP Group in 2017. The underlying business performed well with some notable commercial progress within the portfolio while at a corporate level, IP Group completed a number of individually significant strategic transactions. The Group now has operations in three major geographic territories – the UK, US and Australasia – a stronger balance sheet and a large and diversified portfolio of exciting opportunities.

## Corporate transactions

2017 was a busy period in terms of corporate transactions for the Group. In June, the Group formally launched an all-share offer for Touchstone Innovations plc, a company which creates, builds and invests in technology companies and licensing opportunities developed from scientific research from the 'Golden Triangle', the geographical region broadly bounded by London, Cambridge and Oxford. The combination gives us critical mass, a better-balanced portfolio and additional partnerships. The transaction was declared wholly unconditional in October and Touchstone's portfolio, people and operations have been integrated into the Group.

In May, IP Group announced a £181.0m (net) capital raise and welcomed new shareholders from Australia, China, Singapore and the UK. The funding allows the Group to accelerate growth by investing in new and existing portfolio companies, build on its pool of valued scientific and commercial talent, and attract further investors and co-investment partners. It also furthers the transformation underway by expanding the Group's share register and by further extending its model into Australasia.

In February, we completed the acquisition of Parkwalk Advisors Ltd. that was announced in December 2016. Founded in 2009, Parkwalk is the UK's leading university spin-out focused EIS fund manager. We are delighted to have the team on board and Parkwalk recorded a net contribution of £1.6m for the period since acquisition, while co-investing in six IP Group portfolio companies.

## Expansion into Australasia

IP Group was also delighted to announce a landmark agreement with Australasia's leading universities in 2017, which will see at least A\$200 million invested in finding and developing companies involved in disruptive innovation. The commercialisation agreements, the first of their type in Australasia, were signed with nine universities: the University of Adelaide, Australian National University, the University of Melbourne, Monash University, UNSW Sydney, the University of Queensland, the University of Sydney and the University of Western Australia in Australia, and the University of Auckland in New Zealand. The Group committed to invest at least A\$200 million over a 10-year period to fund investments in spin-out companies based on the intellectual property (IP) developed by academics at the nine universities, generated from research in areas such as digital medicine, new medical therapies and quantum computing.

## Key portfolio events

Turning to the portfolio, I would draw out a few highlights. During the year, Diurnal received positive CHMP opinion for its Alkindi® product, followed by market authorisation in February 2018, paving the way for Diurnal to become the first IP Group company to launch a new therapeutic in Europe, which is anticipated in Q2 2018. Istesso commenced Phase 2a clinical trials for its lead MBS2320 programme in Rheumatoid Arthritis and expanded its R&D collaboration with Janssen. Autifony Therapeutics Ltd, a Touchstone Innovations portfolio company, announced it had signed a €627.5m collaboration agreement with Boehringer Ingelheim. And finally, once again, Oxford Nanopore has shown significant commercial progress during the period, with the company recently announcing that 2017 order intake had increased approximately three-fold to \$23.5m, with an expectation for a similar level of growth in 2018, and a number of product developments, including the launch of the GridION x5.

In addition, our portfolio companies continue to attract significant external funding, raising approximately £315m of new capital this year. Significant fund raisings included AIM-quoted Tissue Regenix Group plc (£40m), Actual Experience plc (£17.5m) and, among the private companies, Ultrahaptics Ltd (£17.9m) and Creavo Medical Technologies (£13.4m).

## Financial performance

In terms of financial performance, the Group continues to build on its strong track record. In 2017, IP Group's portfolio delivered a solid performance with net assets excluding goodwill and intangibles ("Hard NAV") totalling £1,326.2m (2016: £706.5m) with the fair value of the portfolio increasing to £1,130.6m (2016: £614.0m) and resulting in a reported profit of £53.4m (2016: £14.8m loss). The Group ended the year with gross cash and deposits of £326.3m (2016: £112.3m). I must stress however that our business model remains long term in nature and while our objective is to generate long term value for stakeholders, portfolio company valuations and therefore our results can and do fluctuate from year to year.

### **Changes to the Board**

At Board level, there have been two changes this year. In October, we were delighted to welcome Professor David Begg as a non-executive director following the acquisition of Touchstone Innovations plc, where he was a non-executive director. Professor Begg joined Touchstone Innovations plc from Imperial College London, where he was Professor of Economics and Principal of the Business School from 2003 until 2012. He also acted as Vice Provost for Research for the College. During his earlier career, he held a number of distinguished advisory and academic appointments, including Professor of Economics at Birkbeck College, Visiting Fellow at the Reserve Bank of Australia, and Visiting Professor at M.I.T and at INSEAD, and Economic Policy Advisor in the Bank of England.

Doug Liversidge, CBE, retired from his position as a non-executive director of the Company at the end of 2017. Mr Liversidge served on the Board in a non-executive capacity since March 2014 following IP Group's acquisition of Fusion IP plc, where he was Chairman. He was also the Group's Senior Independent Director, a role that Professor Begg agreed to take on from the beginning of 2018. Mr Liversidge made an important contribution to the Group's growth and I would like to thank him for his commitment and wise counsel over the past four years.

### **Summary**

The business made substantial progress in 2017, leaving IP Group well positioned for 2018 and beyond. I would like to welcome all our new colleagues and partners to the Group this year and to thank staff, academic partners and portfolio companies for their commitment and contribution to this positive performance. As ever, I would also like to extend the Board's thanks to all our stakeholders for their continued support without whom none of this would be possible. With a larger and maturing portfolio and an expanded pipeline of opportunities around the world, we look to the rest of the year with continued confidence.

**Mike Humphrey**  
Chairman

### **Operational review**

2017 was an important year for IP Group, which has seen a period of intense corporate activity including the transaction with Touchstone Innovations plc. The integration of the two businesses was a key operational focus throughout the latter part of the year that has continued into 2018. The combination added a maturing portfolio of 45<sup>1</sup> new companies to that of the Group, which we have fair valued at £352.2m on completion. This compares to Touchstone's last audited accounts at 31 July 2017, which reported a portfolio fair value of £461.1m. These businesses complement our existing portfolio companies while presenting growth opportunities across our newly-formed life sciences and technology sectors. Further information on the companies added through the Touchstone combination is included in the portfolio review below and details of the acquisition economics are set out in the financial review below.

Throughout 2017 we have remained focussed on delivering attractive returns from the portfolio, delivering net portfolio gains of £94.2m, resulting from a combination of technical and commercial progress in our portfolio companies, and successful fundraising transactions. Included in the former category were gains from Istesso Limited (£45.1m), Oxford Nanopore Technologies Limited (£27.8m), Ceres Power Holdings plc (£13.5m) and Diurnal Group plc (£9.4m), while in the latter category were gains in Ultrahaptics Holdings Limited (£11.8m<sup>2</sup>), and Creavo Medical Technologies Limited (£5.3m<sup>2</sup>).

The most significant fair value reductions were seen in a small number of the Group's AIM-quoted portfolio companies including hVIVO plc (£15.0m), Tissue Regenix Group plc (£11.8m) and Applied Graphene Materials plc (£3.8m). In addition, there were write-downs in a small number of existing IP Group private companies (£10.0m).

During 2017, the Group provided £71.2m of incubation, seed and development capital to 79 portfolio companies (2016: £58.8m capital excluding multi sector platforms; 55 companies).

### **Significant portfolio company transactions and developments**

Notable highlights in the portfolio in 2017 included:

#### **Life Sciences**

This year saw the transition of our single asset drug discovery company Istesso Limited (formerly Modern Biosciences plc) from a subsidiary to a portfolio company, resulting in a £45.1m profit on deconsolidation. We have operated Istesso Limited as a subsidiary since 2007 as it has progressed its MBS2320 lead product through product development and into the clinic, however it has always been our intention to spin out the business once it had achieved a significant value inflection point. Following the commencement of MBS2320's Phase 2a clinical trial in rheumatoid arthritis in partnership with Johnson and Johnson, we recruited two industry-expert non-executive directors in the latter half of the year as part of the establishment of an independent board for the company. In combination with a

<sup>1</sup> Excluding a further 39 organic holdings and 42 *de minimis* holdings

<sup>2</sup> Of the fair value gains noted above, the following amounts are attributable to the third party limited partners in the consolidated fund, IPVF II: Ultrahaptics Holdings Limited £2.0m, Creavo Medical Technologies Limited £0.9m

reduction in the Group's voting rights and a restructuring of debt funding the business, the company is now recognised in our portfolio rather than as a consolidated subsidiary.

The Group's largest holding, Oxford Nanopore, made significant commercial progress in the year. Oxford Nanopore is the company behind the world's only portable, real-time DNA/RNA sequencer, the MinION. Its goal is to enable the analysis of any living thing, by any person, in any environment – to disrupt multiple scientific and industrial markets. Oxford Nanopore is now entering its third commercial year and has reported having a customer base of thousands of MinION users, mostly in the scientific research community. The company also introduced larger formats in the year - GridION and PromethION - that start to access the higher-throughput end of the sequencing market. The company reported that orders for its products have trebled to \$23.5m in 2017 and with an expectation of \$75m for 2018. Based on the commercial and scientific progress made in the year, and that more than twelve months had elapsed since its last financing, the Group updated its valuation of the business, resulting in a fair value gain of £27.8m. The validity of this valuation assessment was confirmed in March 2018 on completion of a £100m fundraising with the addition of a group of major new investors from Singapore, China and Australia.

Another significant fair value gain of £9.4m came from AIM-listed Diurnal Group plc, one of the Group's most advanced biotech assets. Diurnal has two products either in or having completed Phase 3 studies, Infacort and Chronocort, for the treatment of the childhood and adult forms of adrenal insufficiency respectively, and anticipates market launch for its first product in Q2 2018. Among the larger assets, it was encouraging to note a positive impact from Circassia Pharmaceuticals plc, a Touchstone Innovations plc company, where positive share price performance led to a £4.2m fair value gain from the date of acquisition to the year end. Another Touchstone company, Autifony Therapeutics, signed a €627.5m collaboration agreement in December with Boehringer Ingelheim in respect of its voltage gated potassium channel modulator platform, including for the treatment of schizophrenia.

### **Technology**

The most valuable holding in the Technology portfolio, AIM-listed Ceres Power Holdings plc, made excellent commercial progress in the year resulting in a positive movement in Ceres' share price which translated to a £13.5m gain for the Group. The company's annual results, announced in October, showed revenue increase "ahead of expectations" and up 140% from last year to £4.1m (2016: £1.7m) while in September, Ceres announced the successful conclusion of a one-year field trial in homes in the UK. The results showed that the Ceres SteelCell® technology is reliable and could reduce annual household energy costs by £400 and carbon emissions by up to 2 tonnes per year. Finally, the company announced that it has secured its fifth OEM partner in a pre-close trading update in December. Four of our other key technology assets all completed substantial fundraisings in 2017, each involving high-quality new institutional shareholders.

More detail on the performance of our assets is contained in the portfolio review.

### **North America**

In North America, IP Group, Inc. continued its positive momentum, positioning the business well for 2018. We finished the year with eight institutional relationships, five with prominent universities and three with US Department of Energy Laboratories. Collectively, these institutions represented \$7.9bn (£5.9bn) in total annual R&D spending, with four of the universities in the top 10 for annual R&D expenditure and notable for conducting world-leading research across a broad range of life and physical science disciplines. Initial investments in technologies from several partners were completed: TuneOptix (University of Washington), BetterClouds (Argonne National Laboratory) and Lorem (Johns Hopkins University). We also continued our incubation of new technologies at our mature partnerships: Penn (2), Princeton (1), Columbia (2), NREL (1), PNNL (2).

By the end of the year, our team in North America had grown to 15 representing more than 13 advanced degrees, including six PhDs. The team has continued to work directly with our research partners in 'high-touch' engagement to develop a deep pipeline of future opportunities and to advance the existing portfolio of exciting companies, 22 in total so far. The North American business has established a portfolio that continues to attract strong US investor interest from both financial and strategic investors. During 2017, we continued to see strong external validation and support for our US portfolio. To date, our portfolio has attracted \$11m of external investment. Exyn Technologies (University of Pennsylvania) in January 2018 raised \$3m from new investors and Lumiode (Columbia University) received an investment from a large (c.\$60bn) US strategic investor. In September, Cynash, Inc. (Pacific Northwest National Laboratories) commercialised three technologies from the Department of Homeland Security Science and Technology Directorate through its Transition to Practice program creating a novel cyber-defence technique and introducing the new cybersecurity solution to the marketplace. CARMA Therapeutics (University of Pennsylvania) was voted one of the top 20 life science start-ups to watch in 2018 by industry trade publication BioSpace.

In November, the Group hosted its third annual Hard Science Innovation Forum in Philadelphia, showcasing more than 16 investments to more than 200 investors, academics, politicians, and partners. This event comprised panel discussions that examined investing in innovation, advancements in oncology research, AI, robotics and drone technology.

### **Australasia/the Far East**

In Australasia, the Group was excited to launch a landmark agreement with Australasia's leading universities, under which it anticipates investing at least AU\$200m (c.£116m) in funding and developing companies involved in disruptive innovation. The 10+10-year agreements with the Group of Eight (Go8) universities in Australia and Auckland University in New Zealand are the first of their kind and provide for the Group to gain access to the intellectual property generated by academics at the partner universities.

The Go8 comprises Australia's eight leading research Universities - The University of Melbourne, The Australian National University, The University of Sydney, The University of Queensland, The University of Western Australia, The University of Adelaide, Monash University and the University of NSW. Each of the nine partner universities in Australasia is consistently ranked in the top 150 institutions worldwide, and each year spend in excess of AU\$6bn (c.£3.5bn) on research.

On the capital side, the Group was delighted to welcome TelstraSuper, a significant Australian superannuation fund with AU\$19 billion under management, to the Group's shareholder register as part of the capital raising. In addition, it is pleased to be working with Hostplus, one of Australia's largest superannuation funds with over AU\$30 billion in funds under management, who has committed AU\$100m to a global co-investment mandate with the Group and who made its first investment as part of Oxford Nanopore's March 2018 financing. Following the appointment of the senior team for our Australasian business in October, we have identified what we consider to be an attractive pipeline of opportunities and anticipate making initial investments in 2018.

The Group also held 'Deep Tech Forum' events in Shenzhen and Beijing in China, bringing together ten of our portfolio companies (Oxford Nanopore, Tissue Regenix, Istesso, Diurnal, Ceres Power, Eight 19, Medaphor, Creavo, Xeros, Mirriad) and over 300 Chinese private equity and venture capital investors, corporate representatives and government bodies. The event was aimed at capitalising on strong Chinese investor interest in the IP Group story and the innovative companies we help build and resulted in many new relationships, investment and business opportunities and strategic collaboration opportunities both for the Group and our portfolio companies.

## Outlook

The Board continues to believe the fundamentals of the business remain strong and appeal to an increasingly broad set of international investors. While it remains important to consider the Group as a long-term business where results can fluctuate from year to year, IP Group has a maturing portfolio of exciting assets as well as an expanded pipeline of opportunities around the world. The Group also has a sound balance sheet, a strong core business in the UK and exciting emerging opportunities in both the US and Australasia. These factors, combined with a number of anticipated value inflection points this year, particularly in our life sciences portfolio, means we look to the rest of the year with continued confidence.

## Portfolio review

### Overview

At 31 December 2017 the value of the Group's portfolio had increased to £1,130.6m, from £614.0m in 2016, as a result of the acquisition of Touchstone Innovations plc's portfolio of £352.2m, the fair value movements set out below and a net investment of £64.6m. The portfolio now consists of interests in 155 companies (133 UK and 22 US), strategic holdings in three multi-sector platform businesses as well as a further 42 *de minimis* holdings and 39 organic holdings (2016: 90,3,20,0). Of these 155 holdings, the 20 most valuable portfolio companies account for 65% of the total portfolio value (2016: 76%).

During the year to 31 December 2017, the Group provided pre-seed, seed and post-seed capital totalling approximately £71.2m to its portfolio companies (2016: £69.7m). In contrast to the prior year, in which there were large investments made into the Group's multi-sector platform holdings, this year the investments have been more broadly spread across the portfolio.

The Directors continue to believe that the Group's ability to utilise its capital to maintain its equity interests in its most promising companies will contribute to significant potential fair value increases in the portfolio over the medium to long term.

The Group deployed capital into 21 new companies or projects during the year (2016: 20), ten of which were sourced from the UK (2016: 13), and 11 from the US (2016: seven). Both geographies have again provided consistent pipelines of opportunities, helping to further diversify the portfolio geographically.

In addition to this organic growth, the Group's portfolio increased substantially in size following the acquisition of Touchstone Innovations plc in October 2017. This transaction resulted in the addition of 45 new actively managed investments, a further 39 organic investments and 27 investments which are considered *de minimis*. These investments fall relatively evenly by number across the Group's two sectors, Life Sciences and Technology, and help to diversify the Group's portfolio, with the proportion of the portfolio represented by Oxford Nanopore Technologies falling from 40.1% in 2016 to 24.4% at the end of 2017. The acquisition has contributed eight of the Group's 20 largest investments by year-end value.

Two companies were sold during the year (2016: three), two were acquired by existing portfolio companies, and a further two companies, with a total historic cost of £2.9m, were closed or fully provided against (2016: four, £4.8m).

During the year, cash proceeds from the realisation of investments were £6.6m (2016: £14.7m), with a further £1.0m received after the year-end. The proceeds received during the year were primarily driven by the disposal of interests in Puridify Limited and Plaxica Limited, cash received post year-end related to the sale of Theysay Limited in December 2017. Prior year realisations predominantly arose from the cash received from the sales of Tracsis plc, Gold Standard Simulations Limited and Summit Therapeutics plc.

## Performance summary

A summary of the Income Statement gains and losses which are directly attributable to the portfolio is as follows:

	2017 £m	2016 £m
Unrealised gains on the revaluation of investments	99.3	56.6
Unrealised losses on the revaluation of investments	(49.2)	(50.3)
Effects of movement in exchange rates	(1.1)	0.7
<b>Change in fair value of equity and debt investments</b>	<b>49.0</b>	<b>7.0</b>
Gain/(loss) on disposals of equity investments	0.1	(0.5)
Gain on deconsolidation of subsidiary	45.1	–
<b>Net portfolio gains</b>	<b>94.2</b>	<b>6.5</b>

The most significant contributors to unrealised gains on the revaluation of investments Oxford Nanopore Technologies Limited (£27.8m), Ceres Power Holdings plc (£13.5m), Ultrahaptics Holdings Limited (£11.8m)<sup>3</sup> and Diurnal Group plc (£9.4m). The major contributors to the unrealised losses on the revaluation of investments were hVivo plc (£15.0m), Tissue Regenix Group plc (£11.8m) and Applied Graphene Materials plc (£3.8m).

The performance of the Group's holdings in companies quoted on AIM saw a net unrealised fair value decrease of £1.0m (2016: decrease of £36.1m) while the Group's holdings in unquoted companies experienced a net fair value increase of £49.9m (2016: increase of £43.1m), in addition to a £45.1m gain in respect of the deconsolidation of Istesso Limited (formerly Modern Biosciences plc) and its recognition as a portfolio company.

Since the year-end, i.e. between 31 December 2017 and 28 March 2018, the fair value of the Group's holdings in companies whose shares are listed on the AIM market experienced a net fair value decrease of £30.0m.

## Investments and realisations

The Group's overall rate of capital deployment increased during 2017, with a total of £71.2m being deployed across 79 new and existing projects (2016: £58.8m (excluding the £7.5m and £3.4m strategic investments into OSI and CIC); 55 projects).

The average level of capital deployed per company decreased from £1.2m to £0.9m in 2017. Excluding the Group's participation in Oxford Nanopore Technologies Limited's 2016 financing round and Oxford Sciences Innovation plc's 2016 financing round, the average investment per company was £0.7m in 2016.

Cash invested by company stage was as follows:

	2017 £m	2016 £m
Focus	33.7	39.0
Development	29.1	10.8
Early stage	8.4	9.0
<b>Total</b>	<b>71.2</b>	<b>58.8</b>
Multi-sector platforms	–	10.9
<b>Total purchase of equity and debt investments</b>	<b>71.2</b>	<b>69.7</b>
<b>Cash proceeds from sales of equity investments</b>	<b>6.6</b>	<b>14.7</b>
<b>Net investment</b>	<b>64.6</b>	<b>55.0</b>

The Development stage group includes other businesses to which the Group has provided in excess of £0.5m as principal investor, or in excess of £1.0m of funding in conjunction with other significant investors. Although each business can vary significantly in its rate and manner of development, such additional funding is generally used to progress towards key milestones and commercial validation, to build senior level capability in the business and to attract experienced non-executive directors to their boards. Early-stage companies include both incubation and seed opportunities. Incubation opportunities comprise businesses or pre-incorporation projects that are generally at a very early stage of development, at most within three years since the Group's first financing, and have received at least one stage of funding. Opportunities at this stage usually involve capital of less than £0.2m from IP Group, predominantly allowing for proof of concept work to be carried out. Seed businesses are those that have typically received financing of up to £1m in total, primarily from the Group, in order to continue towards agreed commercial and technology milestones and to enable the recruitment of management teams and early commercial engagement.

Portfolio companies which are classed as being in the Focus stage are those which comprise the largest 20 investments by value (excluding multi-sector platform companies). In 2016 Focus investments were those in which the Group's holding had a fair value in excess of £4m, and this change has been made following the acquisition of Touchstone and the resulting larger portfolio.

Finally, the multi-sector platform companies in which the Group has taken a strategic stake operate a similar business model of sourcing and developing university spin-outs, typically from a single institution. These companies include Oxford Sciences Innovation plc ("OSI") and Cambridge Innovation Capital plc ("CIC").

<sup>3</sup> Of the fair value gains noted above, the following amounts are attributable to the third party limited partners in the consolidated fund, IPVFI: Ultrahaptics Holdings Limited £2.0m.

Those companies which either do not progress beyond the incubation stage within three years of the Group's initial funding and/or whose value has subsequently fallen to below £0.1m but remain as operating businesses are classed as *de minimis* holdings. Organic holdings are investments in which the Group has acquired a shareholding upon creating the company via our technology transfer relationship with Imperial College London, but in which we have not actively invested.

Since its inception in May 2013, IP Venture Fund II ("IPVFII"), the £30m venture capital successor fund to IP Venture Fund, has invested alongside the Group in 27 companies spun-out from IP Group's university partnerships and other collaborations. At 31 December 2017, IPVFII had invested £15.6m into spin-out companies from incubation stage through seed and post-seed stage (2016: £10.6m), with an investment ratio of 30:70 (IP Venture Fund II: IP Group). Further, IP Group holds a 33% interest in IP Venture Fund II. In complying with IFRS 10, the Group consolidates the assets, liabilities and results of IPVFII. In order to reflect meaningful information to its shareholders, the detailed sectoral analysis tables included in this Portfolio review reflect the Group's economic interest in portfolio company holdings, including an estimate of its "look through" interest via IPVFII, which as noted above is calculated as one third of IPVFII's holdings in such companies. The minority interest ownership, i.e. that element of IPVFII's holdings that is attributable to external limited partners, is reflected in a separate section within those tables.

During the year, 21 opportunities received initial incubation or seed funding (2016: 19) and no companies received initial post-seed funding (2016: one).

### Portfolio analysis by stage of company maturity

At 31 December 2017, the Group's portfolio fair value of £1,130.6m was distributed across stages of company maturity as follows:

Stage	As at 31 December 2017				As at 31 December 2016			
	Fair value		Number		Fair value		Number	
	£m	%		%	£m	%		%
Focus	709.6	68%	19	12%	463.5	86%	19	21%
Development	307.2	30%	84	54%	58.7	11%	32	36%
Early-stage	21.6	2%	52	34%	19.2	3%	39	43%
<b>Total</b>	<b>1,038.4</b>	<b>100%</b>	<b>155</b>	<b>100%</b>	<b>541.4</b>	<b>100%</b>	<b>90</b>	<b>100%</b>
Multi-sector platforms	62.9	–	3	–	62.5	–	3	–
<i>De minimis</i> holdings	1.3	–	42	–	0.9	–	20	–
Organic	5.7	–	39	–	–	–	–	–
<b>Total Portfolio</b>	<b>1,108.3</b>	<b>–</b>	<b>239</b>	<b>–</b>	<b>604.8</b>	<b>–</b>	<b>113</b>	<b>–</b>
Attributable to third parties <sup>(i)</sup>	22.3				9.2			
<b>Gross Portfolio</b>	<b>1,130.6</b>				<b>614.0</b>			

(i) The amount attributable to third parties consists of £16.3m attributable to minority interests represented by third party limited partners in the consolidated fund, IPVFII, £5.7m attributable to Imperial College London and £0.3m to other third parties (2016: £9.2m, £nil, £nil).

Of the 155 companies in the Group's portfolio, 52% (2016: 76%) of the fair value resides in the ten most valuable companies (excluding multi sector platforms) and the Group's holdings in these businesses are valued at a total of £573.8m (2016: £418.2m).

The total value of the Group's 155 portfolio companies (excluding multi-sector platforms, organic investments and *de minimis* holdings), calculated by reference to the Group's holding in such companies and grossed up to reflect their total value, is now in excess of £4bn, or approximately £5bn including the Group's three holdings in multi-sector platform companies (Oxford Sciences Innovation plc, Cambridge Innovation Capital plc and Frontier IP Group plc) (2016: £2.7bn, £3.3bn).

### Portfolio analysis by sector

The Group funds spin-out companies based on a wide variety of scientific research emerging from leading research-intensive institutions and does not limit itself to funding companies from particular areas of science. The Group splits its core opportunity evaluation, investment and business building team into two specialist divisions, Life Sciences and Technology. This is a departure from previous years when the management of the portfolio was split between Healthcare, Biotech, Technology and Cleantech and the change has been made as part of the acquisition of Touchstone Innovations plc. The sectors formerly known as Healthcare and Biotech now constitute the Life Sciences sector while those formerly known as Technology and Cleantech now constitute the Technology sector. Where the Group invests in businesses that cannot be classified within these divisions, primarily those portfolio companies which also invest in other opportunities, they are recorded in a separate sector as shown below. Together these three sectors make up the Group's 'university partnership' business segment. An update on the other two operating segments is included in the financial review below.

Sector	As at 31 December 2017				As at 31 December 2016			
	Fair value		Number		Fair value		Number	
	£m	%		%	£m	%		%
Life Sciences	704.4	68%	73	47%	375.4	69%	39	43%
Technology	334.0	32%	82	53%	166.0	31%	51	57%
<b>Total</b>	<b>1,038.4</b>	<b>100%</b>	<b>155</b>	<b>100%</b>	<b>541.4</b>	<b>100%</b>	<b>90</b>	<b>100%</b>
Multi-sector platforms	62.9	–	3	–	62.5	–	3	–
<i>De minimis</i> holdings	1.3	–	42	–	0.9	–	20	–
Organic	5.7	–	39	–	–	–	–	–
<b>Total Portfolio</b>	<b>1,108.3</b>	<b>–</b>	<b>239</b>	<b>–</b>	<b>604.8</b>	<b>–</b>	<b>113</b>	<b>–</b>
Attributable to third parties <sup>(i)</sup>	22.3				9.2			
<b>Gross Portfolio</b>	<b>1,130.6</b>				<b>614.0</b>			

(i) The amount attributable to third parties consists of £16.3m attributable to minority interests represented by third party limited partners in the consolidated fund, IPVFI, £5.7m attributable to Imperial College London and £0.3m to other third parties (2016: £9.2m, £nil, £nil).

The following table lists the value movements attributable to the largest twenty portfolio investments by value, which represent 69.0% of the total portfolio value (2016: 85.1%). Additional detail on the performance of these companies is included in the Life Sciences and Technology portfolio reviews.

Company name	Description	Sector, Quoted (Q)/ Unquoted (U)	Group stake at 31 Dec 2017 <sup>(i)</sup>	Fair value of Group holding at 31 Dec 2016	Acquisitions of Touchstone Innovations plc	Net investment/ (divestment) <sup>(iii)</sup>	Fair value movement and fees settled in equity <sup>(ii)</sup>	Fair value of Group holding at 31 Dec 2017
		%	%	£m	£m	£m	£m	£m
Oxford Nanopore Technologies Limited	Enabling the analysis of any living thing, by any person, in any environment	Life Sciences (U)	19.6%	246.3	—	—	27.8	274.1
Oxford Sciences Innovation plc	University of Oxford preferred IP partner under 15-year framework agreement	Multi- sector platforms (U)	7.9%	55.5	—	—	—	55.5
Istesso Limited	Reprogramming metabolism to treat autoimmune disease	Life Sciences (U)	61.1%	—	—	51.1	—	51.1
PsiOxus Therapeutics Limited	Oncolytic viral therapeutics for cancer	Life Sciences (U)	26.3%	—	44.5	—	—	44.5
Diurnal Group plc	Novel treatments of hormone deficiency	Life Sciences (Q)	44.7%	29.3	—	—	9.4	38.7
Ceres Power Holdings plc	World leading developer of next generation fuel cell technology	Technology (Q)	25.4%	18.0	—	—	13.5	31.5
Actual Experience plc	Optimising the human experience of networked applications	Technology (Q)	22.2%	23.4	—	1.5	3.5	28.4
Circassia plc	Developing a range of novel immunotherapies	Life Sciences (Q)	8.0%	—	22.5	—	4.2	26.7
Cell Medica Limited	T cell therapeutics for oncology	Life Sciences (U)	24.6%	—	20.6	5.7	—	26.3
Xeros Technology Group plc	Polymer bead cleaning systems	Technology (Q)	10.9%	20.2	—	2.0	3.6	25.8
Autifony Limited	Developing high value, novel medicines to treat CNS diseases	Life Sciences (U)	26.4%	—	23.9	—	—	23.9
Ultrahaptics Holdings Limited	Contactless haptic technology "feeling without touching"	Technology (U)	31.0%	8.0	—	4.0	9.8	21.8
Mirriad Advertising plc	Native in-video advertising for post-production ad placement	Technology (Q)	27.7%	13.4	—	3.7	(0.6)	16.5
Featurespace Limited	Leading predictive analytics company	Technology (U)	27.9%	—	15.6	—	—	15.6
Ieso Digital Health Limited	Live, online cognitive behavioural therapy	Technology (U)	49.5%	—	10.2	4.5	—	14.7
Creavo Medical Technologies Limited	Quantum cardiac imaging technology	Life Sciences (U)	39.5%	6.6	—	3.2	4.6	14.4
Veryan Medical Limited	Development and commercialisation of novel 3D stent technology for the peripheral vasculature	Life Sciences (U)	46.1%	—	11.7	2.3	—	14.0
First Light Fusion Limited	Net methodology for achieving extreme intensity cavity collapse	Technology (U)	34.9%	13.9	—	—	—	13.9
Tissue Regenix Group plc	Regenerative dCELL <sup>®</sup> soft tissue body parts	Life Sciences (Q)	13.1%	20.6	—	5.0	(11.8)	13.8
Topivert Limited	Small molecule therapeutics for G1 and Ophtha indications	Life Sciences (U)	29.6%	—	13.8	—	—	13.8
Other companies (138 companies)				148.8	183.4	28.5	(18.4)	342.3
De minimis investments				0.8	—	—	0.2	1.0
Value not attributable to equity holders				9.2	6.0	3.4	3.7	22.3
<b>Total</b>				<b>614.0</b>	<b>352.2</b>	<b>114.9</b>	<b>49.5</b>	<b>1,130.6</b>

- I. Represents the Group's undiluted beneficial economic equity interest (excluding debt) including the portion of IPVFII's stake attributable to the Group. Voting interest is below 50%.
- II. Includes £0.5m fees settled in equity.
- III. Includes £51.1m movement in respect of the deconsolidation of Istesso Limited and recognition as a portfolio company.

## Portfolio review: Life Sciences

### Dr Sam Williams Managing Partner, Life Sciences

IP Group's Life Sciences portfolio comprises 73 companies worth £704.4 million as at 31 December 2017. This includes an additional 23 companies, valued at £235.8m following the acquisition of Touchstone Innovations plc.

#### Review of the year

##### *Oxford Nanopore*

The Group's largest holding, Oxford Nanopore Technologies Ltd, made tremendous commercial progress in the year. Oxford Nanopore is the company behind the world's only portable, real-time DNA/RNA sequencer, the MinION. Its goal is to enable the analysis of any living thing, by any person, in any environment – to disrupt multiple scientific and industrial markets.

Oxford Nanopore is now entering its third commercial year and has reported having a customer base of thousands of MinION users, mostly in the scientific research community. The company also introduced larger formats in the year - GridION and PromethION - that start to access the lucrative higher-throughput end of the market. Increasing numbers of publications and talks indicate expanding uses for their disruptive sequencing technology including the introduction of a new direct RNA sequencing method. This does not require reverse transcription or amplification and delivers full-length RNA transcripts; both highly compelling properties. It is estimated that about half the \$3 billion research sequencing market is composed of RNA analysis.

As well as being used in scientific research, progress is being made towards 'applied' markets such as diagnostics, agriculture, food safety, water testing, biologics production and education. For example, reports emerged of a major international food company developing nanopore technology for food safety, a study to evaluate the MinION in rapid identification of hospital acquired pneumonia, work on rapid diagnosis of TB and other infectious diseases, and pilot projects to identify plant pathogens, rapidly, in rural areas.

Oxford Nanopore consolidated significant improvements in the performance of its technology, most notably on accuracy and the yields of data customers can achieve, by implication making the technology cheaper 'per base'. This marked a transition from an emerging technology with novel features such as portability, real-time data, direct analysis and simple preparation, to a technology that was also competitive on traditional metrics. In 2017, Oxford Nanopore noted that it required a performance of 50Gb per PromethION Flow Cell in order to release the product to customers. This was achieved in December 2017, and early in the New Year the Company reported achieving 150Gb of data from a single PromethION Flow Cell, approaching the requirement for two 30X human genomes on a single consumable (PromethION is designed to run up to 48 Flow Cells at any time). These increased yields correspond to a lower cost per Gb for customers, a key competitive metric, but also the ability to deliver real-time, long read nanopore sequencing data at large scale required for human, plant, or population studies. Early results from customers indicates examples of >70Gb per PromethION Flow Cell and we await further news with interest. In addition, the release of new chemistries, software and other materials has resulted in a consensus accuracy level of 99.98% when using certain tools - sufficient to serve most of the research market applications. The Company has spoken in presentations about its intended pathway to the highest levels of consensus accuracy.

While Oxford Nanopore is private and does not report its financial results, the CEO remarked in a recent interview that the company anticipates 300% year on year growth of its order book. We look forward to updates, in particular noting:

- the company's anticipated growth in China: having launched its technology there in late 2017 the company has noted rapid growth in custom in China
- further rollout of GridION and nanopore service providers, who are expected to open up the market to more customers, more quickly
- the emergence of more PromethION news from customer laboratories. Instruments are already placed with numerous labs and the company has noted that it is now shipping early Flow Cells to participants in its early access programme
- with GridION and PromethION, further emergence of much larger datasets, for example in 'big game' projects in human genetics, cancer research and plant genetics.

In 2018, Oxford Nanopore announced its pathway to a sub \$1000 genome, unveiled the Flongle, which will offer smaller, single-use consumables for rapid-result tests in the lab or in the field, and also introduced MinIT, which eliminates the need for a dedicated laptop for nanopore sequencing with MinION.

Finally, the company announced it had successfully defended a lawsuit with PacBio. In November 2016, PacBio filed a Complaint with the International Trade Commission ("ITC") alleging that Oxford Nanopore infringed two of PacBio's patents and seeking to prevent Oxford Nanopore from selling its product in the United States. The ITC Commission has made a Final Determination affirming the Administrative Judge's decision that Oxford Nanopore has not infringed PacBio's patents and also found that there was no violation of 19 U.S.C. §1337 and terminated the ITC investigation.

Based on the significant commercial and scientific progress made in the year and the fact that the company's previous financing round was greater than twelve months prior to the balance sheet date, the Group reviewed the value of its holding resulting in an increase of 12% or £27.8m as at 31 December 2017. This validity of the valuation assessment was confirmed in March 2018 by the completion of the company's £100m fundraising from significant new investors.

#### *Other significant portfolio company updates*

The largest gain for the Group came from the deconsolidation of Istesso Limited (formerly Modern Biosciences plc) and its recognition as a portfolio company, which resulted in a £45.1m profit on deconsolidation. Istesso, now the third largest company in the portfolio, also made considerable progress in 2017 with its lead product, MBS2320, moving into Phase 2a studies in rheumatoid arthritis, while demonstrating good safety and tolerability in Phase 1. In addition, changes in biomarkers of disease observed in a small patient cohort in the Phase 1 were observed that were consistent with the drug's mechanism-of-action.

Another significant gain of £9.4m came from Diurnal Group plc, one of the Group's most advanced biotech assets. Diurnal has two products in Phase 3 studies, Infacort and Chronocort, for the treatment of the childhood and adult forms of adrenal insufficiency respectively. During 2017, the company took significant steps towards the eventual market launch of both these Phase 3 products. These include the signing of a marketing and distribution agreement for both products in Israel with Israel's leading commercial group for niche healthcare products, the launch of a European patient access programme for Infacort in collaboration with Clinigen Group plc, and the dosing of a food-effect study for Infacort as the first step in its Phase 3 registration programme in the US.

In December, Diurnal announced that the Committee for Medicinal Products for Human Use (CHMP), an advisory committee of the European Medicine Agency (EMA), issued a positive opinion to the European Commission (EC) recommending Alkindi® (development programme name: Infacort®; hydrocortisone granules in capsules for opening) as replacement therapy for paediatric adrenal insufficiency (AI). In February 2018, Diurnal was granted a paediatric use marketing authorisation (PUMA) from the EC and anticipates first launch of Alkindi® in Q2 2018.

Among the larger assets, it was encouraging to note a positive impact from Circassia Pharmaceuticals plc, a Touchstone Innovations plc company, where positive share price performance led to a £4.2m gain. Another company from the Touchstone stable, Autifony Therapeutics Ltd also signed a €627.5m collaboration agreement in December with Boehringer Ingelheim about certain aspects of its voltage gated potassium channel modulator platform. Autifony, a UK-based biotechnology company formed in 2011 as a spin-out from GSK with investment from Touchstone Innovations plc, is focused on the development of high value, novel medicines to treat serious diseases of the central nervous system. Boehringer Ingelheim now has an exclusive option to purchase Autifony's Kv3.1/3.2 positive modulator platform. Included in the agreement is the lead compound AUT00206, a novel, orally active small molecule that is currently being evaluated in two Phase Ib studies, including one in patients with schizophrenia. PsiOxus Therapeutics, also from the Touchstone stable, announced in December that the Clinical Trial Application for NG-348, an "armed" oncolytic virus for the treatment of solid tumours, was approved and, per the licensing agreement between the parties, Bristol-Myers Squibb will make a US \$15m milestone payment to PsiOxus. Under the terms of the December 2016 agreement, Bristol-Myers Squibb granted PsiOxus an upfront payment of \$50m. In aggregate, PsiOxus is eligible to receive development, regulatory and sales-based milestones of \$936m, as well as royalties on net sales.

Creavo Medical Technologies Limited provided a £5.3m fair value gain following a £13.7m fundraising in the first half of 2017. The Company is developing and undertaking clinical trials on a 2017 FDA 510(k) approved device for diagnosing heart attacks which, if the clinical trials it is undertaking, prove successful envisages could save the NHS £200m per year.

Turning to more challenging matters, weak share price performance from hVIVO plc translated to a £15m fair value reduction for the Group. Addressing disappointment in clinical results earlier in the year, Dr Trevor Phillips was appointed to the post of Executive Chairman. Dr Phillips, who will work closely with Chief Executive Kym Denny to refine and focus hVIVO's strategy, has over thirty years' experience in the pharmaceutical industry and has a proven track record in corporate development. He was previously Chief Operations Officer and President of US Operations, as well as a member of the Board, at Vectura Group plc. On the back of this we look forward to developments in 2018.

The Group's second largest fair value reduction, of £11.8m came from Tissue Regenix Group plc. In 2017, Tissue Regenix completed the acquisition of revenue-generating and profitable CellRight Technologies, LLC, a US regenerative medicine business based in San Antonio, Texas, concurrent with a £40 million fundraising. The acquisition, which helps to position the business as a leading commercial stage regenerative medicine company was considered cautiously by the market, perhaps following the departure of Chief Executive Antony Odell and the company's Chief Financial Officer in the latter part of the year. Nevertheless, the new Chief Executive Steve Couldwell takes on the role with highly relevant experience, overseeing the integration of Cellright Technologies and prioritising sales and R&D. Most recently Mr Couldwell was Chief Operating Officer of Global Sanofi Biosurgery. Prior to this, he held several roles at Smith & Nephew including President, Orthopaedics, Europe and Senior VP Sales and Marketing of the Advanced Wound Management business.

Other positive developments in therapeutics included:

Avacta Group plc continues to advance the reagents and therapeutics side of its Affimers business, demonstrating low immunogenicity in an ex-vivo study versus a reference monoclonal antibody and signing several reagents/diagnostics deals with major biotechnology/diagnostic players. In the unquoted portfolio, Karus Therapeutics Limited is now in Phase 1 trials for both of its lead cancer programmes. Glythera Limited continued to demonstrate the advantages of its Antibody Drug Conjugate technology and began the build-out of its executive and non-executive team. Finally, the division's newest company, Microbiotica Limited, which was founded in 2016 to exploit advances in microbiome science at the Sanger Institute in Cambridge, made great progress during 2017, building out its team, as well as replicating and expanding the scientific platform licensed from the Sanger.

In healthcare, the Group participated in equity co-investments in Oxford Drug Design Limited; which is using AI technologies to identify novel gram-negative antibiotics, Oxehealth Limited, which has deployed its technology with a number of NHS Trusts to improve UK patient care particularly in the complex mental health arena, and Alesi Surgical Limited, which secured FDA 510k approval for its device

to clear smoke in laparoscopic surgery procedures and is now accelerating commercial activities. There was also significant technical progress at OxSyBio Limited while Oxford based Genomics plc announced that it had entered into a strategically important collaborative deal with Biogen, Inc., the U.S.-based biotech, to work on multiple sclerosis (MS). Also, over the summer Medaphor Group plc completed its acquisition of Healthcare AI specialist Intelligent Ultrasound Limited, concurrent with a £5.5m placing while Cronin Group plc, which is commercialising a platform to digitize chemistry announced it had acquired revenue-generating OpenOLabs, a Cambridge-based specialist in developing hardware and software for scientific and industrial uses. As part of the acquisition, serial entrepreneur David Cleevely, a founder of Abcam plc and Chairman of the Raspberry Pi Foundation, joined the Board. Working with the New Business and Partnerships team, the team also completed or approved five new grub and seed investments, continuing to ensure a steady pipeline of high-growth opportunities as we head into 2018 and beyond.

## **Portfolio review: Technology**

### **Mark Reilly Managing Partner, Technology**

IP Group's Technology portfolio comprises 82 companies worth £334.0m as at 31 December 2017. This includes an additional 22 companies, valued at £115.2m following the acquisition of Touchstone Innovations plc.

## **Review of the year**

### *Technology*

Several of the top Technology portfolio assets completed substantial fundraisings during 2017, each involving high-quality new institutional shareholders. In October, Featurespace Ltd, a Touchstone Innovations plc company and specialist in machine-learning and fraud prevention, completed a £16.5m funding round, led by Highland Europe and supported by Worldpay Group plc and Invoke Capital. The funding will enable Featurespace to drive revenues from its product platform and continue to expand internationally. Featurespace was recently featured in the Deloitte UK Fast 50, a ranking of the UK's fastest growing technology companies.

February saw Actual Experience plc announce that it had raised £17.5m before expenses to support channel partners deploying the company's technology into a global enterprise customer base. The company has now received its first production order from a channel partner for a major end-customer and expects further orders to follow shortly.

Mid-air haptics pioneer Ultrahaptics hit a key commercial milestone during 2017, securing its first product royalty income. The company announced a series B round of £17.9 million in early-May to support global expansion and entry into the virtual and augmented reality markets. IP Group participated in the round alongside new investors including Ultrahaptics' distribution partner Cornes and Dolby Family Ventures.

Late in the year came the listing of Mirriad Advertising plc on AIM with the company raising gross proceeds of £26.2 million. The video advertising company made encouraging commercial progress during the year, exemplified by the announcement of a major customer deal secured via partner Alibaba/YouKu in China.

Elsewhere in the portfolio, SAM Labs, a Touchstone Innovations plc company, announced the completion of a \$6.75m Series A round of financing led by Touchstone Innovations and E15 Ventures to develop a number of new educational products that support its mission to inspire every student to discover the fun in coding and creating. Positive news came also from Itaconix plc (formerly Revolymmer plc) and Getech Group plc where new customer contracts were announced, whilst there was also encouraging commercial progress at Perpetuum Limited as the company continues to deploy its train monitoring technology to rail operators around the world, and at Anacail Limited, whose technology is gaining increasing traction with large food-producing companies. The falling share price of Applied Graphene Materials plc led to a £3.8m fall in the value of the Group's holding, which was the largest contributor to offsetting gains made elsewhere in the portfolio during the year but there is an opportunity for value recovery if the company can deliver commercial progress following its £9.0m placing completed in October.

### *Cleantech*

In our Cleantech portfolio we focus on building outstanding, science-based businesses that mitigate the impacts of climate change and other environmental challenges. 2017 has been the most successful year for Cleantech at IP Group, with the portfolio achieving a fair value gain of £15.1m on a starting asset base of £74.4m. This reflects strong commercial progress by our companies and continued improvement in investment market sentiment and political support.

AIM-listed Ceres Power Holdings plc made excellent commercial progress in the year, resulting in a positive movement in Ceres' share price, which translated to a £13.5m gain for the Group. The company's annual results, announced in October, showed revenue increase "ahead of expectations" up 140% from last year to £4.1m (2016: £1.7m) while in September, Ceres announced the successful conclusion of a one-year field trial in homes in the UK. The results showed that the Ceres SteelCell® technology is reliable and can reduce household energy costs by £400 and carbon emissions by up to 2 tonnes per year. Finally, the company announced that it has secured its fifth OEM partner in a pre-close trading update in December.

Xeros Technology Group plc continued to develop additional applications for its polymer fabric processing technology and launched a new business model for its lead market of commercial laundry. First Light Fusion Ltd, the Oxford spin-out developing novel implosion processes that can achieve the high temperatures and compression necessary for fusion, also made notable progress. The company achieved its interim technology milestones set in the £22.7m August 2015 funding round three months ahead of schedule, triggering the

second tranche of funding of just under £9m. It also recruited the former UK Government Chief Scientist, Professor Sir David King, to its advisory board. In November, Oxford Sciences Innovation plc acquired a stake in the company in a secondary transaction.

Azuri Technologies Ltd had another good year, launching a programme to deliver 20,000 PayGo solar home systems in Nigeria in January. Azuri has secured strong backing from the Nigerian government for its plans, and its programme in the country was announced by the Acting President, HE Professor Yemi Osinbajo. The company followed this up by securing a \$5m debt facility from Standard Chartered in February and in March hit the milestone of 100,000 unit sales, achieved across 12 countries. This progress has helped Azuri dramatically increase its turnover, up from \$2.5m in calendar 2016 to \$8.7m in 2017.

Elsewhere, despite some good engineering progress at Magnomatics Ltd, the company has struggled commercially. We have therefore written down the value of this asset by approximately £2m. Since the year-end, the Group has also exited its position in AIM-quoted Ilika plc. Founded in 2004 to develop high-throughput materials discovery technology, the company has more recently focussed on developing solid-state battery technology.

### **Multi-Sector Platforms**

The Group has maintained its strategic stakes in its three multi-sector platform companies, Oxford Sciences Innovation plc (OSI), Cambridge Innovation Capital plc (CIC) and Frontier IP Group plc. The value of the Group's holdings in these companies remains largely unchanged during 2017, aside from a £0.4m gain in the Group's holding in AIM-listed Frontier IP Group plc as a result of an increase in its share price.

As a result of its 15-year framework agreement with the University of Oxford, OSI is the preferred intellectual property partner for the provision of capital to, and development of, Oxford spin-out companies and is entitled to 50 per cent of the university's founder equity in spin-out companies. OSI has raised in excess of £580m to date, and 2017 was another good year for OSI as the portfolio continued to develop with a further 20 companies being added to the portfolio at seed stage and the completion of the first Series A investments. The number of investments now stands at 47 with a total portfolio value of £126m. Net Asset Value per share has increased from 107.6p to 111.2p. The most significant Series A investments were those of \$17m in Diffblue and £20m in Vaccitech. These investments were also pleasing as they attracted funds and world class companies who had not previously invested in Oxford including Goldman Sachs, Google Ventures and just post year-end, Sequoia China.

The quality and volume of the deal flow is a result of applying OSI's capital and expertise to the world leading science being conducted at the University. With over 12,000 academics and more than £480m being spent annually on research, it is unlikely that the deal flow will reduce in the foreseeable future. The quality of research has also been endorsed by the Times Higher Education supplement, which has awarded Oxford the accolade of best research University in the world for the second year running.

Cambridge Innovation Capital (CIC) is a preferred investor for the University of Cambridge for the commercialisation of intellectual property created at the University under a 10-year memorandum of understanding and a Cambridge-based investor in technology and healthcare companies from the Cambridge Cluster. CIC has raised £125.0m to date. In July, CIC announced that it had committed a total of £40.0m (2016: £19.0m) into seven new and nine existing portfolio companies in the year ending March 2017. By the end of 2017, CIC had invested £77.2m since inception, in 23 companies.

### **Portfolio additions resulting from the Touchstone combination**

Below is a high-level introduction to some of the investments that IP Group has gained exposure to following the combination.

PsiOxus Therapeutics Limited is an Oxford-based immune-oncology company which has developed a patented platform for the systemic delivery of tumour targeted oncolytic immune therapeutics. The company was founded in 2010 in its present form, having been created by the merger of Imperial College London spin-out Myotec Therapeutics with Oxford spin-out Hybrid BioSystems. PsiOxus' Tumour-Specific Immuno-Gene (T-SiGN) therapy platform is based on the company's oncolytic virus, enadenotucirev, which has unique properties that allow it to be delivered systemically via intravenous administration and to replicate only in tumour cells. The virus's anti-cancer capability can be further enhanced through 'arming' – a process that involves the addition of new genes to the virus. The armed T-SiGN platform makes possible creation of a broad range of systemically delivered oncolytic immune therapeutics, including oncolytic viruses that express one or more antibodies, cytokines, immunomodulatory proteins, and nucleotide (RNA)-based payloads. In December 2017 the company received a \$15m milestone payment pursuant to its licensing agreement with Bristol-Myers Squibb, following the announcement that the Clinical Trial Application for NG-348, an "armed" oncolytic virus for the treatment of solid tumours, had been approved.

Cell Medica Limited develops, manufactures and markets personalised cellular immunotherapeutics for cancer and infectious diseases. It is committed to improving patients' lives through the significant therapeutic potential of cellular immunotherapy. Its approach is to apply innovative technologies with the aim of improving the treatment of cancer and immune reconstitution following hematopoietic stem cell transplant. In December 2017 Cell Medica announced the appointment of industry leader Dr. Annalisa Jenkins as Chair of the Board of Directors. Dr. Annalisa Jenkins is a life sciences business and thought leader with over 25 years of biopharmaceutical industry experience in advancing programs from scientific research through clinical development, regulatory approval and into healthcare systems globally. In March 2017 the company raised £60m in a funding round, with £13.7m committed by Touchstone Innovations, alongside co-investors Invesco Asset Management and Woodford Investment Management.

Circassia Pharmaceuticals plc is a world-class specialty pharmaceutical business focused on respiratory disease. It has a growing commercial organisation to promote its innovative asthma management products directly to specialist physicians. It markets the COPD

product Tudorza® in the US and has a pipeline of asthma and COPD treatments in development. In February 2018 it received a multi-year Innovative Technology contract for its NIOX VERO® asthma management products from Vizient, Inc., the largest member-owned health care company in the United States. Circassia's NIOX VERO® range is used to assist asthma diagnosis and management and is based on the discovery that patients with Th2 or type 2 driven airway inflammation, the major underlying cause of asthma, generally have higher than normal levels of nitric oxide in their exhaled breath. By measuring the concentration of this fractional exhaled nitric oxide (FeNO), NIOX® enables clinicians to evaluate airway inflammation in patients with underlying asthma, aiding diagnosis and helping guide treatment and reduce exacerbations.

Autifony Therapeutics Limited is a company focused on the development of high value, novel medicines to treat serious diseases of the central nervous system. The company was founded in 2011 as a spin-out from GlaxoSmithKline by Charles Large and Giuseppe Alvaro, previously Directors in GSK's Neuroscience Centre of Excellence for Drug Discovery. Autofony is backed by Touchstone Innovations, SV Life Sciences, Pfizer Venture Investments, International Biotechnology Trust PLC and UCL Business. In December 2017 the company signed a EUR627.5m agreement with Boehringer Ingelheim about certain aspects of Autofony's voltage gated potassium channel modulator platform.

Featurespace Limited is an Adaptive Behavioural Analytics company which has developed a machine learning software platform, the behaviour analytics engine (ARIC) that enables the identification of abnormal behaviour in high-volume real-time applications such as online betting and credit card transactions. Featurespace's software, which is based on Bayesian statistics and research undertaken at the University of Cambridge, delivers significant economic benefits to customers by providing a granular view of transactions which allows them to predict likely fraud and take appropriate action. For example, for a UK credit card company it reduced fraud loss by 40% and cut the ratio of false positives to genuine rejections from 23:1 to 6:1. The company raised £16.5m in a funding round during October 2017, led by investor Highland Europe and supported by Worldpay Group plc and Invoke Capital.

Mission Therapeutics Limited was founded in 2011 to commercialise expert research into the ubiquitin pathway for the treatment of cancers and non-malignant disease. It has built a world-leading platform for the discovery and development of first-in-class, small molecule drugs that selectively target deubiquitinating enzymes ('DUBs') – an emerging, and hitherto intractable drug class that is attracting significant commercial interest as the potential 'next kinase area'. DUBs are involved in multiple cellular processes, including DNA damage response and cell proliferation. The inhibition of these enzymes has considerable potential for the generation of novel drugs for treating cancer and other unmet medical needs. The company presented two posters with new research and preclinical data from its USP30 inhibitor Parkinson's disease programmes at Neuroscience 2017. USP30 is a mitochondrial-associated DUB that has emerged as a promising new target in Parkinson's disease, and has been implicated in the control of mitophagy, a cellular mitochondrial quality control mechanism.

Ieso Digital Health Limited is a company providing online cognitive behavioural therapy, and is transforming the accessibility, affordability and accountability of mental health treatment. Discreet 1-to-1 therapy is delivered in real time using written conversation, with patients meeting an accredited therapist in a secure virtual therapy room, at a time and location that is both convenient and comfortable for them. The use of technology and written conversation offers greater patient choice, more widespread access to effective, evidence-based therapy and a freedom for patients to express themselves by communicating online. Ieso is also treating patients in the US via a partnership with Beacon Health Options, the largest behavioural health managed care organisation in the USA and covers 45 million lives. In December 2017, Ieso Digital Health was named as one of the top ten 'disruptors' in the 'Sunday Times Virgin Media Business Disruptors to Watch 10, powered by Fast Track'. The company has been recognised for its outstanding business model and cutting-edge technology, which is helping people with anxiety, depression and other common mental health problems to get better faster.

Veryan Medical Limited is a medical technology company that has developed and patented a three-dimensional stent, BioMimics 3D™, for use in peripheral (leg) arteries. The shape of the stent improved its biomechanical performance and blood flow in the vessel, with a demonstrated benefit on clinical outcomes in peripheral arterial disease. Existing stents indicated for placement in leg arteries have a straight tubular design that tends to straighten any curvature present in vessels. This straightening effect may interfere with normal shortening of the femoropopliteal artery during lower limb movement, such as when the knee is bent. However, Veryan's BioMimics 3D™ stent technology involves adapting traditional straight stent designs to a patented three-dimensional helical shape, which more closely mimics the natural geometry of the human vascular system. In February 2018 the company announced it had submitted a Premarket Approval (PMA) application for the BioMimics 3D Vascular Stent System to the U.S. Food and Drug Administration (FDA) following the achievement of a successful outcome to its pivotal 271-subject MIMICS-2 study in January 2018.

TopiVert Pharma Limited is a clinical-stage biotechnology company developing narrow spectrum kinase inhibitors (NSKIs) as novel, locally-acting medicines for the local treatment of chronic inflammatory diseases of the gastrointestinal tract and eye. TopiVert's most advanced drug candidate, TOP1288 for the treatment of ulcerative colitis, has successfully completed Phase I development, and in January 2018 it announced positive results from the study.

## **Financial review**

### **Statement of comprehensive income**

Overall the Group recorded a profit for the year of £53.4m (2016: loss of £14.8m) and a Return on Hard NAV, i.e. on the Group's net assets excluding goodwill and intangible assets, of £64.1m (2016: negative £7.6m).

A summary analysis of the Group's financial performance is provided below:

	2017 £m	2016 £m
Net portfolio gains <sup>(i)</sup>	94.2	6.5
Change in fair value of limited and limited liability partnership interests	(0.2)	(0.3)
Fair value loss on contingent value rights	—	(1.4)
Licensing income	3.4	0.2
Other income	6.1	2.6
Carried interest plan charge	(1.3)	—
Amortisation of intangible assets	(3.9)	(5.6)
Administrative expenses – Istesso group	(3.5)	(1.4)
Administrative expenses – other consolidated portfolio companies	(2.1)	(1.1)
Administrative expenses – performance-based staff incentives and share based payments charge	(4.9)	(1.5)
Administrative expenses – all other central expenses	(21.2)	(13.0)
IFRS3 charge in respect of acquisition of subsidiary	(4.4)	—
Acquisition and restructuring costs	(9.1)	(0.4)
Net finance income	0.3	0.6
<b>Profit/(loss) for the year</b>	<b>53.4</b>	<b>(14.8)</b>
Other comprehensive income	—	0.1
<b>Total comprehensive income/(loss) for the year</b>	<b>53.4</b>	<b>(14.7)</b>
Exclude:		
Amortisation of intangible assets	3.9	5.6
Share based payment charge	2.4	1.5
IFRS3 charge in respect of acquisition of subsidiary	4.4	—
<b>Return on Hard NAV</b>	<b>64.1</b>	<b>(7.6)</b>
Exclude:		
Acquisition and restructuring costs	9.1	0.4
<b>Return on Hard NAV excluding acquisition and restructuring costs</b>	<b>73.2</b>	<b>(7.2)</b>

(i) Defined in Note 28 Alternative Performance Measures

Net portfolio gains consist of realised and unrealised fair value gains and losses from the Group's equity and debt holdings in portfolio companies and deconsolidated subsidiaries. A detailed analysis of fair value gains and losses is provided in the Portfolio review above.

Other income comprises fund management fees, corporate finance fee income and other fees typically chargeable to the Group's portfolio companies for services including executive search and selection, legal and administrative support. Other income for the year increased to £6.1m (2016: £2.6m). The increase was largely due to the acquisition of Parkwalk Advisors in January and the resultant fund management related fees and commissions (£3.2m) which were consolidated into the Group's results for the first time.

In addition to Parkwalk Advisors, fund management fees are also received from the Group's existing three managed funds, two of which, IP Venture Fund ("IPVF") and The North East Technology Fund LP ("NETF"), also have the potential to generate performance fees from successful investment performance. The results of the Group's third managed fund, IPVFII, are consolidated into those of the Group and accordingly the fund management fees received are not reflected in the statement of comprehensive income.

As described in the portfolio review, the Group's drug development subsidiary, Istesso Limited (formerly Modern Biosciences plc) was deconsolidated from the Group after a share and board re-organisation which resulted in the Group no longer holding a controlling interest in the company. The consolidated results show the licencing income received (£3.4m) and the expenses incurred (£3.5m) by Istesso before the re-organisation occurred and a gain of £45.1m to the Group on deconsolidation, representing Istesso Limited's cumulative losses since inception and the fair value ascribed to the business, which was calculated based on it.

Included within the Group's administrative expenses are costs in respect of a small number of other portfolio companies. Typically, the Group owns a non-controlling interest in its portfolio companies however, in certain circumstances the Group will take a controlling stake and hence consolidate the results of a portfolio company into the Group's financial statements. The administrative expenses included in the Group's results for such companies primarily comprise staff costs, R&D and other operating expenses.

Other central administrative expenses, have increased to £21.2m during the period (2016: £13.0m). This increase was primarily due to an increase in staffing costs, the result of Parkwalk Advisors (£1.4m) and Touchstone Innovations (£3.7m) being consolidated for the first time.

Administrative expenses resulting from performance-based staff incentives and share-based payment charges increased to £4.9m during the period (2016: £1.5m), as the Group's return on Hard NAV during the period exceeded the minimum threshold for payments to be awarded under the Group's Annual Incentive Scheme. This expense is inclusive of a non-cash IFRS 2 share-based payments charge totalling £2.4m (2016: £1.5m) and the cost of the Group's 2017 Long Term Incentive Plan and Deferred Bonus Share Plan awards. This non-cash charge reflects the fair value of services received from employees, measured by reference to the fair value of the share-based payments at the date of award, but has no net impact on the Group's total equity or "net assets".

Additional costs of £4.4m were incurred in relation to the deferred and contingent consideration paid to the sellers of Parkwalk Advisors in the year deemed under IFRS3 to be a payment for post-acquisition services.

The Group's carried interest plan recognised a charge of £1.3m in its first year of operation as a result of a net increase in the value of those companies included within one or more of the Group's carry vintages that is in excess of the hurdle return. There is no cash payment due to members of the scheme until the Group has made sufficient cash realisations.

This year's results include one-off costs relating to the acquisition of Touchstone Innovations of £9.1m, £6.2m of which was for the provision of legal, corporate broker and other professional advice in relation to the transaction, and £2.9m of restructuring costs including redundancy and onerous lease provisions and accelerated depreciation on the fixed assets within Touchstone's central London office. In excess of £4.0m of annual synergy cost savings have been identified across the enlarged Group going forward.

#### Statement of financial position

The Group ended the period with net assets of £1,508.5m, representing an increase of £739.8m from the position at 1 January 2017 (£768.7m). As described above, this increase in net assets was largely as a result of the £53.4m profit in the year, the successful equity placing and the acquisition of Touchstone Innovations. "Hard" net assets, i.e. those excluding goodwill and other intangible assets, totalled £1,326.2m at 31 December 2017 (2016: £706.5m). Based on the Group's 1,057,383,601 shares in issue at 31 December 2017, this represents 125.4p per share (2016: 565,221,967 shares; 125.0p).

	2017 £m	2016 £m
<b>Total Equity or Net Assets</b>	<b>1,508.5</b>	768.7
Exclude:		
Goodwill	(172.1)	(57.1)
Other intangible assets	(10.2)	(5.1)
<b>Hard NAV</b>	<b>1,326.2</b>	706.5
<b>Hard NAV per share</b>	<b>125.4p</b>	125.0p

At 31 December 2017, the Group held gross cash and deposits of £326.3m (2016: £112.3m) and a diversified portfolio of equity and debt investments in 155 private and publicly listed technology companies (2016: 90).

The value of the Group's holdings in portfolio companies increased to £1,130.6m at year end (2016: £614.0m) after net portfolio gains of £94.2m (2016: £6.5m), net investment of £64.6m (2016: £55.0m) and the acquisition of the Touchstone portfolio (£352.2m). The Portfolio review above contains a detailed description of the Group's portfolio of equity and debt investments including key developments and movements during the year.

The Group's statement of financial position includes goodwill of £172.1m (2016: £57.1m) and acquired intangible assets of £10.2m (2016: £5.1m). The increase since the prior year is largely attributable to the Group's combination with Touchstone Innovations in October where £108.5m of goodwill and £6.9m of acquired intangible assets were recognised, the goodwill (£5.7m) and intangibles (£2.1m) recognised on the acquisition of Parkwalk Advisors in January and goodwill (£0.8m) recognised on purchase of a 3<sup>rd</sup> party's minority holding in subsidiary MobillION Inc. £38.7m of the goodwill and the majority of the remaining acquired intangible asset value arose as a result of the Group's acquisition of Fusion IP in 2014. The remainder of the goodwill balance arose from historical acquisitions of IP Assist Services Limited (formerly known as Techtran Group Limited (university partnership business, £16.3m; 2016: £16.3m)) and Top Technology Ventures Limited (venture capital fund management business, £2.1m; 2016: £2.1m). Goodwill is tested at least annually for impairment, as described in note 12. The intangible assets are separately identifiable assets resulting from Fusion IP's agreements with its partner universities.

The fair value of the intangible assets is amortised on a straight-line basis over each partnership's useful economic life.

#### All-share acquisition of Touchstone Innovations plc

As described above, on 17 October 2017 the Group acquired control of 100% of the ordinary shares in Touchstone Innovations in exchange for 357,518,520 new ordinary shares in IP Group plc. A summary of the assets acquired, and consideration is as follows:

	Fair value net assets/(liabilities) £m
<b>Net assets acquired</b>	
Investment portfolio	352.2
Cash and cash equivalents	119.1
Other net current assets	2.1
Non-current liabilities (predominantly EIB debt finance)	(88.3)
Acquired intangible assets	6.9
Net assets	392.0
Goodwill	108.5
Total consideration (being 357,518,520 IP Group shares at 140p per share)	500.5

The fair values of the companies within Touchstone's investment portfolio at the acquisition date have been determined using the Group's accounting and valuation policies. In several cases, these values differed from those within Touchstone's audited financial statements for the year ended 31 July 2017, which valued their investment portfolio at £461.1m. Such differences primarily related to combinations of the following factors (i) differing views on the appropriate valuation based on the commercial and technical progress of a company; (ii)

clinical stage set-backs and, in a limited number of cases, (iii) technical/scientific failure. A number of these differences were anticipated based on our due diligence and this was an important factor taken into account by the Directors in determining the appropriate level of consideration to offer for the business. If subsequent information comes to light in respect of a particular portfolio company within twelve months of the acquisition date that is indicative of conditions that existed at that time, the directors will review and, if necessary, adjust the acquisition valuations.

Goodwill has been recognised as the difference between the net assets acquired and the consideration paid, in the form of newly issued IP Group shares, and relates to the value attributable to Touchstone's access to early stage commercialisation activities with top tier UK universities and the benefits from increased scale and critical mass, and a more diverse portfolio the Group expects to benefit from.

#### *UCL Technology Fund and Apollo Therapeutics*

In addition to investments into its core portfolio, Touchstone has committed £24.8m towards the UCL Technology Fund LP and £3.3m towards Apollo Therapeutics LLP. The actual cash will be invested over a number of years.

#### **Cash, cash equivalents and short-term deposits ("Cash")**

The principal constituents of the movement in Cash during the year are summarised as follows:

	2017 £m	2016 £m
Net Cash generated/(used) by operating activities (excluding cash flows from deposits)	(22.4)	(11.4)
Net Cash generated/(used) in investing activities	(67.6)	(55.2)
Cash acquired on acquisition of subsidiary undertakings	107.8	—
Issue of share capital	181.0	—
Drawdown of debt facility	15.0	—
Effect of foreign exchange rate changes	0.2	0.1
<b>Movement during period</b>	<b>214.0</b>	<b>(66.5)</b>

At 31 December 2017, the Group's Cash totalled £326.3m, an increase of £214.0m from a total of £112.3m at 31 December 2016 predominantly due to net placing proceeds of £181.0m, the business combinations with Touchstone and Parkwalk Advisors which included £119.1m and £2.1m in cash respectively at the acquisition date, offset by net investment in the Group's spin-out companies and operating expenses.

Cash generated in operations has decreased from the comparable period in 2016, most significantly due to the receipt of £3.0m of payments under MBS's agreement with Janssen Biotech in 2017 and an increase in revenue from services and other income in the year predominantly due to the acquisition of Parkwalk Advisors Ltd which contributed £3.2m of revenue in the period since acquisition.

The Group's net cash generated in investing activities increased during 2017, reflecting an increase in the level of investment (2017: £71.2m; 2016: £69.7m), a decreased level of realisations after a record year for the group in 2016 (2017: £6.6m; 2016: £14.7m), an increase in spending on property, plant and equipment predominantly due to IP Group's head office relocation in April and the cash acquired on acquisition of Touchstone (£119.1m) and the deconsolidation of Istesso Limited (negative £6.1m).

In 2015, the Group secured a £30m, 8-year debt facility from the European Investment Bank ("the EIB"). The facility is to be disbursed in two tranches, with the first tranche of £15m having been drawn down in December 2015 and the second tranche was drawn in December 2017. The size of the facility has significantly increased in the year following the acquisition of Touchstone who had a similar facility with the EIB which brings the total EIB debt facility to £104.0m, £6.3m of which is due to be repaid within twelve months of the year-end. The facility provides IP Group with an additional source of long-term capital and represents an evolution in the Group's capital structure to support its future growth and development.

It remains the Group's policy to place cash that is surplus to near-term working capital requirements on short-term and overnight deposits with financial institutions that meet the Group's treasury policy criteria or in low-risk treasury funds rated "A" or above. The Group's treasury policy is described in detail in note 2 to the Group financial information alongside details of the credit ratings of the Group's cash and deposit counterparties.

At 31 December 2017, the Group had a total of £1.2m (2016: £1.1m) held in US Dollars and less than £0.1m (2016: £nil) held in AUS Dollars to meet the short-term working capital requirements of its US and Australasian operations, including capital anticipated to be required by new and existing spin-out company opportunities.

At 31 December 2017, the Group recognised £13.1m of loans (2016: £9.8m) from the Limited Partners of IPVFII, a fund raised during 2013 that is consolidated by the Group. These loans are repayable only upon IPVFII generating sufficient returns to repay the Limited Partners.

At 31 December 2017, the Group recognised a carried interest plan liability of £8.8m (2016: £nil) which consists of a carried interest plan established in 2017 and separately, an existing carried interest plan liability acquired on acquisition of Touchstone. There is no cash payment due to members of either scheme until the Group has made sufficient cash realisations.

## **Taxation**

The Group's business model seeks to deliver long-term value to its stakeholders through the commercialisation of fundamental research carried out at its partner universities. To date, this has been largely achieved through the formation of, and provision of services and development capital to, spin-out companies formed around the output of such research. The Group primarily seeks to generate capital gains from its holdings in spin-out companies over the longer-term but has historically made annual net operating losses from its operations from a UK tax perspective. Capital gains achieved by the Group would ordinarily be taxed upon realisation of such holdings, however, since the Group typically holds in excess of 10% in its portfolio companies and those companies are themselves trading, the Directors continue to believe that the majority of its holdings will qualify for the Substantial Shareholdings Exemption ("SSE"). This exemption provides that gains arising on the disposal of qualifying holdings are not chargeable to UK corporation tax and, as such, the Group has continued not to recognise a provision for deferred taxation in respect of uplifts in value on those equity holdings that meet the qualifying criteria. Gains arising on sales of non-qualifying holdings would ordinarily give rise to taxable profits for the Group, to the extent that these exceed the Group's operating losses from time to time. The Group's unrecognised deferred tax assets and liabilities are set out in note 9 to the financial information.

The Directors consider that the SSE regime has been simplified and enhanced during the period, with a number of changes being enacted in the Finance (No.2) Act 2017 that are effective for disposals on or after 1 April 2017. From the Group's perspective the key changes were to remove the requirement for the investing entity (in this case, IP Group) to be a sole trading entity or member of a trading group and extending the minimum 10% holding period to any 12-month period in the six years prior to disposal. The Group welcomed these changes and the directors anticipate that they will have a favourable impact on the Group, giving greater certainty over the exemption of qualifying gains under SSE, and increasing the Group's flexibility over the timing of future portfolio company disposals.

The changes in the Finance (No.2) Act 2017 also included a restriction on companies' use of brought forward losses. As a result, the amount of profit that can be mitigated by brought forward losses will be restricted to 50% of the amount of profits in excess of £5m. The Directors do not currently consider that these proposed changes will result in the recognition of a deferred tax liability in respect of any unrealised gains that do not qualify for SSE but note that such liabilities may arise in the future.

Assets held in Luxembourg, which were acquired via the combination with Touchstone in the year, are also subject to capital gains and ordinarily the Group would be taxed on their realisation. The participation exemption, similar to the UK SSE scheme described above, is available for certain share disposals. Dividends and gains arising to Imperial Innovations Sàrl through its interest in Touchstone Innovations Businesses LLP should be exempt from tax under Luxembourg law provided the conditions for the participation exemption are met for each investment or each investment can be attributed to a UK permanent establishment. Tax residence of Imperial Innovations Sàrl will be maintained in Luxembourg and no UK tax should arise on the applicable gains.

The Group complies with relevant global initiatives including the US Foreign Account Tax Compliance Act (FATCA) and the OECD Common Reporting Standard.

## **Risk management**

### *Governance*

Overall responsibility for the risk framework and definition of risk appetite rests with the Board, who through regular review of risks ensure that risk exposure is matched with an ability to achieve the Group's strategic objectives. Risk identification is carried out through bottom-up process via operational risk registers maintained by individual teams, with additional top-down input from the management team with non-executive review being carried out by the audit and risk committee.

### *Risk management process*

Ranking of the Group's risks is carried out by combining the economic, operational or environmental impact of risks and the likelihood that they may occur. Those risks that are considered to pose the greatest threat to the Group and score the highest are identified as 'principal risks'. The operations of the Group, and the implementation of its objectives and strategy, are subject to a number of principal risks and uncertainties. Were more than one of the risks to occur together, the overall impact on the Group may be compounded.

The design and ongoing effectiveness of the key controls over the Group's principal risks are documented using a 'risk and control matrix', which includes an assessment of the design and operating effectiveness of the controls in question. The key controls over the Group's identified principal risks are reviewed by management, the audit and risk committee and the Board at least twice a year. However, the Group's risk management programme can only provide reasonable, not absolute, assurance that principal risks are managed to an acceptable level.

During 2017 we have continued to build on our existing risk management framework, enhancing risk management and internal control processes. This activity included the development of operational risk registers for front line operations and central functions, a number of control reviews supported by our external risk consultants PwC, including a review of the US operations, an integration risk review and a review of the controls over our principal risks. We have continued to support the Executive Committee and Board through regular meetings of the Risk Council. Priorities for 2018 include amending our risk management framework to reflect new team structure post the integration of Touchstone Innovations plc.

### *Summary of principal risks and mitigants*

A summary of the principal risks affecting the Group and the steps taken to manage these is set out below.

Risk and description	Impact	Mitigation	Risk trend	Developments during the year	Strategy	KPI
<p><b>1 It may be difficult for the Group and its early-stage companies to attract capital.</b></p> <p>The Group's operations are reliant on capital markets, particularly those in the UK. As the Group's operations, and the operations of the majority of its portfolio companies, are based in the UK, the financial and operational performance of the Group and particularly the ability of its portfolio companies to attract development capital is influenced by the general economic climate and trading conditions in the UK.</p>	<ul style="list-style-type: none"> <li>The success of those portfolio companies which require significant funding in the future may be influenced by the market's appetite for investment in early stage companies, which may not be sufficient.</li> <li>Failure of companies within the Group's portfolio may make it more difficult for the Group or its spin-out companies to raise additional capital.</li> </ul>	<ul style="list-style-type: none"> <li>The Group has significant balance sheet and managed funds capital to deploy in attractive portfolio opportunities.</li> <li>The Group operates a corporate finance function which carries out fundraising mandates for portfolio companies.</li> <li>The Group maintains close relationships with a wide variety of co-investors that focus on companies at differing stages of development.</li> <li>The Group frequently forecasts cash requirements of the portfolio and ensures all capital allocations are compliant with budgetary limits, treasury policy guidelines and transaction authorisation controls.</li> </ul> <p>The Group acquired Parkwalk Advisors Ltd in the year, the leading EIS fund manager in the UK. While Parkwalk Advisors operates independently they have been and continue to be an important co-investor of the Group supporting shared portfolio companies</p>	Decrease	<ul style="list-style-type: none"> <li>The Group completed a successful equity placing, raising net proceeds of £181.0m</li> <li>The Group completed a business combination with Touchstone Innovations plc; the rationale for this transaction includes improved access to capital via increased scale and critical mass</li> <li>The Group held 'Deep Tech Forum' events in Shenzhen and Beijing in China, bringing together ten of our portfolio companies and over 300 Chinese private equity and venture capital investors, corporate representatives and government bodies.</li> </ul>	Develop  Deliver	<ul style="list-style-type: none"> <li>Change in fair value of equity and debt investments.</li> <li>Total equity ("net assets").</li> <li>Profit/loss attributable to equity holders.</li> </ul>
<p><b>2 The returns and cash proceeds from the Group's early-stage companies can be very uncertain.</b></p> <p>The following risks are typically associated with early-stage companies:</p> <p>may not be able to secure later rounds of funding;</p> <p>may not be able to source or retain appropriately skilled staff;</p> <p>competing technologies may enter the market;</p> <p>technology can be materially unproven and may fail;</p>	<ul style="list-style-type: none"> <li>Portfolio company failure directly impacts the Group's value and profitability.</li> <li>At any time, a large proportion of the Group's portfolio value may be accounted for by one, or very few, companies, which could exacerbate the impact of any impairment or failure of one or more of these companies. Oxford Nanopore is an example of such a portfolio company that has the potential to materially impact the Group's results.</li> <li>The value of the Group's drug discovery and development portfolio companies may be significantly impacted by a negative clinical trial result.</li> </ul>	<ul style="list-style-type: none"> <li>The Group's staff have significant experience in sourcing, developing and growing early-stage technology companies to significant value, including use of the Group's systematic opportunity evaluation and business building methodologies within delegated board authorities.</li> <li>Members of the Group's senior team often serve as non-executive directors or advisers to portfolio companies to help identify and remedy critical issues promptly.</li> <li>Support on operational, legal and company secretarial matters is offered to minimise failures due to common administrative factors.</li> <li>The Group has spin-out company holdings across different sectors</li> </ul>	No change	<ul style="list-style-type: none"> <li>The group completed a combination with Touchstone Innovations plc, resulting in increased diversification of the Group's portfolio</li> <li>The Group's portfolio companies raised approximately £315m of capital.</li> <li>The Group maintained board representation on approximately 70% of companies by number.</li> </ul>	Deliver	<p>Change in fair value of equity and debt investments.</p> <p>Purchase of equity and debt investments.</p> <p>Proceeds from the sale of equity investments.</p>

<p>IP may be infringed, copied or stolen;</p> <p>may be more susceptible to cyber-crime; and</p> <p>other administrative, taxation or compliance issues may lead to company failure.</p>	<ul style="list-style-type: none"> <li>• Cash realisations from the Group's portfolio through trade sales and IPOs could vary significantly from year to year.</li> </ul>	<p>managed by experienced sector-specialist teams to reduce the impact of a single company failure or sector demise.</p> <ul style="list-style-type: none"> <li>• The Group maintains significant cash balances and seeks to employ a capital efficient process deploying low levels of initial capital to enable identification and mitigation of potential failures at the earliest possible stage.</li> </ul>				
<p><b>3 Universities or other research-intensive institutions may terminate their partnerships or other collaborative relationships with the Group.</b></p> <p>The Group's business, results of operations and prospects are at least partially dependent on competitive advantage gained from access to leading scientific research through partnerships and other collaborative arrangements with research-intensive institutions and commercial partners such as Oxford Sciences Innovation plc, Cambridge Innovation Capital and the UCL Technology Fund. University partners may terminate their partnerships or may move to non-exclusive sourcing models.</p>	<ul style="list-style-type: none"> <li>• Termination or non-renewal of arrangements through failure to perform obligations may result in the loss of exclusive rights.</li> <li>• The loss of exclusive rights may limit the Group's ability to secure attractive IP opportunities to commercialise.</li> <li>• This could potentially have a material adverse effect on the Group's long-term business, results of operations, performance and prospects.</li> <li>• With several new entrants to our market, this may reduce our opportunities to create new spin-out businesses.</li> </ul>	<ul style="list-style-type: none"> <li>• Dedicated New Business &amp; Partnerships team to service existing partnerships and source new opportunities.</li> <li>• The Group continues to consider and, where appropriate, enter into new and innovative partnerships and collaborations with research institutions.</li> <li>• The Group has been able to source opportunities through non-exclusive relationships and other sources.</li> <li>• Members of the Group's senior team work closely with partner institutions to ensure that each commercial relationship is mutually beneficial and productive.</li> <li>• The Group's track record in IP commercialisation may make the Group a partner of choice for other institutions, acting as a barrier to entry to competitors.</li> </ul>	Decreased	<ul style="list-style-type: none"> <li>• Completed investments with two new US university partners.</li> <li>• The Group acquired Parkwalk Advisors Ltd during the year. Parkwalk's investment vehicles include the University of Cambridge Enterprise Funds, the University of Oxford Innovation Funds and the University of Bristol Enterprise Funds. The Directors believe that Parkwalk's strong links to university partners will be beneficial to the Group.</li> <li>• The Group strengthened its university partnership network during the year having signed 9 new commercialisation agreements with the top universities in Australia and New Zealand and through the combination with Touchstone adding strong links with Imperial College London through its Technology Pipeline agreement ("TPA")</li> <li>• Completed seed investments</li> </ul>	Create	Number of new portfolio companies.

					with both Oxford Sciences Innovation and Cambridge Innovation Capital as co-investors, demonstrating the value of our strategic stakes in these partners.		
<p><b>4 The Group may lose key personnel or fail to attract and integrate new personnel.</b></p> <p>The industry in which the Group operates is a specialised area and the Group requires highly qualified and experienced employees. There is a risk that the Group's employees could be approached and solicited by competitors or other technology based companies and organisations, or could otherwise choose to leave the Group. Given the relatively small size of the Group, its operations are reliant on a small number of key individuals. Scaling the team, particularly into foreign jurisdictions such as the US, presents an additional potential risk.</p>	<ul style="list-style-type: none"> <li>Loss of key executives and employees of the Group or an inability to attract, retain and integrate appropriately skilled and experienced staff could have an adverse effect on the Group's competitive advantage, business, financial condition, operational results and/or future prospects.</li> </ul>	<ul style="list-style-type: none"> <li>Senior team succession plans are in place and updated regularly.</li> <li>The Group's corporate culture and values are well-articulated and consistently promoted.</li> <li>The Group carries out regular market comparisons for staff and executive remuneration and seeks to offer a balanced incentive package comprising a mix of salary, benefits, performance-based long-term incentives and benefits such as flexible working and salary sacrifice arrangements.</li> <li>The Group encourages staff development and inclusion through coaching and mentoring, and carries out regular objective setting and appraisal.</li> </ul>	No change	<ul style="list-style-type: none"> <li>The Group continues to promote an open culture of communication and provides an inspiring and challenging workplace where people are given autonomy to do their jobs. We are fully supportive of flexible working and have enabled employees with technology to work flexibly. The Group also continues to dedicate resources to remuneration and incentivisation.</li> <li>Staff attrition increased during the year to 11%, it remained at low absolute levels. Approximately 44% of staff have been with the Company for at least five years.</li> </ul>	Develop  Deliver	<p>Total equity "Net assets".</p> <p>Number of new portfolio companies.</p>	
<p><b>5 Macroeconomic conditions may negatively impact the Group's ability to achieve its strategic objectives.</b></p> <p>Adverse macroeconomic conditions could reduce the opportunity to deploy capital into opportunities or may limit the ability of such portfolio companies to raise third party funds, develop profitable businesses or achieve</p>	<ul style="list-style-type: none"> <li>The UK's recession has had (and may continue to have) an adverse effect on trading conditions and availability of capital in the UK, particularly for smaller businesses.</li> <li>The success of those portfolio companies which require significant external funding may be influenced by the market's appetite for investment in early stage companies, which may not be sufficient.</li> <li>A significant proportion of the Group's portfolio value is held in</li> </ul>	<ul style="list-style-type: none"> <li>Management team receives regular capital market and economic updates from the Group's capital markets team and its brokers.</li> <li>Six-monthly budget and capital allocation process and monitoring against agreed budget.</li> <li>Regular oversight of upcoming capital requirements of portfolio from both the Group and third parties.</li> </ul>	No change	<ul style="list-style-type: none"> <li>Macroeconomic and geopolitical conditions remain uncertain in the UK, Europe and the rest of the world.</li> <li>The Brexit process remains a source of uncertainty in the year.</li> </ul>	Develop  Deliver	<p>Change in fair value of equity and debt investments.</p> <p>Total equity "Net assets".</p> <p>Profit/loss attributable to equity holders.</p>	

increases in value or exits.  Political uncertainty, including impacts from Brexit or similar scenarios, could have a number of potential impacts, including changes to the labour market available to the Group for recruitment or regulatory environment in which the Group operates.	companies quoted on the AIM market and decreases in values to this market could result in a material fair value impact to the portfolio as a whole.					
<b>6 There may be changes to, impacts from, or failure to comply with, legislation, government policy and regulation.</b>  There may be unforeseen changes in, or impacts from, government policy, regulation or legislation (including taxation legislation). This could include changes to funding levels or to the terms upon which public monies are made available to universities and research institutions and the ownership of any resulting intellectual property.	<ul style="list-style-type: none"> <li>Changes could result in universities and researchers no longer being able to own, exploit or protect intellectual property on attractive terms.</li> <li>Changes to tax legislation or the nature of the Group's activities, in particular in relation to the Substantial Shareholder Exemption, may adversely affect the Group's tax position and accordingly its value and operations.</li> <li>Regulatory changes or breaches could ultimately lead to withdrawal of regulatory permissions for the Group's FCA- authorised subsidiary resulting in loss of fund management contracts, reputational damage or fines. A data security or cyber breach could occur or the Group could otherwise fail to adhere to data protection regulations.</li> </ul>	<ul style="list-style-type: none"> <li>University partners are incentivised to protect their IP for exploitation as the partnership agreements share returns between universities, academic founders and the Group.</li> <li>The Group utilises professional advisers as appropriate to support its monitoring of, and response to changes in, tax, insurance or other legislation.</li> <li>The Group has internal policies and procedures to ensure its compliance with applicable FCA regulations and these are subject to external review.</li> </ul> <p>The Group maintains D&amp;O, professional indemnity and clinical trial insurance policies.</p> <ul style="list-style-type: none"> <li>The Group reviews its data and cyber-security processes with its external outsourced IT provider and applies the UK Government's 'ten steps' framework.</li> </ul>	Decrease	<ul style="list-style-type: none"> <li>Changes to UK Substantial Shareholding Exemption rules reduce the level of uncertainty around the exemption of disposal gains were enacted in Finance (No. 2) Act 2017.</li> <li>Ongoing focus on regulatory compliance including third party reviews.</li> <li>UK Government has committed to university funding and has emphasised the importance of science and innovation.</li> <li>Specialist therapeutics advisory panel continually consulted.</li> <li>Increased focus on cyber security including further development of the Group's controls using the UK Government's 'ten steps' approach and review of the Cyber Essentials regime and how this applies to the Group.</li> </ul>	Create  Deliver	Total equity ("net assets").

### Viability statement

The Directors have carried out a robust assessment of the viability of the Group over a three-year period to December 2020, considering its strategy, its current financial position and its principal risks.

The strategy and associated principal risks underpin the Group's three-year financial plan and scenario testing, which the Directors review at least annually. The three-year plan is built using a bottom up model. The three-year plan makes certain assumptions about the level of capital deployed into, and realisations from, its portfolio of companies, the financial performance (and valuation) of the underlying portfolio companies, the Group's utilisation of its debt finance facility and ability to raise further capital, and the level of the Group's net overheads.

To assess the impact of the Group's principal risks on the prospects of the Group, the plan is stress-tested by modelling several severe but plausible downside scenarios as part of the Board's review of the principal risks of the business. These scenarios envisage the impact of adverse outcomes in the Group's principal risk areas, primarily through reducing the fair value of the Group's portfolio company interests, reducing the amount of capital that the Group can raise, lowering the deployment of capital and decreasing portfolio company divestment proceeds. The scenarios also consider the impact of available mitigating actions.

Based on this assessment, the Directors have a reasonable expectation that the Group will continue to operate and meets its liabilities, as they fall due, up to December 2020.

#### **STRATEGIC REPORT APPROVAL**

The Strategic Report as set out above has been approved by the Board.

#### **CONSOLIDATED FINANCIAL INFORMATION**

The financial information set out below has been extracted from the Annual Report and Accounts of IP Group plc for the year ended 31 December 2017 and is an abridged version of the full financial statements, not all of which are reproduced in this announcement.

#### **DIRECTORS' RESPONSIBILITIES STATEMENT**

The responsibility statement set out below has been reproduced from the Annual Report and Accounts, which will be published in April 2018, and relates to that document and not this announcement.

Each of the directors confirms to the best of their knowledge:

- The Group financial statements have been prepared in accordance with International Financial Reporting Standards (IFRSs) as adopted by the European Union and Article 4 of the IAS Regulation and give a true and fair view of the assets, liabilities, financial position and profit and loss of the Group.
- The Annual Report and Accounts includes a fair review of the development and performance of the business and the financial position of the group and the parent company, together with a description of the principal risks and uncertainties that they face.

#### **ON BEHALF OF THE BOARD**

Mike Humphrey  
Chairman

Alan Aubrey  
Chief Executive Officer

29 March 2018

# Consolidated statement of comprehensive income

For the year ended 31 December 2017

	Note	2017 £m	2016 £m
<b>Portfolio return and revenue</b>			
Change in fair value of equity and debt investments	15	49.0	7.0
Gain/(loss) on disposal of equity investments		0.1	(0.5)
Gain on deconsolidation of subsidiary		45.1	—
Change in fair value of limited and limited liability partnership interests	23	(0.2)	(0.3)
Change in fair value of contingent value right	17	—	(1.4)
Other portfolio income		—	—
Licensing income		3.4	0.2
Revenue from services and other income		6.1	2.6
		<b>103.5</b>	<b>7.6</b>
<b>Administrative expenses</b>			
Research and development costs		(2.9)	(1.0)
Carried interest plan charge		(1.3)	—
Share-based payment charge	22	(2.4)	(1.5)
Amortisation of intangible assets	13	(3.9)	(5.6)
Acquisition and restructuring costs	8	(9.1)	(0.4)
Other administrative expenses		(30.8)	(14.5)
		<b>(50.4)</b>	<b>(23.0)</b>
<b>Operating profit/(loss)</b>	7	<b>53.1</b>	<b>(15.4)</b>
Finance income		1.0	1.1
Finance costs		(0.7)	(0.5)
<b>Profit/(loss) before taxation</b>		<b>53.4</b>	<b>(14.8)</b>
Taxation	10	—	—
<b>Profit/(loss) for the year</b>		<b>53.4</b>	<b>(14.8)</b>
<b>Other comprehensive income</b>			
Exchange differences on translating foreign operations		—	0.1
<b>Total comprehensive income/(loss) for the year</b>		<b>53.4</b>	<b>(14.7)</b>
<b>Attributable to:</b>			
Equity holders of the parent		49.7	(13.5)
Non-controlling interest		3.7	(1.2)
		<b>53.4</b>	<b>(14.7)</b>
<b>Earnings per share</b>			
Basic (p)	11	7.05	(2.39)
Diluted (p)	11	7.04	(2.39)

# Consolidated statement of financial position

As at 31 December 2017

	Note	2017 £m	2016 £m
<b>ASSETS</b>			
<b>Non-current assets</b>			
Intangible assets:			
Goodwill	12	172.1	57.1
Acquired intangible assets	13	10.2	5.1
Property, plant and equipment		2.0	0.2
Portfolio:			
Equity investments	15	1,085.4	594.9
Debt investments	15	45.2	19.1
Limited and limited liability partnership interests	23	11.0	4.2
<b>Total non-current assets</b>		<b>1,325.9</b>	<b>680.6</b>
<b>Current assets</b>			
Trade and other receivables	16	8.3	2.6
Deposits		95.0	—
Cash and cash equivalents		231.3	112.3
<b>Total current assets</b>		<b>334.6</b>	<b>114.9</b>
<b>Total assets</b>		<b>1,660.5</b>	<b>795.5</b>
<b>EQUITY AND LIABILITIES</b>			
Equity attributable to owners of the parent			
Called up share capital	20	21.1	11.3
Share premium account		683.1	504.7
Merger reserve		508.6	12.8
Retained earnings		291.7	239.6
<b>Total equity attributable to equity holders</b>		<b>1,504.5</b>	<b>768.4</b>
Non-controlling interest		4.0	0.3
<b>Total equity</b>		<b>1,508.5</b>	<b>768.7</b>
<b>Current liabilities</b>			
Trade and other payables	18	19.7	2.1
EIB debt facility	19	6.3	—
<b>Non-current liabilities</b>			
EIB debt facility	19	97.7	14.9
Carried interest plan liability		8.8	—
Loans from limited partners of consolidated funds		13.1	9.8
Provisions for liabilities and charges		6.4	—
<b>Total equity and liabilities</b>		<b>1,660.5</b>	<b>795.5</b>

Approved by the Board of Directors and authorised for issue on 29 March 2018 and were signed on its behalf by:

**Greg Smith**  
Chief Financial Officer

**Alan Aubrey**  
Chief Executive Officer

# Consolidated statement of cash flows

For the year ended 31 December 2017

		2017	Re-presented 2016 <sup>(i)</sup>
	Note	£m	£m
<b>Operating activities</b>			
Operating profit/(loss) for the period		53.1	(15.4)
<b>Adjusted for:</b>			
Change in fair value of equity and debt investments	15	(49.0)	(7.0)
Change in fair value of limited and limited liability partnership interests		0.2	0.3
Change in fair value of contingent value right		—	1.4
(Gain)/loss on disposal of equity investments		(0.1)	0.5
Gain on deconsolidation of subsidiary		(45.1)	—
Depreciation of property, plant and equipment		0.9	0.1
Amortisation of intangible non-current assets	13	3.9	5.6
Long term incentive carry scheme charge		1.3	—
Fees settled in the form of equity		(0.5)	(0.4)
Share-based payment charge		2.4	1.5
<b>Changes in working capital</b>			
(Increase)/decrease in trade and other receivables		(6.1)	0.2
Increase/(decrease) in trade and other payables		7.7	(1.8)
Increase in non-current liabilities		8.6	2.7
<b>Other operating cash flows</b>			
Net interest received		0.3	0.9
<b>Net cash outflow from operating activities</b>		(22.4)	(11.4)
<b>Investing activities</b>			
Purchase of property, plant and equipment		(1.6)	(0.1)
Purchase of equity and debt investments	15	(71.2)	(69.7)
Investment in limited and limited liability partnerships	23	(1.4)	(0.1)
Net cash flow (to)/from deposits		(95.0)	70.0
Acquisition of subsidiary undertakings, net of cash acquired		107.8	—
Proceeds from sale of equity investments		6.6	14.7
<b>Net cash (outflow)/inflow from investing activities</b>		(54.8)	14.8
<b>Financing activities</b>			
Proceeds from the issue of share capital		184.7	—
Transaction costs related to issue of share capital		(3.7)	—
Proceeds from drawdown of EIB facility		15.0	—
<b>Net cash inflow from financing activities</b>		196.0	—
<b>Net increase in cash and cash equivalents</b>		118.8	3.4
Cash and cash equivalents at the beginning of the year		112.3	108.8
Effect of foreign exchange rate changes		0.2	0.1
<b>Cash and cash equivalents at the end of the year</b>		231.3	112.3

<sup>(i)</sup> Re-presented from prior year.

# Consolidated statement of changes in equity

For the year ended 31 December 2017

	Attributable to equity holders of the parent					Non-controlling interest <sup>(iv)</sup>	Total equity
	Share capital £m	Share premium <sup>(i)</sup> £m	Merger reserve <sup>(ii)</sup> £m	Retained earnings <sup>(iii)</sup> £m	Total £m	£m	£m
At 1 January 2016	11.3	504.7	12.8	251.6	780.4	1.5	781.9
Comprehensive income	—	—	—	(13.5)	(13.5)	(1.2)	(14.7)
Equity-settled share-based payments	—	—	—	1.5	1.5	—	1.5
<b>At 1 January 2017</b>	<b>11.3</b>	<b>504.7</b>	<b>12.8</b>	<b>239.6</b>	<b>768.4</b>	<b>0.3</b>	<b>768.7</b>
Comprehensive income	—	—	—	49.7	49.7	3.7	53.4
Issue of equity	9.8	178.4	495.8	—	684.0	—	684.0
Equity-settled share-based payments	—	—	—	2.4	2.4	—	2.4
<b>At 31 December 2017</b>	<b>21.1</b>	<b>683.1</b>	<b>508.6</b>	<b>291.7</b>	<b>1,504.5</b>	<b>4.0</b>	<b>1,508.5</b>

I. Share premium — Amount subscribed for share capital in excess of nominal value, net of directly attributable issue costs.

II. Merger reserve — Amount subscribed for share capital in excess of nominal value in relation to the qualifying acquisition of subsidiary undertakings.

III. Retained earnings — Cumulative net gains and losses recognised in the consolidated statement of comprehensive income net of associated share-based payments credits.

IV. Non-controlling interest — Share of profits attributable to the Limited Partners of IP Venture Fund II LP – a consolidated fund which was created in May 2013, as well as the equity invested in partially-owned subsidiaries that is held by third parties.

## Notes to the consolidated financial information

### 1. Accounting Policies

#### Basis of preparation

The consolidated financial information is based on the Group financial statements, which have been prepared in accordance with International Financial Reporting Standards ("IFRS") and the International Financial Reporting Interpretations Committee's interpretations as adopted by the European Union, and with those parts of the Companies Act 2006 applicable to companies reporting under IFRS. This release does not include all of the information required for full annual financial statements. Copies of the 2016 Annual Report and Accounts will be published on the Group's website and will be available upon request.

The financial statements are prepared on a going concern basis, as the directors are satisfied that the Group and parent Company have the resources to continue in business for the foreseeable future. In making this assessment, the directors have considered a wide range of information relating to present and future conditions, including future projections of profitability, cash flows and capital resources.

The accounting policies are consistent with those applied by the Group in its 2015 annual report and accounts. No new standards, interpretations and amendments effective for the first time from 1 January 2016 have had a material effect on the Group's financial statements.

### 2. Financial Risk Management

As set out in the Principal risks and uncertainties section above, the Group is exposed, through its normal operations, to a number of financial risks, the most significant of which are market, liquidity and credit risks.

In general, risk management is carried out throughout the Group under policies approved by the Board of Directors. The following further describes the Group's objectives, policies and processes for managing those risks and the methods used to measure them. Further quantitative information in respect of these risks is presented throughout this consolidated financial information.

#### (a) Market risk

##### (i) Price risk

The Group is exposed to equity securities price risk as a result of the equity and debt investments, and investments in Limited Partnerships held by the Group and categorised as at fair value through profit or loss.

The Group mitigates this risk by having established investment appraisal processes and asset monitoring procedures which are subject to overall review by the Board. The Group has also established corporate finance and communications teams dedicated to supporting portfolio companies with fundraising activities and investor relations.

The Group holds investments which are publicly traded on AIM (20 companies) and investments which are not traded on an active market.

The net increase in fair value of the Group's equity and debt investments during 2017 of £94.2m represents a 15.3% change against the opening balance (2016: net increase of £6.5m, 1.4% change) and a similar increase or decrease in the prices of quoted and unquoted investments is considered to be reasonably possible. The table below summarises the impact of a 1% increase/decrease in the price of both quoted and unquoted investments on the Group's post-tax profit for the year and on equity.

	2017			2016		
	Quoted £m	Unquoted £m	Total £m	Quoted £m	Unquoted £m	Total £m
Equity investments and investments in limited partnerships	2.3	8.7	11.0	1.6	4.6	6.2

##### (ii) Interest rate risk

The EIB debt facility bears interest at a fixed rate of 1.98% with an additional variable spread equal to the six month GBP Libor rate as at the first date of each six-month interest period. The first £15.0m tranche was disbursed on 17 December 2015 and the average floating interest rate (including the fixed element) for 2016 was 2.66% (2015: 2.48%)

The Group also holds an additional debt facility totalling £104.0m with the EIB as a consequence of the combination with Touchstone Innovations during the year. The first tranche of their EIB loan is linked to quarterly LIBOR rate. The loan was disbursed on 30 July 2013 and the floating interest rate including LIBOR was 3.3%. There are no hedging instruments in place to cover against interest rate fluctuation as exposure is deemed insignificant. The second tranche of the Touchstone EIB loan is based on a fixed interest rate of 4.235%. Touchstone entered a second loan agreement for £50.0m with a fixed interest rate of 3.026%.

The other primary impact of interest rate risk to the Group is the impact on the income and operating cash flows as a result of the interest-bearing deposits and cash and cash equivalents held by the Group.

##### (iii) Concentrations of risk

The Group is exposed to concentration risk via the significant majority of the portfolio being UK based companies and thus subject to the performance of the UK economy. The Group is increasing its operations in the US and the determination of the associated concentrations is determined by the number of investment opportunities that management believe represent a good investment.

The Group mitigates this risk, in co-ordination with liquidity risk, by managing its proportion of fixed to floating rate financial assets. The table overleaf summarises the interest rate profile of the Group.

## 2. Financial Risk Management continued

	2017				2016			
	Fixed rate £m	Floating rate £m	Interest free £m	Total £m	Fixed rate £m	Floating rate £m	Interest free £m	Total £m
<b>Financial assets</b>								
Equity investments	—	—	1,085.4	1,085.4	—	—	594.9	594.9
Debt investments	—	—	45.2	45.2	0.2	—	18.9	19.1
Limited and limited liability partnership interests	—	—	11.0	11.0	—	—	4.2	4.2
Deposits	95.0	—	—	95.0	—	—	—	—
Cash and cash equivalents	7.5	223.8	—	231.3	30.0	82.3	—	112.3
Trade receivables	—	—	1.9	1.9	—	—	2.3	2.3
Other receivables	—	—	6.4	6.4	—	—	0.3	0.3
	102.5	223.8	1,149.9	1,476.2	30.2	82.3	620.6	733.1
<b>Financial liabilities</b>								
Trade payables	—	—	(2.0)	(2.0)	—	—	(0.7)	(0.7)
Other accruals and deferred income	—	—	(17.7)	(17.7)	—	—	(1.4)	(1.4)
EIB debt facility	(65.0)	(39.0)	—	(104.0)	—	(14.9)	—	(14.9)
Carried interest plan liability	—	—	(8.8)	(8.8)	—	—	—	—
Provisions for liabilities and charges	—	—	(6.4)	(6.4)	—	—	—	—
Loans from limited partners of consolidated funds	—	—	(13.1)	(13.1)	—	—	(9.8)	(9.8)
	(65.0)	(39.0)	(48.0)	(152.0)	—	(14.9)	(11.9)	(26.8)

At 31 December 2017, if interest rates had been 1% higher/lower, post-tax profit for the year, and other components of equity, would have been £1.8m (2016: £0.8m) higher/lower as a result of higher interest received on floating rate cash deposits.

### (b) Liquidity risk

The Group seeks to manage liquidity risk, to ensure sufficient liquidity is available to meet foreseeable needs and to invest cash assets safely and profitably. The Group's Treasury Management Policy asserts that at any one point in time no more than 60% of the Group's cash and cash equivalents will be placed in fixed-term deposits with a holding period greater than three months. Accordingly, the Group only invests working capital in short-term instruments issued by reputable counterparties. The Group continually monitors rolling cash flow forecasts to ensure sufficient cash is available for anticipated cash requirements.

### (c) Credit risk

The Group's credit risk is primarily attributable to its deposits, cash and cash equivalents, debt investments and trade receivables. The Group seeks to mitigate its credit risk on cash and cash equivalents by making short-term deposits with counterparties, or by investing in treasury funds with an "AA" credit rating or above managed by institutions. Short-term deposit counterparties are required to have most recently reported total assets in excess of £5bn and, where applicable, a prime short-term credit rating at the time of investment (ratings are generally determined by Moody's or Standard & Poor's). Moody's prime credit ratings of "P1", "P2" and "P3" indicate respectively that the rating agency considers the counterparty to have a "superior", "strong" or "acceptable" ability to repay short-term debt obligations (generally defined as having an original maturity not exceeding 13 months). An analysis of the Group's deposits and cash and cash equivalents balance analysed by credit rating as at the reporting date is shown in the table opposite. All other financial assets are unrated.

Credit rating	2017 £m	2016 £m
P1	117.9	76.7
P2	208.4	35.6
Total deposits and cash and cash equivalents	326.3	112.3

The Group has no significant concentration of credit risk, with exposure spread over a large number of counterparties and customers. The Group has detailed policies and strategies which seek to minimise these associated risks including defining maximum counterparty exposure limits for term deposits based on their perceived financial strength at the commencement of the deposit. The maximum single counterparty limit for deposits at 31 December 2017 was £50m (2016: £50m).

The Group's exposure to credit risk on debt investments is managed in a similar way to equity price risk, as described earlier, through the Group's investment appraisal processes and asset monitoring procedures which are subject to overall review by the Board.

The maximum exposure to credit risk for debt investments, receivables and other financial assets is represented by their carrying amount.

### 3. Significant Accounting Estimates and Judgements

The directors make judgements and estimates concerning the future. Estimates and judgements are continually evaluated and are based on historical experience and other factors, such as expectations of future events, and are believed to be reasonable under the circumstances. Actual results may differ from these estimates. The estimates and assumptions which have the most significant effects on the carrying amounts of the assets and liabilities in the financial statements are discussed below.

#### (i) Valuation of unquoted equity investments

The estimates required in order to determine the appropriate valuation methodology of unquoted equity investments have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities. These estimates include making assessments of the future earnings potential of portfolio companies, appropriate earnings multiples to apply, and marketability and other risk discounts as further described in note 2.

#### (ii) Valuation of unquoted equity investments acquired via combination with Touchstone Innovations

As described in (i) above, the valuation of unquoted equity investments requires management to make estimates to determine an appropriate valuation methodology of unquoted equity investments. Additionally, the directors have used their judgement in determining whether valuation changes affect the fair value at the date of acquisition or in the period post acquisition. Again, these estimates are further described in note 2.

#### (iii) Impairment of goodwill

Goodwill is tested for impairment annually or whenever there is an indication that the carrying amount may not be recoverable based on management's judgements regarding the future prospects of the business, estimates of future cash flows and discount rates. When assessing the appropriateness of the carrying value of goodwill, the recoverable amount is determined using a number of value-in-use and fair-value-less-costs-to-sell calculations. The use of these methods requires the estimation of future cash flows, and the selection of a suitable discount rate, in order to calculate the present value of these cash flows as well as the selection of applicable and reasonable multiples.

For the purpose of testing goodwill for impairment, the Group considers each of its cash-generating units separately to which goodwill is allocated. Any impairment losses in respect of goodwill will not be reversed.

Discussion of sensitivity analyses is included in the relevant note for each of the above estimates and judgements.

### 4. Revenue from Services

All revenue from services is derived from either the provision of advisory and venture capital fund management services or from licensing activities, royalty revenues and patent cost recoveries.

### 5. Operating Segments

For both the year ended 31 December 2017 and the year ended 31 December 2016, the Group's revenue and profit/loss before taxation were derived almost entirely from its principal activities within the UK. Though the Group has initiated operations in the US and Australasia, the associated revenues and costs are currently immaterial and accordingly, no additional geographical disclosures are given. For management reporting purposes, the Group is currently organised into three operating segments: (i) the commercialisation of intellectual property via the formation of long-term partner relationships with universities; (ii) the management of venture funds focusing on early-stage UK technology companies; and (iii) the in-licensing of drugable intellectual property from research intensive institutions which due to a share reorganisation in December 2017 was deconsolidated as a Group company and will be recognised on the statement of financial position as part of the IP Group investment portfolio going forward.

	University partnership business £m	Venture capital fund management £m	In-licensing activity £m	Consolidated £m
<b>Year ended 31 December 2017</b>				
<b>STATEMENT OF COMPREHENSIVE INCOME</b>				
<b>Portfolio return and revenue</b>				
Change in fair value of equity and debt investments	49.0	—	—	49.0
Gain on disposal of equity investments	0.1	—	—	0.1
Gain on deconsolidation of subsidiary	—	—	45.1	45.1
Change in fair value of limited and limited liability partnership interests	(0.2)	—	—	(0.2)
Other portfolio income	—	—	—	—
Licensing income	—	—	3.4	3.4
Revenue from services and other income	1.1	0.9	—	2.0
Revenue from fund management services	—	4.1	—	4.1
Carried interest plan charge	(1.3)	—	—	(1.3)
Amortisation of intangible assets	(3.9)	—	—	(3.9)
IFRS3 charge in respect of acquisition of subsidiary	(4.4)	—	—	(4.4)
Acquisition and restructuring costs	(9.1)	—	—	(9.1)
Administrative expenses	(25.9)	(2.3)	(3.5)	(31.7)

Year ended 31 December 2017	University partnership business £m	Venture capital fund management £m	In-licensing activity £m	Consolidated £m
<b>Operating profit</b>	<b>5.4</b>	<b>2.7</b>	<b>45.0</b>	<b>53.1</b>
Finance income	1.0	—	—	1.0
Finance costs	(0.7)	—	—	(0.7)
<b>Profit before taxation</b>	<b>5.7</b>	<b>2.7</b>	<b>45.0</b>	<b>53.4</b>
Taxation	—	—	—	—
<b>Profit for the year</b>	<b>5.7</b>	<b>2.7</b>	<b>45.0</b>	<b>53.4</b>

#### STATEMENT OF FINANCIAL POSITION

Assets	1,643.4	17.1	—	1,660.5
Liabilities	(147.8)	(4.2)	—	(152.0)
<b>Net assets</b>	<b>1,495.6</b>	<b>12.9</b>	<b>—</b>	<b>1,508.5</b>
<b>Other segment items</b>				
Capital expenditure	1.6	—	—	1.6
Depreciation	(0.9)	—	—	(0.9)

Year ended 31 December 2016	University partnership business £m	Venture capital fund management £m	In-licensing activity £m	Consolidated £m
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#### STATEMENT OF COMPREHENSIVE INCOME

##### Portfolio return and revenue

Change in fair value of equity and debt investments	7.0	—	—	7.0
Loss on disposal of equity investments	(0.5)	—	—	(0.5)
Change in fair value of limited and limited liability partnership interests	(0.3)	—	—	(0.3)
Change in fair value of contingent value right	(1.4)	—	—	(1.4)
Other portfolio income				
Licensing income	0.2	—	—	0.2
Revenue from services and other income	0.8	0.9	—	1.7
Revenue from fund management services	—	0.9	—	0.9
Amortisation of intangible assets	(5.6)	—	—	(5.6)
Acquisition costs	(0.4)	—	—	(0.4)
Administrative expenses	(14.9)	(0.7)	(1.4)	(17.0)
<b>Operating loss</b>	<b>(15.1)</b>	<b>1.1</b>	<b>(1.4)</b>	<b>(15.4)</b>
Finance income	0.6	—	—	0.6
Loss before taxation	(14.5)	1.1	(1.4)	(14.8)
Taxation	—	—	—	—
<b>Loss for the year</b>	<b>(14.5)</b>	<b>1.1</b>	<b>(1.4)</b>	<b>(14.8)</b>

#### STATEMENT OF FINANCIAL POSITION

Assets	778.4	10.9	6.2	795.5
Liabilities	(26.5)	(0.1)	(0.2)	(26.8)
<b>Net assets</b>	<b>751.9</b>	<b>10.8</b>	<b>6.0</b>	<b>768.7</b>
<b>Other segment items</b>				
Capital expenditure	—	—	—	—
Depreciation	(0.1)	—	—	(0.1)

## 6. Auditor's Remuneration

Details of the auditor's remuneration are set out below:

	2017 £'000	2016 £'000
Fees payable to the Company's auditor for the audit of the Company's annual accounts	118	74
Fees payable to the Company's auditor for the audit of the Company's interim accounts	50	—
The audit of the Company's subsidiaries, pursuant to legislation	100	87
Total fees for audit services	268	161
Audit-related assurance services	—	21
Total assurance services	268	182
Tax compliance services	—	—
Taxation advisory services	—	—
All other services	23	18
Total non-assurance services	23	18
	291	200

## 7. Operating Profit

Operating profit has been arrived at after (charging) or crediting:

	2017 £m	2016 £m
Amortisation of intangible assets	(3.9)	(5.6)
Depreciation of tangible assets	(0.9)	(0.1)
Employee costs (see note 9)	(17.0)	(9.5)
Operating leases (see note 21)	(1.1)	(0.5)
Gain on deconsolidation of subsidiary	45.1	—
Gain/(loss) on disposal of equity investments	0.1	(0.5)

## 8. Acquisition and Restructuring Costs

Acquisition and restructuring costs in the year comprised:

	2017 £m	2016 £m
Financial and corporate broking advice	5.0	—
Legal advice	1.0	0.3
Other professional advice	0.2	0.1
Other costs	2.9	—
	9.1	0.4

Acquisition and restructuring costs are largely comprised of professional fees incurred for the acquisition of Touchstone Innovations which was affected by means of a takeover under the City Code. Other costs include a provision for employee redundancies, an onerous lease provision for London office space surplus to requirements and accelerated depreciation on the fixed assets within the Touchstone office. Costs incurred in the prior year were wholly incurred in respect of the acquisition of Parkwalk Advisors.

## 9. Employee Costs

Employee costs (including executive directors) comprise:

	2017 £m	2016 £m
Salaries	10.2	7.0
Defined contribution pension cost	0.5	0.4
Share-based payment charge (see note 22)	2.4	1.5
Other bonuses accrued in the year	2.5	—
Social security	1.4	0.6
	17.0	9.5

The average monthly number of persons (including executive directors) employed by the Group during the year was 115, all of whom were involved in management and administration activities (2016: 70).

## 10. Taxation

	2017 £m	2016 £m
Current tax	—	—
Deferred tax	—	—

The Group primarily seeks to generate capital gains from its holdings in spin-out companies over the longer-term but has historically made annual net operating losses from its operations from a UK tax perspective. Capital gains achieved by the Group would ordinarily

be taxed upon realisation of such holdings. The Directors continue to believe that the Group qualifies for the Substantial Shareholdings Exemption ("SSE"). The Directors consider that the SSE regime has been simplified and enhanced during the period, with a number of changes being enacted in the Finance (No.2) Act 2017 that are effective for disposals on or after 1 April 2017. From the Group's perspective the key changes were to remove the requirement for the investing entity (in this case, IP Group) to be a sole trading entity or member of a trading group and extending the minimum 10% holding period to any 12-month period in the six years prior to disposal. The Group welcomed these changes and the directors anticipate that they will have a favourable impact on the Group, giving greater certainty over the exemption of qualifying gains under SSE, and increasing the Group's flexibility over the timing of future portfolio company disposals.

The changes in the Finance (No.2) Act 2017 also included a restriction on companies' use of brought forward losses. As a result, the amount of profit that can be mitigated by brought forward losses will be restricted to 50% of the amount of profits in excess of £5m. The Directors do not currently consider that these proposed changes will result in the recognition of a deferred tax liability in respect of any unrealised gains that do not qualify for SSE but note that such liabilities may arise in the future.

Assets held in Luxembourg, which were acquired via the combination with Touchstone in the year, are also subject to capital gains and ordinarily the Group would be taxed on their realisation. The participation exemption, similar to the UK SSE scheme described above, is available for certain share disposals. Dividends and gains arising to Imperial Innovations Sàrl through its interest in Touchstone Innovations Businesses LLP should be exempt from tax under Luxembourg law provided the conditions for the participation exemption are met for each investment or each investment can be attributed to a UK permanent establishment. Tax residence of Imperial Innovations Sàrl will be maintained in Luxembourg and no UK tax should arise on the applicable gains.

The amount for the year can be reconciled to the profit per the statement of comprehensive income as follows:

	2017 £m	2016 £m
Profit before tax	53.4	(14.8)
Tax at the UK corporation tax rate of 19.25% (2016: 20.0%)	10.3	(3.0)
Expenses not deductible for tax purposes	1.6	0.9
Non-taxable income on deconsolidation of Istesso group	(8.7)	—
Fair value movement on investments qualifying for SSE	(9.4)	(1.3)
Movement on share-based payments	0.3	(0.1)
Unrecognised other temporary differences	—	—
Movement in tax losses arising not recognised	5.9	3.3
Total tax charge	—	—

At 31 December 2017, deductible temporary differences and unused tax losses, for which no deferred tax asset has been recognised, totalled £246.9m (2016: £141.7m). An analysis is shown below:

	2017		2016	
	Amount £m	Deferred tax £m	Amount £m	Deferred tax £m
Share-based payment costs and other temporary differences	15.1	2.6	14.1	2.4
Unused tax losses	231.8	39.4	127.6	21.7
	246.9	42.0	141.7	24.1

At 31 December 2017, deductible temporary differences and unused tax losses, for which a deferred tax asset/(liability) has been recognised, totalled £nil (2016: £nil). An analysis is shown below:

	2017		2016	
	Amount £m	Deferred tax £m	Amount £m	Deferred tax £m
Temporary timing differences	7.1	1.2	2.6	4.4
Unused tax losses	(7.1)	(1.2)	(2.6)	(0.4)
	—	—	—	—

## 11. Earnings per Share

	2017 £m	2016 £m
Earnings		
Earnings for the purposes of basic and dilutive earnings per share	49.7	(13.5)

	2017 Number of shares	2016 Number of shares
<b>Number of shares</b>		
Weighted average number of ordinary shares for the purposes of basic earnings per share	<b>704,227,751</b>	565,056,171
Effect of dilutive potential ordinary shares:		
Options or contingently issuable shares	<b>657,673</b>	—
Weighted average number of ordinary shares for the purposes of diluted earnings per share	<b>704,885,424</b>	565,056,171

Potentially dilutive ordinary shares include contingently issuable shares arising under the Group's LTIP arrangements, and options issued as part of the Group's Sharesave schemes and Deferred Bonus Share Plan (for annual bonuses deferred under the terms of the Group's annual incentive scheme).

## 12. Goodwill

	£m
At 1 January 2017	57.1
Recognised on acquisition of subsidiary undertakings (see note 27)	115.0
<b>At 31 December 2017</b>	<b>172.1</b>

Goodwill arising on business combinations is reviewed for impairment on an annual basis, or more frequently if there are indications that goodwill may be impaired. Recoverable amounts for CGUs are based on the higher of value in use and fair value less costs of disposal. Value in use is calculated from cashflow projections for the CGUs to which the goodwill has been allocated. The goodwill allocated to each CGU is summarised in the table below.

	2017 £m	2016 £m
University partnership CGU	<b>169.6</b>	55.0
Fund management CGU	<b>2.1</b>	2.1
Parkwalk Advisors CGU	<b>0.4</b>	—
	<b>172.1</b>	57.1

### Impairment review of the university partnership CGU

The key assumptions of the DCF models used to assess the value in use are shown below.

For the purposes of impairment testing, the university partnership CGU comprises those elements connected with the Group's university partnership business. The Directors consider that for each of the key variables which would be relevant in determining a recoverable value for the university partnership CGU, there is a range of reasonably possible alternative values. The key variable ranges are set out below:

	2017 £m	2016 £m
Number of spin-out companies per year	<b>13–15</b>	10–15
Annual investment rate	<b>£50m–£60m</b>	£40m–£75m
Rate of return achieved	<b>15%–20%</b>	15%–22%
Proportion of IPO exits	<b>25%–30%</b>	25%–35%
Proportion of disposal exits	<b>25%–28%</b>	25%–32%
IPO & Disposal valuations	<b>£30m–£35m</b>	£25m–£35m
Long term growth rate	<b>1.5%–1.7%</b>	1.9%
Discount rate	<b>10%–15%</b>	9%–11%

When determining the key variables, management has, where possible and appropriate, used historical performance data as a basis. In instances where the forecasted volumes and scale of activity do not align with the Group's prior performance, management applies its judgement in determining these variables. Two different value-in-use models were assessed in order to evaluate the recoverable value of the CGU, neither of which resulted in an impairment being required.

### Impairment review of venture capital fund management CGU

The key assumptions of the DCF model used to assess the value in use are shown below:

	2017	2016
Discount rate	<b>9%–11%</b>	9%–11%
Number of funds under management	<b>3</b>	4
Management fee	<b>2%–3.25%</b>	2%–3.25%
Cost inflation	<b>2.5%</b>	1.5%
Long term growth rate	<b>1.9%</b>	—

The value-in-use models were assessed in order to evaluate the recoverable value of the CGU does not indicate an impairment being required.

### 13. Intangible Assets

	£m
<b>Cost</b>	
At 1 January 2017	21.6
Additions acquired through business combinations	9.0
<b>At 31 December 2017</b>	<b>30.6</b>
<b>Accumulated amortisation</b>	
At 1 January 2017	16.5
Charge for the year	3.9
<b>At 31 December 2016</b>	<b>20.4</b>
<b>Net book value</b>	
<b>At 31 December 2017</b>	<b>10.2</b>
At 31 December 2016	5.1

The intangible assets represent contracts with customers and other contractual arrangements with UK universities acquired through acquisition of subsidiaries. The contractual arrangements have fixed terms and, consequently, the intangible assets have a finite life which align with the remaining terms which, at the end of the period, range from 2 months to 29 months. The individual contractual arrangements are amortised in a straight line over the remainder of their terms with the expense being presented directly on the primary statements.

### 14. Categorisation of Financial Instruments

	At fair value through profit or loss		Loans and receivables £m	Total £m
	Held for trading £m	Designated upon initial recognition £m		
<b>Financial assets</b>				
<b>At 31 December 2017</b>				
Equity investments	—	1,085.4	—	1,085.4
Debt investments	—	45.2	—	45.2
Other financial assets	—	—	—	—
Limited and limited liability partnership interests	—	11.0	—	11.0
Trade and other receivables	—	—	8.3	8.3
Deposits	—	—	95.0	95.0
Cash and cash equivalents	—	—	231.3	231.3
<b>Total</b>	<b>—</b>	<b>1,141.6</b>	<b>334.6</b>	<b>1,476.2</b>
<b>At 31 December 2016</b>				
Equity investments	—	594.9	—	594.9
Debt investments	—	19.1	—	19.1
Other financial assets	—	—	—	—
Limited and limited liability partnership interests	—	4.2	—	4.2
Trade and other receivables	—	—	2.6	2.6
Deposits	—	—	—	—
Cash and cash equivalents	—	—	112.3	112.3
<b>Total</b>	<b>—</b>	<b>618.2</b>	<b>114.9</b>	<b>733.1</b>

All financial liabilities are categorised as other financial liabilities and recognised at amortised cost.

The Group does not consider that any change in fair value of financial assets in the year is attributable to credit risk (2016: £nil).

All net fair value gains in the year are attributable to financial assets designated at fair value through profit or loss on initial recognition (2016: all net fair value gains attributable to financial assets designated at fair value through profit or loss on initial recognition).

All interest income is attributable to financial assets not classified as fair value through profit and loss.

## 15. Net Investment Portfolio

	Level 1	Level 2		Level 3			
	Equity investments in quoted spin-out companies £m	Equity investments in unquoted spin-out companies £m	Unquoted debt investments in spin-out companies £m	Equity investments in unquoted spin-out companies £m	Unquoted debt investments in spin-out companies £m	Equity investments in unquoted spin-out companies £m	Total £m
At 1 January 2017	161.1	-	-	368.0	19.1	65.8	614.0
Investments during the year	15.2	-	-	36.3	11.5	8.2	71.2
Acquired with Touchstone Innovations plc	35.3	-	-	131.6	19.9	165.4	352.2
Transaction-based reclassifications during the year	—	-	-	5.6	(12.5)	6.9	—
Other transfers between hierarchy levels during the year	13.4	-	-	(266.7)	—	253.3	—
Disposals	1.2	-	-	—	(0.8)	(7.8)	(7.4)
Adjustments for deconsolidation of subsidiaries	—	-	-	—	8.4	42.7	51.1
Fees settled via equity	—	-	-	0.5	—	—	0.5
Change in fair value in the year <sup>(i)</sup>	(1.1)	-	-	26.9	(0.4)	23.6	49.0
<b>At 31 December 2017</b>	<b>225.1</b>	<b>-</b>	<b>-</b>	<b>302.2</b>	<b>45.2</b>	<b>558.1</b>	<b>1,130.6</b>
At 1 January 2016	201.3	-	-	308.6	9.1	33.2	552.2
Investments during the year	10.9	-	-	50.9	6.2	1.7	69.7
Transaction-based reclassifications during the year	—	-	-	0.7	(0.7)	—	—
Other transfers between hierarchy levels during the year	—	-	-	(39.8)	6.7	33.1	—
Disposals	(15.0)	-	-	(0.2)	(0.1)	—	(15.3)
Fees settled via equity	—	-	-	0.4	—	—	0.4
Change in fair value in the year <sup>(i)</sup>	(36.1)	-	-	47.4	(2.1)	(2.2)	7.0
<b>At 31 December 2016</b>	<b>161.1</b>	<b>-</b>	<b>-</b>	<b>368.0</b>	<b>19.1</b>	<b>65.8</b>	<b>614.0</b>

i. The change in fair value in the year includes a loss of £1.1m (2016: gain of £0.7m) in exchange differences on translating foreign currency investments.

In order to align the Group's reporting with that of Touchstone Innovations, we have classified our investments which were previously level 2 as level 3a, and we have re-presented the 2016 investment level data accordingly.

The Group's policy is to classify equity investments in unquoted spin-out companies as Level 3a where prices have been determined from recent investments in the last twelve months. The impact of changing the qualifying criteria for Level 3a to be determined from recent investments in the last six months would mean 23.0% (2016: 4.4%) of the equity investments in unquoted spin-out companies would be reclassified to Level 3b.

Fair values of unquoted spin-out companies classified as Level 3b in the fair value hierarchy have been determined, in part or in full, by valuation techniques that are not supported by observable market prices or rates. This includes where prices have been determined from the most recent market transaction, but that transaction occurred more than twelve months prior to the balance sheet date, and a variety of other valuation techniques. Investments in 191 (2016: 54) companies have been classified as Level 3b. If the fair value of all Level 3b investments were to decrease by 10%, the net assets figure would decrease by £55.8m (2016: £6.6m), with a corresponding increase if the unobservable inputs were to increase by 10%.

If the assumptions used in the valuation techniques for the Group's holding in each company are varied by using a range of possible alternatives, there is no material difference to the carrying value of the respective spin-out company. The effect on the consolidated statement of comprehensive income for the period is also not expected to be material.

Due to the significant increase in the size of the unquoted investment portfolio during the year, which resulted from the acquisition of Touchstone Innovations, the Group have reconsidered the observability of the inputs in all unquoted valuations within the Group and aligned the classification of the level 3 investments with that previously reported by Touchstone Innovations. The prior year presentation has been reclassified accordingly.

For assets and liabilities that are recognised at fair value on a recurring basis, the Group determines whether transfers have occurred between levels in the hierarchy by re-assessing categorisation (based on the lowest level input that is significant to the fair value measurement as a whole) at the end of each reporting period. Transfers between tiers are then made as if the transfer took place on the first day of the period in question, except in the cases of transfers between tiers based on an initial public offering ("IPO") of an investment wherein the changes in value prior to the IPO are calculated and reported in tier 3a, and those changes post are attributed to tier 1.

Transfers between Level 3a and Level 1 occur when a previously unquoted investment undertakes an initial public offering, resulting in its equity becoming quoted on an active market. In the current period, transfers of this nature amounted to £13.4m (2016: £nil).

Transfers between Level 1 and Level 3a would occur when a quoted investment's market becomes inactive, or the portfolio company elects to delist. There have been no such instances in the current period (2016: one instance, £nil value).

Transfers between Level 3b and Level 3a occur when an investment which previously had a most recent investment of over twelve months ago undertakes an investment, resulting in an observable market rate. In the current period, transfers of this nature amounted to £26.7m (2016: £7.3m).

Transfers between Level 3a and Level 3b occur when an investment's recent investment becomes more than twelve months old, with the price being deemed unobservable. In the current period, transfers of this nature amounted to £280.0m (2016: £45.3m).

#### Change in fair value in the year

	2017 £m	2016 £m
Fair value gains	99.3	57.3
Fair value losses	(50.3)	(50.3)
	49.0	7.0

#### 16. Trade and Other Receivables

	2017 £m	2016 £m
Trade debtors	1.9	2.3
Prepayments	1.4	0.3
Other receivables	5.0	—
	8.3	2.6

The Directors consider the carrying amount of trade and other receivables to approximate their fair value. All receivables are interest free, repayable on demand and unsecured.

#### 17. Contingent Value Rights

As a result of the disposal of Proximagen Group plc in August 2012, the Group received contingent consideration, in the form of contingent value rights ("CVRs"), based upon future net revenues of two associated drug programmes. In line with the Group's policies, these have previously been recognised as financial assets at fair value through profit and loss. The Group considers this asset to be Level 3 in the fair value hierarchy throughout the current and previous financial years. This asset is fair valued at £nil (2016: £nil) and the directors do not expect any value to be realised in the future.

#### 18. Trade and Other Payables

	2017 £m	2016 £m
<b>Current liabilities</b>		
Trade payables	2.0	0.7
Social security expenses	0.7	0.3
Deferred consideration payable	4.3	—
Redundancy and restructuring cost accrual	2.4	—
Bonus accrual	2.8	—
Other accruals and deferred income	7.5	1.1
	19.7	2.1

#### 19. Borrowings

	2017 £m	2016 £m
<b>Non-current liabilities</b>		
EIB debt facility	97.7	14.9
Loans drawn down from the Limited Partners of consolidated funds	13.1	9.8
	110.8	24.7

	2017 £m	2016 £m
<b>Current liabilities</b>		
EIB debt facility	6.3	—
	6.3	—

#### Loans drawn down from the Limited Partners of consolidated funds

The loans from Limited Partners of consolidated funds are interest free and repayable only upon the applicable funds generating sufficient returns to repay the Limited Partners. Management anticipates that the funds will generate the required returns and consequently recognises the full associated liabilities.

#### EIB debt facility

On 8 July 2015 the Group secured a £30m, 8-year debt facility from the European Investment Bank. The facility is to be disbursed in two tranches. The Group will use the proceeds to continue to fund UK university spin-out companies as they develop and mature.

The first tranche of £15.0m was drawn down on 17 December 2015. There were £0.1m of initial transaction costs incurred in the arrangement of the facility. This balance was set against the loan amount and is to be subsequently amortised over the term of the loan.

The associated charge to the statement of comprehensive income for 2017 was £nil (2016: nil). The loan is based on a fixed rate of 1.98% with an additional variable spread equal to the six month GBP Libor rate as at the first date of each six-month interest period. The capital is repayable in ten equal payments over a five-year period with the first payment due on 7 January 2019.

The second tranche of £15.0m was drawn down on 7 December 2017. The capital is repayable in ten equal payments over a five-year period with the first payment due on 7 January 2019. The loan is based on a fixed interest rate of 3.016% and is repayable over a ten year period.

The Group also holds an additional debt facility with the EIB as a consequence of the combination with Touchstone Innovations during the year. The first tranche of a £30.0m debt facility was drawn down on 30 July 2013. Transaction costs of £0.2m were incurred to obtain the loan and were set against the loan amount. These costs are subsequently amortised over the life time of the loan. The loan is based on a floating interest rate related to LIBOR and is repayable in 10 equal annual instalments over a twelve year period.

The second tranche was drawn down on 30 June 2015. Transaction costs of £0.2m were incurred to obtain the loan and were set against the loan amount. These costs are subsequently amortised over the life time of the loan. The loan is based on a fixed interest rate of 4.235% and is repayable over a ten year period.

On 13 July 2015, Touchstone entered a second loan agreement of £50.0m available to draw down in up to four tranches with a minimum tranche value of £10.0m. There is a non-utilisation fee calculated on the daily undrawn, uncanceled balance of the loan from the date falling six months after the date of the agreement at a rate of 0.10% per annum. This facility was fully drawn down in February 2017 and is repayable over an eight year period.

The Touchstone loans contain a debt covenant requiring that the ratio of the total fair value of investments plus cash and qualifying liquidity to debt should at no time fall below 4:1. The loan also stipulates that on any date, the aggregate of all amounts scheduled for payment to the EIB in the following six months should be kept in a separate bank account.

The IP Group loans contain covenants requiring that the ratio between the value of the portfolio along with the value of the Group's cash net of any outstanding liabilities, and the outstanding debt facility does not fall below 6:1. The Group must maintain that the amount of unencumbered funds freely available to the Group is not less than £15.0m. The Group is also required to maintain a separate bank account which must at any date maintain a minimum balance equal to that of all payments due to the EIB in the forthcoming six months.

## 20. Share Capital

Issued and fully paid:	2017		2016	
	Number	£m	Number	£m
<b>Ordinary Shares of 2p each</b>				
At 1 January	565,221,967	11.3	564,648,168	11.3
Issued under share placings	131,913,567	2.6	—	—
Issued as consideration in acquisitions	359,304,235	7.2	—	—
Issued under employee share plans	943,832	—	573,799	—
<b>At 31 December</b>	<b>1,057,383,601</b>	<b>21.1</b>	<b>565,221,967</b>	<b>11.3</b>

The Company has one class of ordinary shares with a par value of 2p ("Ordinary Shares") which carry equal voting rights, equal rights to income and distributions of assets on liquidation, or otherwise, and no right to fixed income.

In June 2017, the Group issued 131,357,140 new Ordinary Shares as part of a fund raising which raised £184.7m before expenses at a price of £1.40 per share. Later in August, an additional subscription for 556,427 Ordinary Shares was made at the same terms as the previous share placing bring total funds raised to £181.0m net of expenses.

In October 2017, the Group's offer to acquire 100% of the share capital of Touchstone Innovations plc became unconditional in all respects and 357,518,520 new Ordinary Shares were issued to the existing Touchstone shareholders in exchange for shares in IP Group plc.

Also in October 2017, the Group issued 1,785,715 new Ordinary Shares as consideration to the sellers of Parkwalk Advisors (see Note 22).

In June and November 2017, the Group issued 436,689 new Ordinary Shares in order to settle the exercise of options that had been issued under the Group's Deferred Bonus Share Plan ("DBSP", see Note 27).

Finally, in November 2017, the Group issued 507,143 new Ordinary Shares in exchange for Touchstone Innovations shares that were issued under the rules of the Imperial Innovations 2016 Long Term Incentive Plan ("LTIP", see Note 22). Prior to the completion of the all-share acquisition by IP Group, the Remuneration Committee of Touchstone Innovations plc determined that one third of the shares comprised in the 2016 awards granted over shares in Touchstone under the 2016 LTIP would become immediately exercisable upon the IP Group offer becoming wholly unconditional, notwithstanding that the performance conditions had not been met at that time.

## 21. Operating Lease Arrangements

	2017 £m	2016 £m
Payments under operating leases recognised in the statement of comprehensive income for the year	1.1	0.5

At the reporting date, the Group had outstanding commitments for future minimum lease payments under non-cancellable operating leases, which fall due as follows:

	2017 £m	2016 £m
Within one year	1.7	0.6
In the second to fifth years inclusive	4.6	3.1
	6.3	3.7

Operating lease payments represent rentals by the Group for its office properties. Leases are negotiated for an average term of five years and rentals are fixed for an average of one year.

## 22. Share-Based Payments

In 2017, the Group continued to incentivise employees through its LTIP and AIS.

### Deferred Bonus Share Plan ("DBSP")

Awards made to employees under the Group's AIS above a certain threshold include 50% deferred into IP Group equity through the grant of nil-cost options under the Group's DBSP. The number of nil-cost options granted under the Group's DBSP is determined by the share price at vesting date. The DBSP options are subject to further time-based vesting over two years (typically 50% after year one and 50% after year two).

An analysis of movements in the DBSP options outstanding is as follows:

	Number of options 2017	Weighted- average exercise price 2017	Number of options 2016	Weighted- average exercise price 2016
At 1 January	837,995	-	187,869	-
AIS deferral shares award during the year	-	-	781,148	-
Exercised during the year	(436,689)	-	(101,622)	-
Lapsed during the year	(6,812)	-	(29,400)	-
<b>At 31 December</b>	<b>394,494</b>	<b>-</b>	<b>837,995</b>	<b>-</b>
Exercisable at 31 December	-	-	86,247	-

The options outstanding at 31 December 2017 had an exercise price in the range of £nil (2016: £nil) and a weighted-average remaining contractual life of 0.3 years (2016: 0.8 years).

The weighted average share price at the date of exercise for share options exercised in 2017 was 139.17p (2016: £178.90p).

As the 2017 AIS financial performance targets were met and as the number of DBSP options to be granted in order to defer such elements of the AIS payments as are required under our remuneration policy are based on a percentage of employees' salary, the share-based payments line includes the associated share-based payments expense incurred in 2017.

### Long-Term Incentive Plan ("LTIP")

Awards under the LTIP take the form of conditional awards of ordinary shares of 2p each in the Group which vest over the prescribed performance period to the extent that performance conditions have been met. The Remuneration Committee imposes objective conditions on the vesting of awards and these take into consideration the guidance of the Group's institutional investors from time to time.

The 2017 LTIP awards were made on 29 August 2017. The awards will ordinarily vest on 31 March 2020, to the extent that the performance conditions have been met. The awards are based on the performance of the Group's Hard NAV and Total Shareholder Return ("TSR"). Both performance measures are combined into a matrix format to most appropriately measure performance relative to the business, as shown in the Directors' Remuneration Report within the Group's 2017 Annual Report and Accounts. The total award is subject to an underpin based on the relative performance of the Group's TSR to that of the FTSE 250 index, which can reduce the awards by up to 50%. The 2017 LTIP matrix is designed such that up to 100% of the award (prior to the application of the underpin) will vest in full in the event of both Hard NAV increasing by 15% per year on a cumulative basis, from 1 January 2017 to 31 December 2019, and TSR increasing by 15% per year on a cumulative basis from the date of award to 31 March 2020, using an industry-standard average price period at the beginning and end of the performance period. Further, the matrix is designed such that 30% of the award shall vest (again prior to the application of the underpin) if the cumulative increase is 8% per annum for both measures over their respective performance periods ("threshold performance"). A straight-line sliding scale is applied for performance between the distinct points on the matrix of vesting targets.

The 2016 LTIP awards were made on 16 May 2016. The awards will ordinarily vest on 31 March 2019, to the extent that the performance conditions have been met. The awards are based on the performance of the Group's Hard NAV and Total Shareholder Return ("TSR"). Both performance measures are combined into a matrix format to most appropriately measure performance relative to the business, as

shown in the Directors' Remuneration Report within the Group's 2017 Annual Report and Accounts. The total award is subject to an underpin based on the relative performance of the Group's TSR to that of the FTSE 250 index, which can reduce the awards by up to 50%. The 2016 LTIP matrix is designed such that up to 100% of the award (prior to the application of the underpin) will vest in full in the event of both Hard NAV increasing by 15% per year on a cumulative basis, from 1 January 2016 to 31 December 2018, and TSR increasing by 15% per year on a cumulative basis from the date of award to 31 March 2019, using an industry-standard average price period at the beginning and end of the performance period. Further, the matrix is designed such that 30% of the award shall vest (again prior to the application of the underpin) if the cumulative increase is 8% per annum for both measures over their respective performance periods ("threshold performance"). A straight-line sliding scale is applied for performance between the distinct points on the matrix of vesting targets.

The 2015 LTIP awards were made on 21 May 2015. The awards will ordinarily vest on 31 March 2018, to the extent that the performance conditions have been met. The awards are based on the performance of the Group's Hard NAV and Total Shareholder Return ("TSR"). Both performance measures are combined into a matrix format to most appropriately measure performance relative to the business, as shown in the Directors' Remuneration Report within the Group's 2017 Annual Report and Accounts. The total award is subject to an underpin based on the relative performance of the Group's TSR to that of the FTSE 250 index, which can reduce the awards by up to 50%. The 2015 LTIP matrix is designed such that up to 100% of the award (prior to the application of the underpin) will vest in full in the event of both Hard NAV increasing by 15% per year on a cumulative basis, from 1 January 2015 to 31 December 2017, and TSR increasing by 15% per year on a cumulative basis from the date of award to 31 March 2018, using an industry-standard average price period at the beginning and end of the performance period. Further, the matrix is designed such that 30% of the award shall vest (again prior to the application of the underpin) if the cumulative increase is 8% per annum for both measures over their respective performance periods ("threshold performance"). A straight-line sliding scale is applied for performance between the distinct points on the matrix of vesting targets.

The 2014 LTIP awards did not meet the threshold performance target and lapsed on 31 March 2017.

The movement in the number of shares conditionally awarded under the LTIP is set out below:

	Number of options 2017	Weighted- average exercise price 2017	Number of options 2016	Weighted-average exercise price 2016
At 1 January	5,614,837	—	3,378,595	—
Lapsed during the year	(1,227,666)	—	(349,655)	—
Forfeited during the year	(3,766)	—	(144,294)	—
Vested during the year	—	—	(457,877)	—
Notionally awarded during the year	4,682,712	—	3,188,078	—
<b>At 31 December</b>	<b>9,066,117</b>	<b>—</b>	<b>5,614,837</b>	<b>—</b>
Exercisable at 31 December	—	—	—	—

The options outstanding at 31 December 2017 had an exercise price in the range of £nil (2016: £nil) and a weighted-average remaining contractual life of 1.6 years (2016: 1.6 years).

The fair value of LTIP shares notionally awarded during 2017 was calculated using Monte Carlo pricing models with the following key assumptions:

	2017	2016
Share price at date of award	£1.151	£1.558
Exercise price	£nil	£nil
Fair value at grant date	£0.34	£0.41
Expected volatility (median of historical 50-day moving average)	36%	31%
Expected life (years)	3.0	2.83
Expected dividend yield	0%	0%
Risk-free interest rate	0.4%	1.0%

#### Former Touchstone LTIP

Also in 2017, as a result of the combination with Touchstone, award holders under existing Touchstone long term incentive share schemes were entitled to receive 2.2178 new IP Group shares in exchange for each Touchstone share the subject of the awards held by each of them; this multiplier was the exchange ratio set out in the Offer Document for the combination (the "Exchange Ratio").

#### *Touchstone Innovations 2016 Long Term Incentive Plan ("2016 LTIP")*

Under the 2016 LTIP, awards were made to directors and employees in each of 2016 and 2017.

In respect of those awards made in 2016, the Touchstone remuneration committee determined that tranche 1 of each of the awards (being one third of each award holder's total award) should be subject to accelerated vesting upon the Offer being declared unconditional. Accordingly, such awards vested and were exercised in November 2017. In respect of the balance of two thirds of each award (tranche 2 and 3 of each award), as part of the terms of the combination, award holders were offered the opportunity to release the same in exchange for the grant of a replacement award of equivalent value over shares in IP Group, with the number of IP Group shares calculated

by multiplying the number of Touchstone shares the subject of the awards by the Exchange Ratio and the exercise price calculated by dividing the existing exercise price of 3 1/33 (three and one thirty third) pence by the Exchange Ratio. The vesting dates of the replacement awards remain the same as for tranches 2 and 3 of the original awards, being 1 December 2020 and 1 December 2021. The replacement awards are subject to performance conditions adjusted from those attaching to the original Touchstone award as follows: a) for non-Technology Transfer Office ("TTO") staff, 100% of the replacement awards will vest based on Touchstone Net Asset Value ("NAV") growth over the relevant performance periods, with adjusted NAV targets to reflect Touchstone's portfolio being part of the enlarged group following the combination; b) for TTO staff, 50% of the replacement awards will vest based on the same adjusted Touchstone NAV growth with 50% being linked to unchanged TTO specific targets; and (c) all Touchstone share price performance measures have been dropped.

In respect of those awards made in 2017, as part of the terms of the combination, award holders were offered the opportunity to release their awards in exchange for the grant of a replacement award of equivalent value over shares in IP Group, with the number of IP Group shares calculated by multiplying the number of Touchstone shares the subject of the awards by the Exchange Ratio at the exercise price calculated by dividing the existing exercise price of 3<sup>1/33</sup> (three and one thirty third) pence by the exchange ratio. The vesting dates on the replacement awards remained the same as the original award being 1 December 2020, 1 December 2021 and 1 December 2022. The replacement awards are subject to performance conditions adjusted from those attaching to the original Touchstone award as follows: a) the NAV condition has been adjusted to reflect Touchstone's portfolio being part of the enlarged group following the combination and b) the Total Shareholder Return ("TSR") condition has been adjusted so that TSR is now measured by reference to the performance of IP Group shares over the performance period with the starting share price for such purpose being adjusted by dividing previous starting share price of 290 pence by the Exchange Ratio. The TTO specific targets remain the same.

	Number of options 2017	Weighted- average exercise price 2017	Number of options 2016	Weighted- average exercise price 2016
At 1 January	—	—	—	—
Replacement shares awarded on 17 October 2017	<b>2,875,606</b>	—	—	—
Forfeited during the year	—	—	—	—
Vested during the year	—	—	—	—
<b>At 31 December</b>	<b>2,875,606</b>	—	—	—
Exercisable at 31 December	—	—	—	—

The options outstanding at 31 December 2017 had an exercise price of £0.015 (2016: £nil) and a weighted-average remaining contractual life of 2.7 years (2016: n/a).

#### *Touchstone Innovations 2006 Long Term Incentive Plan ("2006 LTIP"):*

Under the 2006 LTIP, awards were made to directors and employees between 2012 and 2015 ("2006 Awards"). As part of the combination, holders of 2006 Awards were offered the opportunity to release each of their awards in exchange for the grant of a replacement award of equivalent value over shares in IP Group, with the number of IP Group shares calculated by multiplying the number of Touchstone shares the subject of the awards by the Exchange Ratio and the exercise price for each awards calculated by dividing the relevant exercise price by the Exchange Ratio. The exercise period and time-based vesting provisions for the replacement awards remained the same as for the original Touchstone awards but the shareholder return performance condition has been updated by reference to the Exchange Ratio.

	Number of options 2017	Weighted- average exercise price 2017	Number of options 2016	Weighted- average exercise price 2016
At 1 January	—	—	—	—
Replacement shares awarded on 17 October 2017	<b>4,009,785</b>	<b>£2.13</b>	—	—
<b>At 31 December</b>	<b>4,009,785</b>	<b>£2.13</b>	—	—
Exercisable at 31 December	4,009,785	£2.13	—	—

The options outstanding at 31 December 2017 had an exercise price of £2.13 (2016: £nil) and a weighted-average remaining contractual life of 6.9 years (2016: 7.9 years).

#### **Former Fusion IP LTIP**

In 2014, three former employees of Fusion IP plc were each conditionally awarded 1,000,000 shares in Fusion IP plc under the Fusion IP LTIP. As part of the arrangements for the acquisition of Fusion IP plc, the Fusion IP LTIP awards were converted into awards over IP Group shares at the same conversion price per share as the scheme of arrangement was undertaken (0.446 IP Group plc shares for every Fusion IP plc share). The awards were scheduled to vest on 31 December 2017 provided certain performance conditions are met which related to, inter alia, the growth in value of Fusion IP plc's net asset value ("Fusion NAV") from the date of acquisition and the continued employment of the individual by the Group. The options expired on 31 December 2017 as vesting criteria had not been met.

The movement in the number of shares conditionally awarded under the Former Fusion IP LTIP is set out below:

	2017	2016
At 1 January	<b>1,338,000</b>	1,338,000
Expired during the year	<b>(1,338,000)</b>	—
At 31 December	—	1,338,000

#### Fair value charge

The fair value charge recognised in the statement of comprehensive income during the year in respect of all share-based payments, including the DBSP, LTIP and Former Fusion IP LTIP, was £2.4m (2016: £1.5m).

### 23. Limited and Limited Liability Partnership Interests

	£m
At 1 January 2016	4.4
Additions during the year	0.1
Realisations in the year	—
Change in fair value during the year	(0.3)
At 1 January 2017	4.2
Additions during the year	1.4
Acquired on acquisition of subsidiary	5.6
Realisations in the year	—
Change in fair value during the year	(0.2)
<b>At 31 December 2017</b>	<b>11.0</b>

The Group considers interests in Limited and Limited Liability Partnerships to be Level 3b in the fair value hierarchy throughout the current and previous financial years. If the assumptions used in the valuation techniques for the Group's holding in each company are varied by using a range of possible alternatives, there is no material difference to the carrying value of the respective spin-out company. The effect on the consolidated statement of comprehensive income for the period is also not expected to be material.

### 24. Related Party Transactions

The Group has various related parties arising from its key management, subsidiaries, equity stakes in portfolio companies and management of certain Limited Partnership funds.

#### a) Limited Partnerships

The Group manages a number of investment funds structured as Limited Partnerships. Group entities have a Limited Partnership interest (see note 1) and act as the general partners of these Limited Partnerships. The Group therefore has power to exert significant influence over these Limited Partnerships. The following amounts have been included in respect of these Limited Partnerships:

	2017 £m	2016 £m
<b>Statement of comprehensive income</b>		
Revenue from services	<b>0.7</b>	0.9

	2017 £m	2016 £m
<b>Statement of financial position</b>		
Investment in limited partnerships	<b>2.6</b>	2.8
Amounts due from related parties	<b>0.7</b>	0.2

#### b) Key management personnel

##### i) Key management personnel transactions

Key management had investments in the following spin-out companies as at 31 December 2017:

Director/ Company Secretary	Company name	Shares held at 1 January 2017	Number of shares acquired/ (disposed) in the period	Number of shares held at 31 December 2017	%
<b>Alan Aubrey</b>	Accelercomm Limited	333	—	<b>333</b>	0.3%
	Alesi Surgical Limited	18	—	<b>18</b>	0.2%
	Amaethon Limited — A Shares	104	—	<b>104</b>	3.1%
	Amaethon Limited — B Shares	11,966	—	<b>11,966</b>	1.0%
	Amaethon Limited — Ordinary shares	21	—	<b>21</b>	0.3%
	Avacta Group plc	202,761	—	<b>202,761</b>	0.3%
	Boxarr Limited	1,732	—	<b>1,732</b>	0.3%
	Capsant Neurotechnologies Limited	11,631	—	<b>11,631</b>	0.8%
	Cloud Sustainability Limited <sup>(II)</sup>	26	(26)	—	0.0%
	Crysalin Limited	1,447	—	<b>1,447</b>	0.1%
	Ditto AI Limited <sup>(IV)(II)</sup>	119,965,724	468,801	<b>120,434,525</b>	9.0%
	Diurnal Group plc	15,000	—	<b>15,000</b>	<0.1%

Director/ Company Secretary	Company name	Shares held at 1 January 2017	Number of shares acquired/ (disposed) in the period	Number of shares held at 31 December 2017	%
	EmDot Limited	15	—	15	0.9%
	Getech Group plc	15,000	—	15,000	<0.1%
	Gunsynd plc	767,310	—	767,310	<0.1%
	hVivo plc	37,160	—	37,160	<0.1%
	Ilika plc	69,290	—	69,290	<0.1%
	Istesso Limited <sup>(V)</sup>	1,185,150	—	1,185,150	1.7%
	Karus Therapeutics Limited	223	—	223	<0.1%
	Microbiotica Limited	3,750	6,250	10,000	<0.1%
	Mirriad Advertising plc <sup>(I)</sup>	33,333	—	33,333	<0.1%
	MDL 2016 Limited — Ordinary shares	3,226	—	3,226	0.4%
	MDL 2016 Limited — A shares	229	—	229	0.5%
	Modern Water plc	519,269	—	519,269	0.7%
	Cronin Group plc	2,172,809	—	2,172,809	0.4%
	Oxford Nanopore Technologies Limited	101,208	—	101,208	0.4%
	Perachem Holdings plc	108,350	—	108,350	0.8%
	Salunda Limited	53,639	—	53,639	<0.1%
	Structure Vision Limited	212	—	212	1.0%
	Surrey Nanosystems Limited	453	—	453	0.3%
	Tissue Regenix Group plc	2,389,259	—	2,389,259	0.3%
	Xeros Technology Group plc	40,166	—	40,166	<0.1%
	Zeetta Networks Limited	424	—	424	<0.1%
<b>Mike Townend</b>	Amaethon Limited — A Shares	104	—	104	3.1%
	Amaethon Limited — B Shares	11,966	—	11,966	1.0%
	Amaethon Limited — Ordinary shares	21	—	21	0.3%
	Applied Graphene Materials plc	7,619	15,000	22,619	<0.1%
	Avacta Group plc	20,001	—	20,001	<0.1%
	Capsant Neurotechnologies Limited	11,282	—	11,282	0.8%
	Cloud Sustainability Limited <sup>(II)</sup>	25	(25)	—	0.0%
	Creavo Technologies Limited	117	—	117	<0.1%
	Crysalin Limited	1,286	—	1,286	0.1%
	Ditto AI Limited <sup>(IV)(II)</sup>	—	613,048	613,048	<0.1%
	Diurnal Group plc	15,000	—	15,000	<0.1%
	EmDot Limited	14	—	14	0.8%
	Getech Group plc	20,000	—	20,000	<0.1%
	Ilika plc	10,000	—	10,000	<0.1%
	Istesso Limited <sup>(V)</sup>	1,185,150	—	1,185,150	1.7%
	Itaconix plc <sup>(III)</sup>	64,940	—	64,940	<0.1%
	Mirriad Advertising plc <sup>(I)</sup>	25,000	—	25,000	<0.1%
	Mode Diagnostics Limited	1,756	—	1,756	0.1%
	Modern Water plc	575,000	—	575,000	0.7%
	Cronin Group plc	932,944	—	932,944	0.2%
	Oxford Advanced Surfaces Limited	5,000	—	5,000	0.2%
	Oxford Nanopore Technologies Limited	30,967	—	30,967	0.1%
	Perachem Holdings plc	113,222	—	113,222	0.8%
	Structure Vision Limited	212	—	212	1.0%
	Surrey Nanosystems Limited	404	—	404	0.2%
	Tissue Regenix Group plc	1,950,862	—	1,950,862	0.3%
	Ultrahaptics Holdings Limited	35	1,189	1,224	<0.1%
	Xeros Technology Group plc	35,499	—	35,499	<0.1%
<b>Greg Smith</b>	Alesi Surgical Limited	2	—	2	<0.1%
	Avacta Group plc	3,904	—	3,904	<0.1%
	Capsant Neurotechnologies Limited	896	—	896	<0.1%
	Cloud Sustainability Limited <sup>(II)</sup>	8	(8)	—	0.0%
	Crysalin Limited	149	—	149	<0.1%
	Ditto AI Limited <sup>(IV)(II)</sup>	—	144,246	144,246	<0.1%
	Diurnal Group plc	15,000	—	15,000	<0.1%
	EmDot Limited	4	—	4	0.2%
	Encos Limited	5,671	—	5,671	0.3%
	Getech Group plc	8,000	—	8,000	<0.1%

Director/ Company Secretary	Company name	Shares held at 1 January 2017	Number of shares acquired/ (disposed) in the period	Number of shares held at 31 December 2017	%
	hVivo plc	61,340	—	61,340	<0.1%
	Istesso Limited <sup>(V)</sup>	313,425	—	313,425	0.5%
	Perachem Holdings plc	4,830	—	4,830	<0.1%
	Mirriad Advertising plc <sup>(I)</sup>	16,667	—	16,667	<0.1%
	MDL 2016 Limited — Ordinary shares	361	—	361	<0.1%
	MDL 2016 Limited — A shares	28	—	28	<0.1%
	Modern Water plc	7,250	—	7,250	<0.1%
	Oxford Nanopore Technologies Limited	1,581	—	1,581	<0.1%
	Summit Therapeutics plc	798	—	798	<0.1%
	Surrey Nanosystems Limited	88	—	88	<0.1%
	Tissue Regenix Group plc	50,000	—	50,000	<0.1%
	Xeros Technology Group plc	1,392	—	1,392	<0.1%
<b>David Baynes</b>	Alesi Surgical Limited	4	—	4	<0.1%
	Arkivum Limited	377	—	377	<0.1%
	Creavo Technologies Limited	46	—	46	<0.1%
	Diurnal Group plc	73,000	—	73,000	0.1%
	Mirriad Advertising plc <sup>(I)</sup>	16,667	—	16,667	<0.1%
	Oxford Nanopore Technologies Limited	174	—	174	<0.1%
	Ultrahaptics Holdings Limited	26	—	26	<0.1%
	Zeetta Networks Limited	424	—	424	<0.1%
<b>Angela Leach</b>	Alesi Surgical Limited	2	—	2	<0.1%
	Avacta Group plc	1,897	—	1,897	<0.1%
	Boxarr Limited	102	—	102	<0.1%
	Capsant Neurotechnologies Limited	1,858	—	1,858	0.1%
	Cloud Sustainability Limited <sup>(II)</sup>	10	(10)	—	0.0%
	Creavo Technologies Limited	23	—	23	<0.1%
	Cronin Group plc	68,101	—	68,101	<0.1%
	Ditto AI Limited <sup>(IV)(III)</sup>	—	180,308	180,308	<0.1%
	Diurnal Group plc	11,500	—	11,500	<0.1%
	Gunsynd plc	7,990	—	7,990	<0.1%
	First Light Fusion Limited	17	10	27	<0.1%
	Getech Group plc	2,083	—	2,083	<0.1%
	hVivo plc	25,903	—	25,903	<0.1%
	Istesso Limited <sup>(V)</sup>	322,923	—	322,923	0.5%
	Mirriad Advertising plc <sup>(I)</sup>	16,667	—	16,667	<0.1%
	MDL 2016 Limited — Ordinary Shares	606	—	606	<0.1%
	MDL 2016 Limited — A Shares	102	—	102	0.2%
	Modern Water plc	15,570	—	15,570	<0.1%
	Oxford Nanopore Technologies Limited	1,782	—	1,782	<0.1%
	Structure Vision Limited	21	—	21	0.1%
	Surrey Nanosystems Limited	90	—	90	<0.1%
	Tissue Regenix Group plc	276,791	(130,000)	146,791	<0.1%
	Ultrahaptics Holdings Limited	5	—	5	<0.1%
	Xeros Technology Group plc	5,666	(3,971)	1,695	<0.1%

I. Mirriad Advertising plc was formerly known as Mirriad Advertising Limited

II. Cloud Sustainability Limited was acquired during the year by Ditto AI Limited

III. Itaconix plc was formerly known as Revolymer plc

IV. Ditto AI Limited was formerly known as Empircom Limited

V. Istesso Limited was formerly known as Modern Biosciences plc

## ii) Key management personnel compensation

Key management personnel compensation comprised the following:

	2017 £000s	2016 £000s
Short-term employee benefits <sup>(i)</sup>	2,144	1,489
Post-employment benefits <sup>(ii)</sup>	116	71
Other long-term benefits	—	—
Termination benefits	—	—
Share-based payments <sup>(iii)</sup>	837	623
<b>Total</b>	<b>3,097</b>	<b>2,183</b>

- I. Represents key management personnel's base salaries, benefits including cash in lieu of pension where relevant, and the cash settled element of the Annual Incentive Scheme.
- II. Represents employer contributions to defined contribution pension and life assurance plans
- III. Represents the accounting charge for share based payments, reflecting LTIP and DBSP options currently in issue as part of these schemes. See note 22 for a detailed description of these schemes.

## c) Portfolio companies

### i) Services

The Group earns fees from the provision of business support services and corporate finance advisory to portfolio companies in which the Group has an equity stake. Through the lack of control over portfolio companies these fees are considered arms-length transactions. The following amounts have been included in respect of these fees:

	2017 £m	2016 £m
<b>Statement of comprehensive income</b>		
Revenue from services	1.9	1.6
<b>Statement of financial position</b>		
Trade receivables	0.5	0.7

### ii) Investments

The Group makes investments in the equity and debt of unquoted and quoted investments where it does not have control but may be able to participate in the financial and operating policies of that company. It is presumed that it is possible to exert significant influence when the equity holding is greater than 20%. The Group has taken the investment entity exception as permitted by IFRS 10 and has not equity accounted for these investments, in accordance with IAS 28, but they are related parties. The total amounts included for investments where the Group has significant influence but not control are as follows:

	2017 £m	2016 £m
<b>Statement of comprehensive income</b>		
Net gains/(losses) on disposals	0.7	—
Change in fair value of equity and debt investments	49.0	(17.9)
<b>Statement of financial position</b>		
Equity and debt investments	619.5	200.7

## d) Subsidiary companies

Subsidiary companies that are not 100% owned either directly or indirectly by the parent Company have intercompany balances with other Group companies totalling as follows:

	2017 £m	2016 £m
<b>Statement of financial position</b>		
Intercompany balances with other Group companies	3.2	10.7

These intercompany balances represent funding loans provided by Group companies that are interest free, repayable on demand and unsecured.

## 25. Capital Management

The Group's key objective when managing capital is to safeguard the Group's ability to continue as a going concern so that it can continue to provide returns for shareholders and benefits for other stakeholders.

The Group sets the amount of capital in proportion to risk. The Group manages the capital structure, and makes adjustments to it, in light of changes in economic conditions and the risk characteristics of its underlying assets. In order to maintain or adjust the capital structure, the Group may adjust the amount of issued new shares or dispose of interests in more mature portfolio companies.

During 2017, the Group's strategy, which was unchanged from 2016, was to maintain healthy cash and short-term deposit balances that enable it to provide capital to all portfolio companies, as determined by the Group's investment committee, whilst having sufficient cash reserves to meet all working capital requirements in the foreseeable future.

The Group has an external debt facility with associated covenants that are described in Note 19.

## 26. Capital Commitments

### Commitments to university partnerships

A number of the Group's partnerships with research intensive universities in the UK include certain arrangements to provide seed capital to spin-out companies arising from such universities. As at 31 December 2017, the balances were as follows:

Partnership	Year of commencement of partnership	Original commitment £m	Invested to date £m	Remaining commitment £m
University of Southampton <sup>(i)</sup>	2002	5.0	3.6	1.4
King's College London <sup>(ii)</sup>	2003	5.0	1.8	3.2
University of York — CNAP <sup>(iii)</sup>	2003	0.8	0.2	0.6
University of Leeds <sup>(iv)</sup>	2005	4.2	1.5	2.7
University of Bristol <sup>(v)</sup>	2005	5.0	1.2	3.8
University of Surrey <sup>(vi)</sup>	2006	5.0	0.5	4.5
University of York <sup>(iii)</sup>	2006	5.0	0.3	4.7
Queen Mary University of London <sup>(vii)</sup>	2006	5.0	0.8	4.2
University of Bath <sup>(viii)</sup>	2006	5.0	0.4	4.6
University of Glasgow <sup>(ix)</sup>	2006	5.0	2.0	3.0
University of Manchester <sup>(x)</sup>	2013	7.5	0.5	7.0
		<b>52.5</b>	<b>12.8</b>	<b>39.7</b>

- I. Under the terms of an agreement entered into in 2002 between the Group, the University of Southampton and certain of the University of Southampton's subsidiaries, IP2IPO Limited agreed to make £5.0m available for the purposes of making investments in University of Southampton spin-out companies.
- II. Under the terms of an agreement entered into during 2003 between the Group and King's College London ("KCL") and King's College London Business Limited (formerly KCL Enterprises Limited), the Group agreed to make £5.0m available for the purposes of making investments in spin-out companies. Under the terms of this agreement, KCL was previously able to require the Company to make a further £5.0m available for investments in spin-out companies on the tenth anniversary of the partnership. However, the 2003 agreement was terminated and replaced by a revised agreement between the same parties on 12 November 2010. Under the revised agreement, the Group agreed to target investing the remaining commitment of £3.2m over a three-year period; KCL cannot, however, require the Group to make any additional funds available. Other changes effected by the revised agreement included the removal of the Group's automatic entitlement to initial partner equity in every spin-out company and/or a share of KCL's licensing fees from intellectual property commercialisation and to the termination rights of the parties.
- III. In 2003, the Group entered into an agreement with the University of York. The agreement relates to a specialist research centre within the University of York, the Centre for Novel Agricultural Products ("CNAP"). The Group has committed to invest up to a total of £0.8m in spin-out companies based on CNAP's intellectual property. In 2006, the Group extended its partnership with the University of York to cover the entire university. The Group has committed to invest £5.0m in University of York spin-outs over and beyond the £0.8m commitment as part of the Group's agreement with CNAP. The agreement with the University of York was amended during 2013 so as to alter the process by which the Group evaluates commercialisation opportunities and the level of initial partner equity the Group is entitled to as a result. Further, the Group's automatic entitlement to share in any of the University of York's proceeds from out-licensing has been removed from the agreement.
- IV. The Group extended its partnership with the University of Leeds in July 2005 by securing the right with associated contractual commitment to invest up to £5.0m in University of Leeds spin-out companies. This agreement was varied in March 2011 to, amongst other things, remove the Group's entitlement to a share of out-licensing income generated by the University of Leeds except in certain specific circumstances where the Group is involved in the relevant out-licensing opportunity. Under the terms of the variation agreement, subject to quality and quantity of the investment opportunities, the Group, IP Assist Services Limited and the University of Leeds have agreed to target annual investments of at least £0.7m in aggregate and, subject to earlier termination or the parties otherwise agreeing alternative target, to review this target on 30 April 2017.
- V. In December 2005, the Group entered into an agreement with the University of Bristol. The Group has committed to invest up to a total of £5.0m in University of Bristol spin-out companies.
- VI. Under the terms of an agreement entered into in 2006 between the Group and the University of Surrey, the Group has committed to invest up to a total of £5.0m in spin-out companies based on the University of Surrey's intellectual property.
- VII. In July 2006, the Group entered into an agreement with Queen Mary University of London ("QM") to invest in QM spin-out companies. The Group has committed to invest up to a total of £5.0m in QM spin-out companies. The agreement was amended in January 2014, primarily to remove the Group's entitlement to licence fees save where it is involved in the development or licensing of the relevant IP and, in most cases, to replace the Group's automatic entitlement to a share of the initial equity in any spin-out company with an equivalent warrant exercisable at the seed stage of the relevant company.
- VIII. In September 2006, the Group entered into an agreement with the University of Bath to invest in University of Bath spin-out companies. The Group has committed to invest up to a total of £5.0m in University of Bath spin-out companies. The agreement with the University of Bath was amended during 2009 so as to remove the Group's automatic entitlement to a share of the initial equity or licence fees (as applicable) received by the University of Bath from the commercialisation of its intellectual property in the event that the Group and its employees have not been actively involved in developing the relevant opportunity.
- IX. In October 2006, the Group entered into an agreement with the University of Glasgow to invest in University of Glasgow spin-out companies. The Group has committed to invest up to a total of £5.0m in University of Glasgow spin-out companies.

- X. In February 2013, the Group entered into a commercialisation agreement with the University of Manchester. Initially the Group had agreed to make available an initial facility of up to £5.0m to provide capital to new proof of principle projects (excluding graphene projects) intended for commercialisation through spin-out companies. During January 2014, the Group extended its agreement to include funding for graphene projects; increased the capital commitment by a further £2.5m, bringing the total to £7.5m; and extended the agreement to 2019.

### Commitments to limited partnerships

Pursuant to the terms of their Limited Partnership agreements, the Group has committed to invest the following amounts into Limited Partnerships as at 31 December 2017:

Partnership	Year of commencement of partnership	Original commitment £m	Invested to date £m	Remaining commitment £m
IP Venture Fund	2006	3.1	3.0	0.1
IP Venture Fund II L.P.	2013	10.0	6.6	3.4
UCL Technology Fund LP	2016	24.8	6.1	18.7
Apollo Therapeutics LLP	2016	3.3	0.4	2.9
<b>Total</b>		<b>41.2</b>	<b>16.1</b>	<b>25.1</b>

### 27. Acquisition of subsidiaries

The Group completed two corporate transactions in 2017, the combination with AIM-listed Touchstone Innovations plc in October and the acquisition of Parkwalk Advisors Ltd in January. Touchstone Innovations creates, builds and invests in technology companies and licensing opportunities developed from scientific research from the 'Golden Triangle', the geographical region broadly bounded by London, Cambridge and Oxford and Parkwalk is the UK's leading university spin-out focused EIS fund manager.

#### Touchstone Innovations plc:

On 17 October 2017 the Group acquired 100% of the ordinary shares in Touchstone Innovations in exchange for 357,518,520 ordinary shares in IP Group plc. The acquisition has been accounted for using the acquisition method. The consolidated financial statements for the year ending 31 December 2017 include the results of Touchstone Innovations for the period post the acquisition date.

	Fair value net assets/(liabilities) £m
<b>Net assets acquired</b>	
Acquired intangible assets	6.9
Investment portfolio	352.2
Other non-current assets	6.7
Trade and trade receivables	2.9
Cash and cash equivalents	119.1
Current liabilities	(7.5)
Non-current liabilities	(88.3)
Net assets	392.0
Goodwill	108.5
Total consideration	500.5

Consideration satisfied by:

Issue of share capital (357,518,520 IP Group ordinary shares at 140.0 pence per share <sup>(i)</sup> )	500.5
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- (i) Being the closing price of IP Group plc shares on 17 October 2017, the date of acquisition

Goodwill recognised on acquisition of Touchstone relates to the value attributable to its access to early stage commercialisation activities with top tier UK universities and the benefits from increased scale and critical mass and a more diverse portfolio the Group expects to benefit from. None of the goodwill recognised is expected to be deductible for tax purposes.

In the period since acquisition, Touchstone contributed £3.8m in portfolio return and revenue and profit of £0.3m to the Group's results. Ordinarily the Group would also disclose the group consolidated revenue and profit had the acquisition occurred on 1 January 2017 in accordance with IFRS 3 however, management have determined it impractical to do so. It has been determined to be impractical as the retrospective application requires assumptions about what management's intent would have been for the period and also requires significant estimates of amounts and it is impossible to distinguish objectively information about those estimates that provides evidence of circumstances that existed on the dates as at which those amounts are to be recognised, measured and disclosed and would have been available when the financial statements for that prior period were authorised for issue from other information. Specifically, this relates to the valuation of unquoted equity investments.

In accordance with the terms of the acquisition agreement, the Group exchanged equity-settled share based payment awards held by employees of Touchstone for equity settled share based payment awards of IP Group. The details of the acquirees' awards and replacement awards were as follows:

	Acquirees' awards	Replacement awards
<b>Terms and conditions</b>		
Scheme 1:		
Grant date:	26/11/2014	n/a
Vesting date:	26/11/2019 – 26/11/2024	26/11/2019 – 26/11/2024
Service conditions:	Continued employment	Continued employment
Fair value at acquisition:	£0.4	£0.4
Scheme 2:		
Grant date:	04/11/2015	n/a
Vesting date:	26/11/2019 – 26/11/2024	26/11/2019 – 26/11/2024
Service conditions:	Continued employment	Continued employment
Fair value at acquisition:	£0.4	£0.4
Scheme 3:		
Grant date:	23/11/2016	n/a
Vesting date:	02/12/2019	02/12/2019
Service conditions:	Continued employment	Continued employment
Fair value at acquisition:	£0.2m	£0.2m
Scheme 4:		
Grant date:	23/11/2016	n/a
Vesting date:	02/12/2020	02/12/2020
Service conditions:	Continued employment	Continued employment
Fair value at acquisition:	£0.2m	£0.2m
Scheme 5:		
Grant date:	23/11/2016	n/a
Vesting date:	02/12/2021	02/12/2020
Service conditions:	Continued employment	Continued employment
Fair value at acquisition:	£0.2m	£0.2m
Scheme 6:		
Grant date:	17/10/2017	n/a
Vesting date:	02/12/2022	02/12/2022
Service conditions:	Continued employment	Continued employment
Fair value at acquisition:	£0.3m	£0.3m

The value of the total replacement awards was £1.7m.

The Group incurred acquisition costs of £6.2m and a further £2.9m of restructuring costs in relation to the combination with Touchstone. Further details on acquisition and restructuring costs are included in note 8.

#### **Parkwalk Advisors Ltd:**

On 31 January 2017, the Group acquired 100% of the share capital of Parkwalk Advisors Ltd ("Parkwalk"), the UK's leading university spin-out focused EIS fund manager. The initial consideration comprises £5.0m payable in cash, £2.5m payable in the form of newly issued IP Group ordinary shares and an additional working capital payment of £1.8m.

	Fair value net assets/(liabilities) £m
<b>Net assets acquired</b>	
Net assets	1.5
Acquired intangible assets	2.1
Net assets	3.6
Goodwill	5.7
Total consideration	9.3
Consideration satisfied by:	
Cash	6.8
Issue of share capital	2.5

Total consideration paid includes the cost of cash paid, shares issued to date and the present value of contingent amounts expected to be paid.

Goodwill recognised on the acquisition of Parkwalk is attributable to the technical skills, experience and track record of its investment and marketing teams in its niche sector as specialist EIS fund manager, its significant assets under management and its strong links to leading UK universities. None of the goodwill recognised is expected to be deductible for tax purposes.

For the period from acquisition to 31 December 2017, Parkwalk contributed net revenue of £3.2m and profit of £1.6m to the Group's results. If the acquisition had occurred on 1 January 2017, management estimates that the consolidated net revenue would have been £4.5m and consolidated profit would have been £1.9m. In determining these amounts, management has assumed that the fair value adjustments, determined provisionally, that arose on the date of acquisition would have been the same if the acquisition had occurred on 1 January 2017.

Consideration of £9.3m has been recognised to date, and a further £4.4m cost has been recognised in relation to the deferred and contingent consideration payable to the sellers in the year and deemed under IFRS3 to represent a payment for post-acquisition services.

The Group incurred acquisition costs of £0.1m in relation to the acquisition of Parkwalk in January and a further £0.4m was incurred in 2016 which comprised legal and due diligence fees. Further details on acquisition and restructuring costs are included in note 8.

## 28. Alternative Performance Measures ("APM")

IP Group management believes that the alternative performance measures included in this document provide valuable information to the readers of the consolidated financial information as they enable the reader to identify a more consistent basis for comparing the business' performance between financial periods and provide more detail concerning the elements of performance which the managers of the Group are most directly able to influence or are relevant for an assessment of the Group. They also reflect an important aspect of the way in which operating targets are defined and performance is monitored by the directors. These measures are not defined by IFRS and therefore may not be directly comparable with other companies' APMs, including those in the Group's industry. APMs should be considered in addition to, and are not intended to be a substitute for, or superior to, IFRS measurements.

The Directors believe that these APMs assist in providing additional useful information on the underlying trends, performance and position of the Group. APMs are used to enhance the comparability of information between reporting periods and aid the user in understanding the Group's performance. Consequently, APMs are used by the Directors and management for performance analysis, planning, reporting and incentive-setting purposes.

APM	Reference for reconciliation	Definition and purpose	Calculation		
<b>Hard NAV</b>	- Primary statements	Hard NAV is defined as the total equity of the Group less intangible assets.  Excluding intangible assets highlights the Group's assets that management can be reasonably expected to influence in the short term and therefore reflects the short-term resources available to drive future performance. Additionally, excluding intangible assets allows better comparison with the Group's competitors, many of which operate under fund structures and therefore would not include intangible assets.  The measure shows tangible assets managed by the Group. It is used as a performance metric for directors and employees as a part of annual incentives in the Group.		<b>2017</b>	2016
				<b>£m</b>	£m
			Total equity	<b>1,508.5</b>	768.7
			<i>Excluding:</i>		
			Goodwill	<b>172.1</b>	57.1
			Other intangible assets	<b>10.2</b>	5.1
			<b>Hard NAV</b>	<b>1,326.2</b>	706.5
<b>Hard NAV per share</b>	- Primary statements - note 20	Hard NAV per share is defined as Hard NAV, as defined above, divided by the number of shares in issue.  The measure shows tangible assets managed by the Group per share in issue. It is a useful measure to compare to the Group's share price.		<b>2017</b>	2016
			Hard NAV	<b>£1,326.2m</b>	£706.5m
			Shares in issue	<b>1,057,383,601</b>	565,648,168
			<b>Hard NAV per share</b>	<b>125.4p</b>	125.0p

<b>Return on Hard - NAV</b>	Primary statements	Return on Hard NAV is defined as the total comprehensive income or loss for the year excluding charges which do not impact on Hard NAV, specifically amortisation of intangible assets, share based payment charges and the charge in respect of deferred and contingent consideration deemed to represent post acquisition services under IFRS3. Return on Hard NAV is defined as the total comprehensive income or loss for the year excluding charges which do not impact on Hard NAV, specifically amortisation of intangible assets, share based payment charges and the charge in respect of deferred and contingent consideration deemed to represent post acquisition services under IFRS3.		<b>2017</b>	2016
				<b>£m</b>	£m
			Total comprehensive income	<b>53.4</b>	(14.7)
			<i>Excluding:</i>		
			Amortisation of intangible assets	<b>3.9</b>	5.6
			Share based payment charge	<b>2.4</b>	1.5
<b>Return on Hard NAV excluding acquisition and restructuring costs</b>	Primary statements	Return on Hard NAV excluding acquisition and restructuring costs is defined as Return on Hard NAV, as above, excluding acquisition and restructuring costs.  The measure shows the profit for the year excluding accounting adjustments and material one-off costs in relation to the corporate transactions. It allows for easier comparison with previous periods and normalises the performance return for the reader.	IFRS3 charge in respect of acquisition of subsidiary	<b>4.4</b>	—
			<b>Return on Hard NAV</b>	<b>64.1</b>	(7.6)
<b>Return on Hard - NAV excluding acquisition and restructuring costs and Touchstone profits since acquisition for AIS performance targets</b>	Primary statements	Return on Hard NAV excluding acquisition and restructuring costs and Touchstone profits since acquisition for AIS performance targets is defined as Return on Hard NAV excluding acquisition and restructuring costs, as above, further excluding Touchstone net results in the period from acquisition to year end.  This measure has been agreed by the Remuneration Committee as the most appropriate basis for short term performance or "AIS" targets in the year due to the costs and performance not controllable by employees eligible for the scheme.		<b>2017</b>	2016
				<b>£m</b>	£m
			Return on Hard NAV	<b>64.1</b>	(7.6)
			<i>Excluding:</i>		
			Acquisition and restructuring costs	<b>9.1</b>	0.4
			<b>Return on Hard NAV excluding acquisition and restructuring costs</b>	<b>73.2</b>	(7.2)
<b>Return on Hard NAV excluding acquisition and restructuring costs and Touchstone profits since acquisition for AIS performance targets</b>	Primary statements	Return on Hard NAV excluding acquisition and restructuring costs and Touchstone profits since acquisition for AIS performance targets is defined as Return on Hard NAV excluding acquisition and restructuring costs, as above, further excluding Touchstone net results in the period from acquisition to year end.  This measure has been agreed by the Remuneration Committee as the most appropriate basis for short term performance or "AIS" targets in the year due to the costs and performance not controllable by employees eligible for the scheme.		<b>2017</b>	2016
				<b>£m</b>	£m
			Return on Hard NAV excluding acquisition and restructuring costs	<b>73.2</b>	(7.2)
			<i>Excluding:</i>		
			Touchstone profit from 17 October 2017	<b>(0.3)</b>	—
			<b>Return on Hard NAV excluding acquisition and restructuring costs and Touchstone profits</b>	<b>72.9</b>	(7.2)

<b>Net portfolio gains</b>	-	Note 15	<p>Net portfolio gains are defined as the movement in the value of holdings in the portfolio due to share price movements or impairments in value, gains or losses on realisation of investments and gains or losses on disposals of subsidiaries.</p> <p>The measure shows a summary of the income statement gains and losses which are directly attributable to the portfolio which is a headline measure for the Group's performance. This is a key driver of the Return on Hard NAV which is the performance metric for directors' and employees' annual incentives.</p>		<b>2017</b>	2016
					<b>£m</b>	£m
				Change in fair value of equity and debt investments	<b>49.0</b>	7.0
				Gain on disposal of equity investments	<b>0.1</b>	(0.5)
				Gain on disposal of subsidiary	<b>45.1</b>	
				<b>Net portfolio gains</b>	<b>94.2</b>	6.5

## 29. Post Balance Sheet Events

Between 31 December 2017 and the 28 March 2018 the fair value of the Group's holdings in companies whose shares are listed on the AIM experienced a combined net fair value decrease of £30.1m.

In March 2018 portfolio company Oxford Nanopore Technologies Limited announced it had raised £100m in new investment. Funds were raised from global investors including GIC (Singapore), CCB International (China), Hostplus (Australia) and existing investors. The funds will be used to support the company's next stage of commercial expansion.