



FOR RELEASE ON

26 March 2019

**("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 2018.

Portfolio highlights

- Fair value of portfolio: £1,128.2m (2017: £1,099.8m)
- Net portfolio loss¹ of £48.4m (2017: gain of £94.2m)
- Portfolio cash realisations: £29.5m (2017: £6.6m)
- Capital provided by IP Group to portfolio companies and projects: £100.9m (2017: £71.2m), with Parkwalk Advisors investing a further £20.3m (2017: £13.4m)
- Total funds raised by portfolio companies of £695m (2017: £315m)
- Oxford Nanopore completed £100m financing round plus £50m investment from NASDAQ-listed Amgen; significant commercial progress
- Ceres Power raised new capital of £74m from financial investors, and new strategic partners Bosch and Weichai Power
- Microbiotica signed microbiome collaboration with Genentech worth up to \$534m
- Avacta Group plc signed development alliance with LG Chem Life Sciences worth up to \$310m
- Artios Pharma completed £65m funding round
- Ultrahaptics completed £35m funding round
- IP Group Australasia completed its first two spin-out investments

Financial and operational highlights

- Hard NAV¹ £1,217.5m (2017: £1,295.8m)
- Net assets £1,218.2m (2017: £1,508.5m)
- Gross cash and deposits £219.0m (2017: £326.3m)
- Return on Hard NAV¹ of negative £75.6m (2017: positive £64.1m)
- Loss for the year of £90.6m before exceptional goodwill impairment¹ of £203.2m (2017: profit £53.4m; £nil)
- Annual synergies achieved from Touchstone integration of £8m by full year 2020
- US business attracted external funding from privately held US blue-chip family office
- Appointment of Sir Douglas Flint as Chairman and Heejae Chae as Non-Executive Director

Post period end highlights

- Featurespace completed £25.0m funding round
- Technology Transfer Operations transferred back to Imperial College; resulting in annual cost savings of c.£3m

¹ Alternative performance measure, see Note 27 for definition and reconciliation to IFRS primary statements.

Alan Aubrey, Chief Executive of IP Group, said: "2018 has been a year of consolidation for the Group as we finalised the integration of Touchstone Innovations and identified significant cost synergies that are now starting to come through. We remain excited by the enlarged portfolio which we continue to believe will deliver significant benefits for all stakeholders.

Material progress was made on a number of fronts in 2018, notably the maturation of our model and portfolio with cash realisations rising more than fourfold to £29.5m while our portfolio companies raised £695m, more than double the prior year. While market conditions for AIM-listed small-cap companies were challenging, there was significant commercial progress among many of the key companies in our portfolio, now valued at £1.1bn.

We retain a high level of confidence in our portfolio, with many of our companies due to reach material inflexion points this year, and the benefits that will accrue sustainably to shareholders in the years ahead.

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Notes

(i) Nature of announcement

This Annual Results Release was approved by the directors on 25 March 2019.

The financial information set out in this Annual Results Release does not constitute the company's statutory accounts for 2018 or 2017. Statutory accounts for the years ended 31 December 2018 and 31 December 2017 have been reported on by the Independent Auditor. The Independent Auditor's Reports on the Annual Report and Financial Statements for 2018 and 2017 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 2017 have been filed with the Registrar of Companies. The statutory accounts for the year ended 31 December 2018 will be delivered to the Registrar following the Company's annual general meeting.

The 2018 Annual Report and Accounts will be published in April 2019 and a copy will be posted on the Group's website (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 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.

STRATEGIC REPORT

Chairman's summary

2018 was a year of consolidation for IP Group as it bedded down its acquisition of Touchstone Innovations plc ('Touchstone') and navigated public investment markets that were not particularly favourable towards smaller technology focussed companies, given broader market uncertainties. Therefore, realisation opportunities at valuations that made sense were limited, given the Group's assessment of long-term potential. Encouragingly, our longer-term valuation perspective was reinforced by a number of third-party investments into and partnership collaborations across a number of our most important portfolio companies during the year. Our portfolio companies as a whole raised £695m, the highest annual total so far. Alan Aubrey will cover these in more detail in his report.

This is my inaugural report as Chairman of IP Group, having taken over the role in November last year. I want to record on behalf of shareholders and the Board our gratitude to my predecessor, Mike Humphrey, for his commitment and wise counsel, initially as a non-executive director upon joining the Board in October 2011, before becoming Non-executive Chairman in March 2015.

Technology is reshaping the world at least as significantly as the geopolitics which attracts so much media attention. This is increasingly apparent in areas where technology leadership commands global market dominance or has strategic implications. But it is also the key to addressing some of the world's most pressing challenges in disease prevention and mitigation, in the transition to a less carbon intense energy world and in productivity improvement. These are all core areas of focus within IP Group with its focus on backing and building world-changing businesses, based on innovative science and technology. This focus is enabled through collaboration with the science and engineering departments of leading universities in the UK, the United States and Australasia.

By way of illustration of the impact of IP Group, with your support, the Group has invested more than £850m to date in the UK in science and technology and created more than 300 companies which, in aggregate, have raised approximately £4.7bn of funding. Through these endeavours, we calculate more than 5,000 jobs have been created across the UK.

In addition, the Group's portfolio companies are, from the outset, truly international in outlook, as technology has few national boundaries, so projecting the 'Global Britain' positioning that will be increasingly important to the UK's future trading success.

One simple illustration of this in 2018 was the £7m investment by portfolio company Ceres Power in a new, state of the art manufacturing facility in Redhill in the UK, creating 60 new jobs as demand, largely from overseas, for its low cost, next generation fuel cell technology expanded. Alongside this, as part of a broader strategic collaboration with Weichai Power, one of the leading automobile and equipment manufacturing companies in China, Ceres Power announced a joint venture for a major new fuel cell manufacturing facility in Shandong, China, subject to completion of successful trials.

Alan's operational review, which follows, highlights the other key events during the year within the Group's portfolio.

Financial performance

The Group had a disappointing financial performance in 2018, the most significant driver of which was share price declines of a number of AIM listed portfolio companies. 2018 was the first year for a long time that the world's major equity markets all declined, with the FTSE100 down 12%, FTSEAIM down 19%, the S&P500 down 10% and NASDAQ down 8%. China's 'A' share market fell by 12%.

Given the long-term focus of the Group's business, management's key financial performance indicator remains Hard NAV and this is the core element of the incentive portion of directors' remuneration, as approved by shareholders. At the end of 2018, Hard NAV amounted

to £1,217.5m, a reduction of 5.9% over the year, with the fair value of the portfolio broadly flat at £1,128.2m (2017: £1,099.8m). In terms of financial performance for the year, the Group's Return on Hard NAV was negative £75.6m (2017: positive £64.1m). It is important to recognise that, as the Group's business model is long-term in nature, fluctuations in portfolio company valuations and results are to be expected. The Group ended the year with a strong balance sheet with gross cash and deposits of £219.0m (2017: £326.3m).

The Board remains focused on actions that will bring the Group into a more sustainable position and has taken steps to streamline its operations following the Touchstone acquisition in late 2017. Following modest headcount reductions and other combination synergies, such as rationalising duplicated professional adviser and similar costs during 2018, on 28 February 2019 we agreed to transfer back to Imperial College their Technology Transfer Operations. In this way we have reduced both cost and complexity in the Group's business. We also began the process of slimming the portfolio, disposing of a number of smaller investments.

Given these operational changes, the current macroeconomic climate and the recent performance of the Group's portfolio, considerable Board focus was directed to the carrying value of goodwill on the Group's balance sheet, the significant majority of which arose from the nil-premium, all-paper acquisition of Touchstone and it was clear that this should be written off. Although the resulting non-cash charge does not impact the Group's key performance indicator of Hard NAV, which has always excluded goodwill, this action resulted in an overall reported IFRS loss for the year of £293.7m (2017: profit £53.4m). It is also worth reiterating at this point that the strategic rationale for the Touchstone acquisition, i.e. that of scale, liquidity and a more balanced portfolio by sector and stage of development, remains sound.

Governance and the Board

At Board level, there have been a number of changes this year in addition to the departure of the previous Chairman, Mike Humphrey, following his indication earlier in the year that he wished to retire.

Sadly, we also said goodbye to Professor Lynn Gladden during 2018 following her appointment as Executive Chairman of the Engineering and Physical Sciences Research Council (EPSRC) in October. She left the Board at the end of September and I would like to express on behalf of shareholders and the Board our thanks to her for her dedicated service since joining the Board in 2014.

Heejae Chae, Chief Executive of AIM-listed Scapa Group plc, was appointed as Non-executive Director in May. He brings to the Board considerable experience both from the perspective as a CEO of growing businesses and in finance, having spent the early part of his career at The Blackstone Group and Credit Suisse First Boston. Mr Chae has degrees in Economics and Engineering from Columbia University and an MBA from Harvard University.

Our people

A key focus for the Board is recruitment and retention of the talent needed to drive long-term sustainable success for the Group. As we integrated Touchstone into the Group it reinforced the imperative to create an environment of collaboration, co-operation and collegiality, but also one that encourages challenge and questioning, given the high degree of ambiguity and uncertainty that surrounds the world of technology and life science investment.

The culture we aim for at IP Group is necessarily entrepreneurial while being collaborative, reflecting the Group's purpose of evolving great ideas into world-changing businesses. As we partner with academic institutions, it is critical that we have a highly skilled workforce who can work constructively in partnership to help foster the commercialisation of novel science. IP Group's core values of being 'passionate, pioneering and principled' guide the behaviours the Group wishes to see not only in its general endeavours but also in its interactions with all stakeholders. We believe that these values and behaviours have contributed positively to the portfolio that we have built over many years and we will be exploring how we refine and build on them to deliver future success. I have been particularly impressed by the quality and enthusiasm of IP Group's team and their overwhelming ambition to make a difference to the world through building the companies of the future.

Outlook

IP Group's portfolio is both well diversified and maturing and we remain confident that it will deliver appropriate and meaningful returns for stakeholders over the medium to long term. I would like to thank our staff, academic partners and portfolio companies for their commitment and contribution during the year as well as our shareholders for their continued support.

Sir Douglas Flint
Chairman

Chief Executive's operational review

UK business

The results for the period, which showed a negative Return on Hard NAV of £75.6m compared to a positive return of £64.1m for 2017, were impacted by the exposure of our quoted portfolio to the weaker performance of stock markets as well as certain company specific issues, the biggest of which was Diurnal. This financial performance does not, we believe, reflect the underlying strength and quality of IP Group's portfolio and overshadows the commercial progress seen in the year from a number of our key assets which are emerging as the leaders in their respective fields.

Turning first to Diurnal, its shares fell 78% over the year, resulting in a £33.1m reduction in the value of our holding, after its drug Chronocort did not meet the primary endpoint in a Phase 3 study in congenital adrenal hyperplasia (CAH). IP Group has invested a total of £19.4m into Diurnal to date and the company is currently valued at £19.7m on AIM. Despite the headline results, the company is optimistic that the drug remains approvable, given some very positive outcomes using other measures in the Phase 3 study, and that premium pricing is still possible. You can read more in the life sciences report below.

Excluding Diurnal, the Group's quoted portfolio fell 35% in 2018, against a 19% decline in the performance of the AIM index which has suffered this year from a number of well-documented factors. Including Diurnal, the Group's quoted portfolio fell 43% during 2018. Of the bigger quoted share price falls were Xeros Technology Group (£21.1m loss), Circassia (£14m loss) and Mirriad Advertising (£12.3m loss), in addition to a £12.4m loss for private company Cell Medica Limited. These falls more than offset fair value gains, the largest of which came from Garrison Technology (£15.2m gain), Ceres Power (£11.1m gain), Uniformity Labs (£9.0m gain) and Featurespace (£9.6m gain).

I am also pleased to report that there was strong commercial progress in the year from a number of our portfolio companies. Oxford Nanopore Technologies, Ceres Power and WaveOptics have all signed partnerships with blue chip companies further validating their respective technologies. In particular, Ceres Power signed agreements with China's Weichai Power and Germany's Robert Bosch. In the private portfolio, NASDAQ-listed Amgen invested £50m into Oxford Nanopore Technologies while WaveOptics agreed a partnership with and investment from Goertek, a global leader in the design and manufacturing of high-tech consumer electronics.

In the quoted portfolio, there was excellent commercial progress from a number of companies that, in our opinion, has not yet been reflected in their share prices. Tissue Regenix (£4.6m loss) announced that its subsidiary CellRight Technologies entered into an agreement to allow Arthrex, Inc. to distribute its proprietary 'BioRinse' bone portfolio throughout Europe, with the initial focus on the UK. Avacta Group (£5m loss) signed a development alliance with LG Chem Life Sciences worth up to \$310m including \$180m across upfront, near-term payments and development milestones. Medaphor, which has changed its name to Intelligent Ultrasound Group plc, is expecting turnover for 2018 to increase by approximately 27% to between £5.3m and £5.4m.

Touchstone integration

From an operational perspective, in 2018 one of the most significant areas of focus for the Group was finalising the integration of the Touchstone team and portfolio, which I am pleased to report is now substantially complete.

The former Touchstone and IP Group portfolio companies are being managed together in the UK by our Life Sciences and Technology partnerships that were formed in the year from a combination of professionals from both businesses. While there has been a level of further reduction in the fair values of some of the former Touchstone companies, the combined portfolio is now well-balanced by sector and stage of development and contains a number of opportunities for significant future value growth.

While the strategic rationale of the transaction was primarily one of scale and combined portfolio strength, it also presented the opportunity to realise synergies from an operational perspective. During the 18 months since the transaction completed, we have taken a number of steps to streamline the two businesses. Most recently, in the first quarter of 2019, we agreed to transfer back to Imperial College the technology transfer operation known previously as Imperial Innovations. This will not impact our plans to continue to work with Imperial and continue to invest in some of the most exciting opportunities from the university.

There has been some modest headcount reduction, outside of the transfer of the technology transfer team to Imperial College. We have taken the opportunity to rationalise professional fees and other administrative costs, particularly for services duplicated across the two businesses, including the costs of Touchstone being a listed entity. Finally, in March 2019, we surrendered the lease on Touchstone's former head office in Central London. As a result of these actions, we anticipate annual cost synergies by full-year 2020 of more than £8m from the combination versus the pre-integration cost base of the two companies.

North America

Turning to North America, IP Group, Inc. and its portfolio companies continued to make significant developments during the 12-month period. The portfolio attracted \$30m of external investment from both financial and strategic investors and reached several significant milestones. These financing rounds resulted in net portfolio gains in the US portfolio of \$14m during the year, representing an increase of approximately 50% on the opening position. The team also attracted a significant strategic investment into the US business that was led by a privately held blue-chip family office based in the US. We consider these co-investments to be a great endorsement of both our model and attractiveness of the portfolio and future opportunities to US investors.

Of particular note in the portfolio, Exyn Technologies (University of Pennsylvania) completed a series of global commercial engagements, the most recent with Dundee Precious Metals (TMX:DPM), a Canadian-based international mining company, that we believe significantly endorse Exyn's ground-breaking artificial intelligence technology and its commercial relevance. Carisma Therapeutics (University of Pennsylvania), a developer of technology that targets and kills solid tumours, closed a \$53.0m Series A financing round led by AbbVie

Ventures and Healthcap. Uniformity Labs (Princeton University) has made substantial progress establishing relationships with new customers, including multiple validation projects and a signed letter of intent for the supply of aluminium powder.

We added Yale University as a collaboration partner, bringing our total to six prominent universities and three U.S. Department of Energy Labs. We have an established team of 16 professionals with broad business development capabilities across life sciences and technology who continue to advance the existing portfolio of 21 exciting companies.

Australasia

In Australasia, the Group completed its first two investments from partner universities in 2018, Canopus Networks (The University of New South Wales) and Inosi Therapeutics (Monash University). Canopus is using machine learning and software-defined networking to develop solutions for analysing and optimising data flows within telecommunication networks and large corporates. Inosi is developing small-molecule inhibitors of a novel target for fibrosis-related diseases and the Group invested alongside BioCurate, a joint venture of Monash and Melbourne universities for early stage commercialisation of pharmaceutical research.

On the capital side, the Group continued to work with Hostplus, one of Australia's largest superannuation funds with over AU\$34 billion in funds under management, through the AU\$100m IP Group Hostplus Innovation Fund which participated in financings for Oxford Nanopore Technologies and Ultrahaptics in 2018.

Our team in Australasia now totals nine, based between Melbourne, Sydney and Brisbane, and represents a strong blend of expertise and experience in academia, industry and commercialisation. In addition, the Group has established a steering group in Australasia comprising experienced senior executives with a broad range of operational and investment experience. The team has identified an attractive pipeline of opportunities and anticipates progressing several of these to investment in 2019.

Greater China

Many of our portfolio companies have secured investment and business partnerships in China, including Oxford Nanopore, Ceres Power, Mirriad Advertising and Creavo Medical Technologies. The Group considers China to be strategically important and, in September, announced the launch of its office in Hong Kong in order to continue to facilitate market entry, business partnership and investment discussions with relevant Chinese partners for our portfolio companies. This also allows the Group to manage its growing pan-Asian investor base. Following last year's success in Beijing and Shenzhen, the Group hosted its second annual "Global Deep Tech Forum" event in Hong Kong and Shanghai in September where 22 of our portfolio companies introduced their technology and business to hundreds of attendees from the Greater China area.

Outlook

In summary, significant progress was achieved by many of our portfolio companies during 2018, which in our view is yet to be reflected in their valuations. As a result, the Board is confident about the potential of the Group's portfolio including Oxford Nanopore, which commented publicly on significant increases in its order book and has attracted investment from a world-leader in human genetics, First Light Fusion Limited, which aims to demonstrate fusion using its 'Machine 3' by mid-2019 and a number of our therapeutic assets which are approaching key inflexion points.

While IP Group is a long-term business where results can and do fluctuate from year to year, the Board is confident that the portfolio can generate significant returns for stakeholders and in the medium term will begin to position the business for transition to a more self-sustaining model. This will allow the Group to sustainably fulfil its mission of supporting outstanding science from around the world from the eureka moment through to maturity.

Alan Aubrey
Chief Executive Officer

Portfolio review

Overview

At 31 December 2018 the value of the Group's portfolio had increased to £1,128.2m, from £1,099.8m at the end of 2017, as a result of the fair value movements set out below, and a net investment of £71.4m (2017 £64.6m). The portfolio now consists of interests in 147 companies (122 UK, 23 US and 2 Australasia, and 61 of which are of key focus), strategic holdings in three multi-sector platform businesses as well as a further 44 de minimis holdings and 47 organic holdings (2017: 155,3,42,39).

In a departure from previous years, we have categorised the portfolio to highlight those companies on which the life science and tech partnership teams focus a significant proportion of their resources and capital. These 61 companies comprise 84% of the portfolio by value. Outside these companies, the portfolio contains a broad selection of potentially exciting opportunities, many of which are at an early stage, but which typically receive a lower level of management resource and capital.

During the year to 31 December 2018, the Group provided pre-seed, seed and post-seed capital totalling £100.9m to its portfolio companies (2017: £71.2m). The Group deployed capital into nine new companies or projects during the year (2017: 21), five of which were sourced from the UK, two from the US and two from Australasia (2017: 10,11,0). The three geographies have provided consistent pipelines of opportunities, and the Group has backed the best innovations from all three, whilst sustainably managing portfolio size. The new investments in Australasia have helped to further diversify the portfolio geographically and are a reflection of the quality of new research the Group now has access to through the additional university partnerships it formed in 2017.

In 2018 we fully exited three investments (2017: two), and a further 15 companies, with a total historic cost of £8.5m, were closed or fully provided against (2017: two, £2.9m).

During 2018 the cash proceeds from the realisation of investments increased to £29.5m (2017: £6.6m), arising from 14 investments, spread roughly evenly across the sectors and comprising a mix of quoted and private capital. The largest disposals were from interests in Veryan Medical Limited, Abzena plc, Getech Group plc and Concirrus Limited. The largest realisations in the prior year arose from the cash received from the sales of Puridify Limited and Plaxica Limited.

Performance summary

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

	2018 £m	2017 £m
Unrealised gains on the revaluation of investments	99.7	99.3
Unrealised losses on the revaluation of investments	(153.1)	(49.2)
Effects of movement in exchange rates	3.0	(1.1)
Change in fair value of equity and debt investments	(50.4)	49.0
Gain on disposals of equity investments	2.0	0.1
Gain on deconsolidation of subsidiary	—	45.1
Net portfolio gains/(losses)	(48.4)	94.2

The most significant contributors to unrealised gains on the revaluation of investments were Garrison Technology Limited (£15.2m), Ceres Power Holdings plc (£11.1), Featurespace Limited (£9.6m), Uniformity Labs Inc (£9.0m), Wave Optics Limited (£7.6m) and Ultrahaptics Holdings Limited (£6.4m)¹.

The major contributors to the unrealised losses on the revaluation of investments were Diurnal Group plc (£33.1m), Xeros Technology Group plc (£21.1m), Circassia Pharmaceuticals plc (£14.0m), Cell Medica Limited (£12.4m), Mirriad Advertising plc (£12.3m), Actual Experience plc (£8.4m), OxSyBio Limited¹ (6.6m), Abzena plc (£5.2m) and Avacta Group plc (£5.0m).

The performance of the Group's holdings in companies quoted on AIM saw a net unrealised fair value decrease of £99.8m (2017: decrease of £1.0m) while the Group's holdings in unquoted companies experienced a net fair value increase of £46.4m (2017: increase of £49.9m, in addition to a £45.1m gain in respect of the deconsolidation of Istesso Limited and its recognition as a portfolio company).

Investments and realisations

The Group's overall rate of capital deployment increased during 2018, with a total of £100.9m being deployed across 77 new and existing projects (2017: £71.2m, 79 projects). The average level of capital deployed per company remained relatively consistent, at £1.3m, compared to £1.2m in 2017.

Cash invested by company focus was as follows:

	2018 £m	2017 £m
Top 20	26.0	20.7
Focus	41.6	23.7
Other (including companies exited by 31 December 2018)	19.4	20.7
Total United Kingdom	87.0	65.1
United States ²	13.2	6.1
Australasia	0.7	—
Multi-sector platforms	—	—
Total purchase of equity and debt investments	100.9	71.2
Less cash proceeds from sales of equity investments	(29.5)	(6.6)
Net investment	71.4	64.6

²United States investment total includes £1.1m invested in Uniformity Labs, Inc., which is one of the Top 20 holdings by value.

During the year, 9 opportunities received initial incubation or seed funding (2017: 21).

¹Of 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: gain of £1.8m (2017, £2.0m), OxSyBio Limited: loss of £1.3m (2017: gain of £0.7m).

Portfolio analysis by focus

At 31 December 2018, the Group's portfolio fair value of £1,128.2m was distributed across the portfolio as follows:

Stage	As at 31 December 2018				As at 31 December 2017			
	Fair value		Number		Fair value ²		Number	
	£m	%		%	£m	%		%
Top 20 by value	732.5	68%	20	13%	663.0	62%	20	13%
Focus	204.4	19%	41	27%	216.8	20%	41	26%
Other	147.7	13%	89	60%	190.5	18%	97	61%
Total	1,084.6	100%	150	100%	1,070.3	100%	158	100%
<i>De minimis</i> & Organic holdings	8.3				7.2			
Total Portfolio	1,092.9				1,077.5			
Attributable to third parties ¹	35.3				22.3			
Gross Portfolio	1,128.2				1,099.8			

¹ The amount attributable to third parties consists of £18.7m attributable to minority interests represented by third party limited partners in the consolidated fund, IPVFII, £5.5m attributable to minority interests represented by third party limited partners in the consolidated US portfolio, £8.1m attributable to Imperial College London and £3.0m to other third parties (2017: £16.3m IPVFII, n/a US, £5.7m Imperial College, £0.3m other).

² Restated following finalisation of provisional acquisition accounting in respect of Touchstone acquisition (see note 26)

Top 20 investments consist of 20 most valuable holdings in the Group's portfolio by year-end value. Focus investments are those investments that are not within the 20 most valuable but on which the life sciences and technology teams focus a significant proportion of their resources and capital. These investments typically, although not exclusively, fall within the 100 most valuable portfolio company holdings by year-end value. Other companies are those that are not within the Top 20 or focus category.

Companies which are at a very early stage or in which the Group's holding is of minimal value, 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 as a result of our technology transfer relationship with Imperial College London, but in which we have not actively invested.

The total value of the Group's 147 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 £5bn, or almost £6bn including the Group's holdings in multi-sector platform companies, most significantly Oxford Sciences Innovation plc (2017: £4bn, £5bn).

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. 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 as multi-sector platforms. An update on the two primary operating segments is included in the financial review.

Sector	As at 31 December 2018				As at 31 December 2017			
	Fair value		Number		Fair value ²		Number	
	£m	%		%	£m	%		%
Life Sciences	624.5	57%	64	43%	680.1	63%	73	46%
Technology	396.9	37%	83	55%	327.3	31%	82	52%
Multi-sector platforms	63.2	6%	3	2%	62.9	6%	3	2%
Total	1,084.6	100%	150	100%	1,070.3	100%	158	100%
<i>De minimis</i> & Organic holdings	8.3				7.2			
Total Portfolio	1,092.9				1,077.5			
Attributable to third parties ¹	35.3				22.3			
Gross Portfolio	1,128.2				1,099.8			

1. The amount attributable to third parties consists of £18.7m attributable to minority interests represented by third party limited partners in the consolidated fund, IPVFII, £5.5m attributable to minority interests represented by third party limited partners in the consolidated US portfolio, £8.1m attributable to Imperial College London and £3.0m to other third parties (2017: £16.3m, £0.0m £5.7m, £0.3m).

2. Restated following finalisation of provisional acquisition accounting in respect of Touchstone acquisition (see note 26)

The following table lists the value movements attributable to the largest twenty portfolio investments by value, which represent 62.8% of the total portfolio value (2017: 69.0%). 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 2018 ¹ %	Fair value of Group holding at 31 Dec 2017 ² £m	Net investment/ (divestment) £m	Fair value movement and fees settled in equity £m	Fair value of Group holding at 31 Dec 2018 £m
Oxford Nanopore Technologies Limited	Enabling the analysis of any living thing, by any person, in any environment	Life Sciences (U)	18.2%	274.1	—	—	274.1
Istesso Limited	Design and development of novel therapeutic drugs	Life Sciences (U)	59.1%	51.1	2.0	4.8	57.9
Oxford Sciences Innovation plc	University of Oxford preferred IP partner under 15-year framework agreement	Multi-sector platforms (U)	7.6%	55.5	—	—	55.5
Ceres Power Holdings plc	World leading developer of next generation fuel cell technology	Technology (Q)	18.9%	31.5	4.4	11.2	47.1
Garrison Technology Limited	Anti-malware solutions for enterprise cyber defences	Technology (U)	23.4%	9.8	3.8	15.2	28.8
Ultrahaptics Holdings Limited	Contactless haptic technology "feeling without touching"	Technology (U)	23.8%	21.8	0.5	5.2	27.5
Autifony Therapeutics Limited	Developing high value, novel medicines to treat CNS diseases	Life Sciences (U)	28.2%	23.9	—	1.7	25.6
Featurespace Limited	Leading predictive analytics company	Technology (U)	25.4%	15.6	—	9.6	25.2
PsiOxus Therapeutics Limited	Oncolytic viral therapeutics for cancer	Life Sciences (U)	25.0%	22.7	—	—	22.7
Actual Experience plc	Optimising the human experience of networked applications	Technology (Q)	22.1%	28.3	—	(8.4)	19.9
Inivata Limited	Clinical cancer genomics company utilising circulating DNA analysis to improve testing and treatment in oncology	Life Sciences (U)	31.3%	12.8	6.0	—	18.8
First Light Fusion Limited	New methodology for achieving extreme intensity cavity collapse	Technology (U)	35.9%	13.9	3.8	0.2	17.9
Wave Optics Limited	Novel optical waveguide technology and modules for augmented reality displays	Technology (U)	21.1%	5.6	2.0	7.6	15.2
Creavo Medical Technologies Limited	Quantum cardiac imaging technology	Life Sciences (U)	39.3%	14.4	—	—	14.4
Cell Medica Limited	T cell therapeutics for oncology	Life Sciences (U)	24.6%	26.3	—	(12.4)	13.9
Ieso Digital Health Limited	Online text-based psychotherapy software and service	Life Sciences (U)	45.5%	14.7	—	(0.8)	13.9
Mission Therapeutics Limited	Cancer therapeutics based on new understandings of DNA damage response	Life Sciences (U)	20.6%	12.4	—	1.3	13.7
Yoyo Wallet Limited	Mobile payments with integrated loyalty schemes	Technology (U)	40.0%	13.3	0.3	—	13.6
Econic Technologies Limited	Novel catalyst technologies to build carbon dioxide into polyurethanes and other polymers	Technology (U)	49.7%	10.6	3.0	—	13.6
Uniformity Labs Inc	Equipment, materials and software for additive manufacturing	Technology (U)	22.8%	4.7	(0.6) ⁴	9.0	13.1
Top 20 total				663.0	25.2	44.2	732.4
Other companies (130 companies)				407.3	38.8	(93.9)	352.2
De-minimis & Organic investments				7.2	2.5	(1.4)	8.3
Value not attributable to equity holders				22.3	6.9	6.1	35.3 ³
Total				1,099.8	73.4	(45.0)	1,128.2

1. Represents the Group's undiluted beneficial economic equity interest (excluding debt), including the Group's portion of IPVFII, and the Group's portion of the US portfolio. Voting interest is below 50%.
2. 31 Dec 2017 fair value restated following finalisation of provisional acquisition accounting in respect of Touchstone acquisition (see note 26)
3. Includes £2.0m increase in revenue share to Imperial College London, with a corresponding increase in revenue share liability resulting in no net fair value movement.
4. The Group has not sold shares in Uniformity Labs Inc. during the year. The realisation noted above reflects the effect of minority ownership of the US portfolio, following the strategic investment made during the year.

Portfolio review LIFE SCIENCES

Dr Sam Williams Managing Partner, Life Sciences

IP Group's Life Sciences portfolio comprises 64 companies worth £624.5m as at 31 December 2018

Review of the year Oxford Nanopore

The Group's largest holding, Oxford Nanopore Technologies Ltd, continues to make excellent progress with tangible signs of it disrupting the ~\$3.7bn DNA sequencing market. The company produces a range of novel, proprietary, real-time DNA sequencing devices, from small and portable formats such as MinION and Flongle to the high-throughput PromethION, which can deliver sub-\$1,000 genomes. Oxford Nanopore's long-term goal is to enable the analysis of any living thing, by any person, in any environment. Where sequencing has traditionally been performed in the central lab environment, the company seeks to address that central market but also open up new, distributed markets. The Company made significant progress in 2018, as set out in further detail below, and this continued in 2019, including the announcement in March 2019 that its new 'R10' nanopore had been released into early access. ONT also described very promising internal results with R10, including consensus accuracy of Q50 (or 99.999%).

Oxford Nanopore successfully completed a £100m fundraising in March 2018, primarily from Asian investors, to support commercial expansion and continued investment in R&D. It subsequently announced a \$50m investment from Amgen, whose subsidiary deCODE Genetics noted that they have now used nanopore technology to sequence several hundred genomes. While Oxford Nanopore has not yet disclosed 2018 orders, it noted at the start of the year that it was expecting strong growth across the world, with notable contribution from China. In the previous year, between 2016-2017, the Company approximately tripled its orders.

Key 2018 highlights for Oxford Nanopore included:

Technology

- **PromethION launch.** PromethION is Oxford Nanopore's largest device, designed to offer multi-Tb of sequence data, on demand. Dramatic performance improvements during the year showing that a PromethION could offer a 30X human genome for less than \$600, and a rapid pathway to less than \$300 with larger data yields. By the end of the year, researchers were routinely using PromethION to sequence human genomes at scale.
- **Upgrades in nanopore, algorithms for enhanced performance.** The Company announced that a new nanopore, R10, will come online in early 2019. Having delivered 'Q42' accuracy internally, and with a pathway to Q50 (99.999%), this is expected to expand the applications for which Oxford Nanopore can be used. The company is also focused on updating its analysis algorithms and other improvements that all contribute to ongoing performance enhancements.
- **"RevD", a flow cell upgrade for high yields of data.** This release enabled as much as 30Gb of sequence data to be generated from a single GridION/MinION Flow Cell, making these small devices into powerful devices that can address an even broader range of scientific questions.
- **Ultra-long reads.** Oxford Nanopore technology sequences the fragment of DNA/RNA that is presented to it, allowing very long contiguous fragments to be analysed. This confers huge benefits including easier assembly, characterisation of repeats and structural variations and phasing. In 2018, the longest read ever sequenced (2.3Mb) was revealed. This is symbolic of a broader desire to get consistently high 'N50'; large numbers of long reads, enabled by Oxford Nanopore's '109' kits also released in 2018.
- **Flongle.** The adapter for MinION that allows low cost, rapid, smaller tests, was released into an early access community in late 2018. With hugely disruptive potential in a range of testing applications, 2019 will bring more examples of how it is being used by the scientific community.

Applications

- **Whole human genomes:** At the start of the year, Nature Genetics published the first complete human genome using Oxford Nanopore sequencing. Described as the most complete genome using a single technology to date, the consortium of researchers, from nine different institutions, added ultra-long reads to their assembly to double their contiguity, estimate telomere lengths, and resolve complex regions including the 4Mb major histocompatibility complex.
- **Direct RNA:** A landmark paper using nanopore sequencing for the direct analysis of RNA was published in Nature in 2018. RNA analysis accounts for about a third of the sequencing market; this information gives scientists an insight into how DNA information is really being expressed. Oxford Nanopore technology can uniquely analyse RNA without using an intermediary (bisulfite sequencing), giving new biological insights including methylation profiling.
- **Towards diagnostics:** Oxford Nanopore technology is currently for research use only, however scientists are exploring ways to use it in a regulated environment to provide diagnostic testing. During the year, researchers showed methods for rapid characterisation of lung infections in an acute setting, TB in remote populations, rapid characterisation of acute myeloid leukemia, and rapid testing of Huntington's disease. These applications are expected to progress towards clinical use in 2019.
- **Public health:** Real time, portable sequencing is uniquely positioned to be used in the field rather in the lab, for rapid insights. In 2018, Oxford Nanopore's technology was used in real time surveillance of outbreaks of Rabies, Lassa fever, Yellow Fever, Flu, Dengue, Malaria, *E. coli* and MRSA.
- **Plant genomes:** Understanding plant genomes is important for agriculture and food industries, however plant genomes are typically very large and complex; the abundant long read sequencing of Oxford Nanopore is uniquely positioned to address this. In 2018, researchers spoke about using nanopore to sequence many plant species, including '100 tomato genomes in 100 days'.

- **Targeted sequencing:** Oxford Nanopore has indicated that in 2019 it will expand the availability of its technology in targeted sequencing, which is used in a broad range of application areas.

For more information about the uses of nanopore technology, visit <https://nanoporetech.com/resource-centre>

Other significant portfolio company updates

The overall performance of the rest of the life sciences portfolio has been poor (-10.4%), largely as a result of negative share-price movement in the listed companies. Most notably, Diurnal Group plc suffered a setback when its drug Chronocort did not meet the primary endpoint in a Phase 3 study in congenital adrenal hyperplasia (CAH). The stock closed the year down 85.5%, marking a £33.1m reduction in our fair value holding. However, despite this, we and the company are optimistic that the drug remains approvable, given some very positive outcomes using other measures in the Phase 3 study, and that premium pricing is still possible. Diurnal is due to receive advice from the EMA in the first half of 2019 which will provide an indication of the way forward. Assuming a positive outcome, the company anticipates filing a Marketing Authorisation Application (MAA) for Chronocort® in Q4 2019.

Other poor performers in the portfolio were Circassia (£14.0m), Avacta (£5.0m), Cell Medica (£12.4m), OxSyBio (£6.6m) and Abzena which, despite being acquired for £34m by a private equity buyer, provided a -£5.2m return for the year.

In the private Life Sciences portfolio, there were some notable successes, including Microbiotica signing a \$534m deal with Genentech, Mission Therapeutics signing a collaboration with Abbvie and Avacta signing a \$310m deal with LG Group. From a financing perspective, a number of our companies announced significant funding rounds including Series B financings for Crescendo Biologics (headline \$70m raised), Artios Pharma (£65m raised) and Inivata (\$51.4m raised).

Portfolio review

TECHNOLOGY

Mark Reilly Managing Partner, Technology

IP Group's Technology portfolio comprises 83 companies worth £396.9m as at 31 December 2018.

Review of the year

Technology

2018 saw strong revenue progress, major commercial deals, and several large transactions in the Technology Partnership's portfolio.

WaveOptics raised £20m from investors including Octopus, Bosch and Goertek to further commercialise its waveguide technology, which we believe will be one of the fundamental building blocks of a huge emerging opportunity in augmented reality. The involvement of Goertek in this transaction, whose customers include Samsung, Sony and Google, is a major endorsement for the WaveOptics technology and will enable the company to achieve mass market manufacturing scale.

Another of our portfolio companies targeting the virtual and augmented reality market, remote haptics pioneer Ultrahaptics, capped off a year of progress by securing the Queens Award for Enterprise and raising £35m from Mayfair Equity Partners, Hostplus and Dolby Family Ventures. Another recipient of the Queens Award, Featurespace, continued its impressive revenue growth in 2018, securing a place in the Sunday Times Tech Track 100, Deloitte Technology Fast 50 and FT 1000 Fastest Growing Companies in Europe. Featurespace announced that it had secured a new round of £25.0m growth capital immediately after the year end. The round was led by Insight Venture Partners, a New York-based global private equity firm focused on high-growth investments in the technology sector, while MissionOG, a US-based venture capital fund with significant operational experience across the payments industry, also participated in the round as a new investor. The funding was also supported by existing investors including IP Group plc, Highland Europe, TTV Capital, Robert Sansom and Invoke Capital.

One particularly notable element of these transactions is the amount of money brought in from high-quality financial and strategic investors who have never before invested in an IP Group portfolio company. Between them, the Ceres Power, WaveOptics and Ultrahaptics transactions brought in more than £75m from high-quality first-time co-investors alongside circa £10m invested by IP Group. This demonstrates the growing appeal of our portfolio to a broader and deeper pool of capital.

We were also encouraged by the revenue progress at many of our top assets, several of which are showing signs of progressing maturity as revenue undergoes high double-digit or even triple-digit growth. Examples include Ceres Power and Azuri, both of which have a rapidly-growing revenue run rate that now exceeds £10m per annum, and others such as Featurespace, Perpertuum and Import.io which have all shown rapid recent revenue growth.

Unfortunately, the substantial fair value uplift delivered by the above-mentioned transactions was significantly offset in the year by negative movement in the price of some of our listed assets in very challenging stock market conditions for small cap technology companies. Xeros saw a large drop in price as the shares reacted to slower than hoped-for commercial progress, but we were also disappointed to see significant commercial progress at some other assets contradicted by the share price. Actual Experience, in particular, achieved major milestones in 2018 with its first full-scale deployment of a large customer from one of its channel partners, yet its share price reduced by 30% over the year. We hope that these will prove short-term anomalies that will be rectified as further progress occurs.

Cleantech

In our Cleantech portfolio we focus on building outstanding, science-based businesses that mitigate the impacts of climate change and other environmental challenges.

The IP Group Cleantech team continues to enhance its growing reputation in both venture and policy-making circles. Our Head of Cleantech, Dr Robert Trezona, is one of the handful of leaders from the energy sector chosen to be a commissioner of the Energy Transitions Commission (www.energy-transitions.org), which has been working for over a year to develop a roadmap for how to reduce carbon emissions from “hard to abate” sectors that must be addressed by 2050 to avoid climate breakdown. The commission’s report was launched by Lord Adair Turner in November and vindicates a number of technology themes we have been pursuing in the IP Group Cleantech portfolio, notably fuel cells, carbon capture and fusion.

The portfolio saw significant progress this year, most notably at Ceres Power, which received new equity investment totalling £74 million from financial investors and Bosch and Weichai Power. The company announced in December that it had hit major milestones with both of those two strategic partners, meaning that revenue for their current 2017/18 financial year is expected to more than double to approximately £15 million, from £7 million in 2016/17.

Elsewhere in the portfolio, carbon capture chemistry company C-Capture announced a major partnership with Drax, the UK’s biggest power station, to deliver a Bioenergy Carbon Capture and Storage (BECCS) pilot plant. If this project is successful, the C-Capture technology could enable Drax to become the world’s first carbon-negative power station.

Finally, we were pleased to welcome a new company to the Cleantech portfolio, University of Oxford spin-out and autonomous vehicle software pioneer Oxbotica. Soon after our investment, the company was among the lead recipients of a £25m grant supporting the UK’s first trials of self-driving vehicle services and has already secured a strategic alliance with Addison Lee Group, the global ground transportation business, to accelerate the implementation of autonomous vehicles on London’s streets.

Portfolio review

MULTI-SECTOR PLATFORMS

The Group has maintained its strategic stakes in its multi-sector platform companies, most significantly Oxford Sciences Innovation plc (OSI) and Cambridge Innovation Capital plc (CIC).

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 2018 was another good year for OSI as the portfolio continued to develop with a further 22 companies being added to the portfolio, and OSI leading on 33 investments. The number of investments now stands at 69 with a total portfolio value of £229m and cash and deposits of £455m. Net Asset Value per share has increased from 111.2p to 116.1p. In early 2019, OSI announced the appointment of Patrick Pichette, previously Google’s Chief Financial Officer, as Chairman designate and Charles Conn, most recently Chief Executive of the Rhodes Trust, as Chief Executive.

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, and in September 2018 CIC announced that it had committed a total of £19.6m into two new and nine existing portfolio companies during the period ending September 2018. By the end of 2018, CIC had invested £111.0m since inception, in 24 companies.

Financial review

Greg Smith Chief Financial Officer

The Group recorded a loss for the year of £293.8m (2017: profit of £53.4m) and a negative Return on Hard NAV, i.e. on the Group's net assets excluding goodwill and intangible assets, of £75.6m (2017: positive £64.1m). Net assets at 31 December 2018 were £1,218.2m (2017: £1,508.5m) and Hard NAV totalled £1,217.5m at 31 December 2018 (2017: £1,295.8m), representing 115.0p per share (2017: 122.5p).

Consolidated statement of comprehensive income

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

	2018 £m	2017 £m
Net portfolio gains/(losses) ⁽¹⁾	(48.4)	94.2
Change in fair value of limited and limited liability partnership interests	2.3	(0.2)
Net Overheads ⁽²⁾	(26.0)	(17.6)
Licensing income – Istesso group	—	3.4
Administrative expenses – Istesso group	—	(3.5)
Administrative expenses – other consolidated portfolio companies	(2.6)	(2.1)
Administrative expenses – share based payments charge	(1.9)	(2.4)
IFRS3 charge in respect of acquisition of subsidiary	(3.3)	(4.4)
Carried interest plan release/(charge)	1.1	(1.3)
Amortisation of intangible assets	(9.9)	(3.9)
Goodwill impairment	(203.2)	—
Acquisition and restructuring costs	—	(9.1)
Net finance (expense)/income	(1.8)	0.3
Taxation	(0.1)	—
(Loss)/profit for the year	(293.8)	53.4
Other comprehensive income	(0.1)	—
Total comprehensive income/(loss) for the year	(293.9)	53.4
Exclude:		
Amortisation of intangible assets	9.9	3.9
Goodwill impairment	203.2	—
Share based payment charge	1.9	2.4
IFRS charge in respect of acquisition of subsidiary	3.3	4.4
Return on Hard NAV	(75.6)	64.1
Exclude:		
Acquisition and restructuring costs	—	9.1
Return on Hard NAV excluding acquisition and restructuring costs	(75.6)	73.2

⁽¹⁾ Defined in Note 27 Alternative Performance Measures

⁽²⁾ See net overheads table below and definition in Note 27 Alternative Performance Measures

Net portfolio gains/(losses) consist primarily of realised and unrealised fair value gains and losses from the Group's equity and debt holdings in spin-out businesses, which are analysed in detail in the Portfolio review above.

Net Overheads

	2018 £m	2017 £m
Other income	9.9	6.1
Administrative expenses – all other expenses	(34.5)	(21.2)
Administrative expenses – Annual Incentive Scheme	(1.4)	(2.5)
Net Overheads	(26.0)	(17.6)

Other income totalled £9.9m; an increase on the year (2017: £6.1m) due to the acquisition of Touchstone Innovation plc on 17th October 2017; the 2018 results see the consolidation on this business for the full year. In addition, 2018 saw continued growth in revenues for Parkwalk Advisors Limited, which was acquired on 31 January 2017. Other income comprises fund management fees, licensing and patent income from Imperial Innovations, corporate finance fees as well as consulting and similar fees, typically chargeable to portfolio companies for services including executive search and selection as well as legal and administrative support.

Other central administrative expenses, excluding performance-based staff incentives and share-based payments charges, have increased to £34.5m during the period (2017: £21.2m), primarily as a result of the annualised cost of Touchstone Innovations plc, as well as the growth in IP Group's Australasian operations. Of the £34.5m gross overheads, £5.8m relates to the cost of the Group's US and Australasian operations. The charge of £1.4m in respect of the Group's Annual Incentive Scheme (2017: £2.5m), reflects performance against 2018 AIS targets.

£3.3m of the Group's 2018 net overheads relate to the Technology Transfer Office (2017: £0.7m). On 28 February 2019, the Group transferred back the future commercialisation operations of the TTO to Imperial, although retained its rights to future earnings in respect of existing licenses. The transfer of the TTO and the surrender of the lease on Touchstone Innovation's head office in Central London (agreed on 22 March 2019), represent the final steps in the conclusion of the Touchstone integration, that management estimates will result in annual cost synergies of £8m compared to IP Group and Touchstone's combined pre-acquisition net operating cost base. The full level of annual synergies will be realised following the completion of these last two integration steps, i.e. for the year ending 31 December 2020 onwards.

Other income statement items

The share-based payments charge of £1.9m (2017: £2.4m) reflects the accounting charge for the Group's Long-Term Incentive Plan and Deferred Bonus Share Plan. 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.

In late 2017, the Group's drug development subsidiary, Istesso Limited, was deconsolidated from the Group and recognised as a portfolio company; its licensing income and administrating costs are no longer consolidated into the Group's results.

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 takes a controlling stake and hence consolidates 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.

The carried interest plan release of £0.8m (2017: charge of £1.3m) relates to the recalculation of liabilities under the Group's carry schemes, which include a newly constituted scheme for the combined UK investment teams, as well as historic IP Group and Touchstone schemes. No cash payments are due to scheme members until sufficient asset realisations have occurred.

Costs of £3.3m (2017: £4.4m) were recognised in relation to deferred and contingent consideration payable to the sellers of Parkwalk Advisors Ltd deemed under IFRS3 to be a payment for post-acquisition services.

Included in the Group's results are non-cash charges in respect of the impairment of historic goodwill of £203.2m (2017: £nil) and amortisation of acquisition intangibles of £9.9m (2017: 3.9m). The Group conducts impairment testing of goodwill on at least an annual basis (or earlier if impairment triggers are identified), using a consistent model to estimate the value in use of the assets in each CGU versus the carrying value of goodwill. Key inputs to the model include an estimate of the Group's future portfolio return, the anticipated level of portfolio investment and the Group's cost of capital. The rate of return estimate has previously been based on the Group's long-term returns forecast, which was supported by the Group's cumulative IRR performance. As a result of current year portfolio performance, particularly the Group's AIM-quoted companies, as well as the broader macroeconomic and equity market environment, management has lowered its assumptions for future rate of return for these purposes, using historic cumulative IRR as a basis. This is the primary factor resulting in the impairment of goodwill.

Acquisition intangibles relates to separately identifiable assets recognised through the acquisition of Touchstone Innovations plc, Parkwalk Advisors Limited and Fusion IP plc; these assets are amortised over the period to which the contractual commitments relate.

Statement of financial position

A summary analysis of the Group's assets and liabilities is provided below:

	Year ended 31 December 2018 £m	Year ended 31 December 2017 ¹ £m
Goodwill and other intangible assets	0.7	212.7
Portfolio	1,128.2	1,099.8
Other non-current assets	18.8	12.6
Cash and deposits	219.0	326.3
EIB debt facility	(97.8)	(104.0)
Other net current liabilities	(9.9)	(11.4)
Other non-current liabilities	(40.8)	(27.5)
Total Equity or Net Assets	1,218.2	1,508.5
Exclude:		
Goodwill	(0.4)	(202.5)
Other intangible assets	(0.3)	(10.2)
Hard NAV	1,217.5	1,295.8
Hard NAV per share	115.0p	122.5p

¹ Restated following finalisation of provisional acquisition accounting in respect of Touchstone acquisition (see note 26)

Goodwill and other intangible assets relate to the group's previous acquisitions including Touchstone Innovations plc, Parkwalk Advisors Limited, Fusion IP plc, Techtran Limited and Top Technology Venture Limited.

The composition of, and movements in the Group's portfolio is described in the Portfolio review above.

The majority of non-current assets relate to holdings in LP and LLP funds; these include our co-investment fund IP Venture Fund, as well as investments in Apollo Therapeutics LLP, UCL Technology Fund LP and Teknikos LLP. These funds give us both economic interest and direct investment opportunities in a portfolio of early stage companies, as well as relationships with high quality institutional co-investors.

The largest item within other non-current liabilities are loans from LPs of consolidated funds. The Group consolidates the assets of two managed funds in which it has both a significant economic interest, specifically co-investment fund IP Venture Fund II LP and IPG Cayman LP, which was created during the year to facilitate third party investment into the Group's US portfolio. Loans from third parties of consolidated funds represent third party loans into these partnerships. These loans are repayable only upon IPVFII generating sufficient returns to repay the Limited Partners.

At 31 December 2018, the Group held gross cash and deposits of £219.0m (2017: £326.3m). 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 statements alongside details of the credit ratings of the Group's cash and deposit counterparties.

At 31 December 2018, the Group had a total of £40.2m (2017: £1.2m) held in US Dollars and £0.1m (2017: £0.1m) held in AUS Dollars.

Both IP Group and Touchstone Innovation plc arranged debt facilities with the European Investment Bank ("the EIB"), total borrowings under which totalled £97.8m at the period end (2017: £104m). Of these facilities, £15.4m is due to be repaid within twelve months of the period end (2017: £6.3m). The facility provides IP Group with an additional source of long-term capital to support the development of the portfolio.

All-share acquisition of Touchstone Innovations plc

On 17 October 2017 the Group acquired control of 100% of the ordinary shares in Touchstone Innovations plc. The Group has recognised the assets and liabilities acquired in accordance with IFRS 3 'Business Combinations'. Certain assets, primarily holdings in unlisted portfolio companies that have been accounted for using valuation techniques, were provisionally determined and for a 12-month period post-acquisition, adjustments are made to these assets to the extent that new information is obtained about facts and circumstances that were in existence at the acquisition date. Post finalisation of the acquisition accounting, the prior year Touchstone net assets acquired have been restated by £30.4m (which comprises £30.8m portfolio valuation decrease, £0.4m decrease in fixed assets and £0.8m decrease in non-current liabilities) with a corresponding increase in goodwill.

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

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

	2018	2017
	£m	£m
Net Cash generated/(used) by operating activities	(24.9)	(22.4)
Net Cash generated/(used) in investing activities (excluding cash flows from deposits)	(76.0)	(67.6)
Cash acquired on acquisition of subsidiary undertakings (net of cash acquired)	—	107.8
Issue of share capital	—	181.0
Repayment/drawdown of debt facility	(6.3)	15.0
Effect of foreign exchange rate changes	(0.1)	0.2
Movement during period	(107.3)	214.0

At 31 December 2018, the Group's Cash totalled £219.0m, a decrease of £107.3m from a total of £326.3m at 31 December 2017 due to net cash used by operating activities of £24.9m, net cash used in investing activities of £76.0m and debt repayments of £6.3m.

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 majority of investments acquired via the combination with Touchstone Innovations plc were previously held via Imperial Innovation Srl, which exempted dividends and gains from tax under Luxembourg law provided the conditions for the relevant participation exemption were met. During the year, the group unwound this structure and as a result the assets of Touchstone Innovations are now subject to the UK tax regime described above.

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

Alternative Performance Measures (“APMs”)

The Group discloses alternative performance measures, such as Hard NAV and Return on Hard NAV, in this Annual Report. The Directors believe that these APMs assist in providing additional useful information on the underlying trends, performance and position of the Group. Further information on APMs utilised in the Group, is set out in note 27.

Risk management

Managing risk: our framework for balancing risk and reward

A robust and effective risk management framework is essential for the Group to achieve its strategic objectives and to ensure that the directors are able to manage the business in a sustainable manner, which protects its employees, partners, shareholders and other stakeholders. Ongoing consideration of, and regular updates to, the policies intended to mitigate risk enable the effective balancing of risk and reward.

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. The IP Group Risk Council operates to establish, recommend and maintain a fit for purpose risk management framework appropriate for the Group and oversees the effective application of the framework across the business. 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 financial, strategic, operational, reputational, regulatory and employee impact of risks and the likelihood that they may occur. Operational risks are collated into strategic risks which identifies key themes and emerging risks and ultimately informs our principal risks which are detailed in the Principal Risk and Uncertainty section of this report. 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 2018 we have continued to build on our existing risk management framework, enhancing risk management and internal control processes and established an outsourced internal audit function with PwC. This activity included the development of operational risk registers for new front line operations and a refresh of existing front line and operational risk registers, an assessment of the strategic risks and the appropriateness of our principal risks, testing of key controls over our principal risks, a review of protectionist policies across the globe that may impact our investments internationally including proposed CFIUS laws in the US and an updated Brexit risk review led by the Group’s Risk Council. We have continued to support the Board in exercising their responsibility surrounding risk management through the Risk Council who meet on a regular basis. Priorities for 2019 include embedding the risk management culture further across the business, integrating internal audit in the business and empowering control owners to identify and react to risks as they happen through regular risk reporting.

Brexit

The Group continues to closely monitor political developments as the UK prepares to leave the EU in 2019. Management updated its assessment of the impacts of Brexit on the Group in response to the likelihood of a “No Deal” scenario increasing in 2018. PwC’s specialist trade team facilitated a Brexit workshop with key people within IP Group across capital markets, finance, compliance, operations, legal, talent management and human resources to i) identify the key risks of the likely impacts of Brexit and ii) to discuss actions the Group could take to mitigate the risks identified. As a result of this work, management determined that Brexit did not constitute a principal risk for the Group however management produced guidance for portfolio company boards and the Group’s representatives to assist with their preparations. The key risks impacting our strategic aims identified via the above-mentioned process are detailed further below:

Key risks	Actions taken
<p>Macro-economic environment could cause a short-term UK recession which would reduce investor confidence and impact access to capital for both IP Group and its portfolio companies.</p> <p>Access to capital:</p> <ul style="list-style-type: none"> ➤ A No Deal Brexit would create uncertainty in the short term, likely translating to more restrictive financing conditions. Any reduction in UK credit worthiness due to a Brexit induced increase in the current account deficit and higher exposure outside the EU could increase the cost of lending and decrease the availability of capital. ➤ Significant parts of the Brexit outcome and political declarations are still vague, continuing to exacerbate the political and economic uncertainty. Subdued investor confidence across the investment sector is highly likely regardless of a Deal/No Deal scenario. This could impact access to capital for both IP Group and its portfolio companies. ➤ In both a No Deal and a Deal scenario the UK will leave the EIB which results in loss of access to funding. While the Group has assumed no further funding, changes to repayment obligations of existing funding could be initiated. 	<ul style="list-style-type: none"> ➤ Reassurance provided to key stakeholders and investors that tangible and measurable preparations are being considered and made in order to mitigate any risks that Brexit poses as much as possible for IP Group ➤ Diversification of co-investors and funding has been undertaken over recent years to mitigate the reliance on UK co-funders of the Group and its portfolio companies. ➤ Material contracts that the Group considered most likely impacted by the Brexit process were reviewed. It was concluded that there were no clauses contained within these contracts and no indications from the third parties received that would indicate contracts such as EIB loan facilities or fund management contracts would be terminated.
<p>The performance and management of portfolio companies is crucial to the success of the Group and, as a result, the preparation that portfolio company management teams have undertaken to address key Brexit risks will be central to the successful navigation of operational and other issues that may impact their performance.</p> <p>Performance and management of portfolio companies:</p> <ul style="list-style-type: none"> ➤ The macro-economic impact of a No Deal Brexit would lead to a significant GDP fall and the risk of a short-term recession is high. IP Group's portfolio companies have significant exposure to the UK economy. ➤ The regulated nature of a number of the Group's portfolio companies across both sectors could mean that marketing pharmaceuticals and selling medical devices into the EU is no longer possible in the current way in the event of a No Deal Brexit. 	<ul style="list-style-type: none"> ➤ A portfolio company risk exposure and consultation plan was developed. The Group surveyed the portfolio companies' representatives of a sample of the most mature companies to determine the common Brexit-related risks which had been discussed at their board meetings. This analysis determined that the key risks across this subsection of the portfolio fell into the following five categories: <ul style="list-style-type: none"> i. Hiring and retaining talent ii. Supply chain difficulties including tariffs, delays and additional cost for storing extra stock iii. Macro-economy and currency risk impacting profit iv. Access to funding from investors and EU grants v. Regulatory changes ➤ The Group used this information to prepare an advice note for all portfolio company representatives at IP Group to enable those individuals to raise relevant issues at portfolio company board levels. ➤ Additional advice was obtained from advisors regarding clinical trials sponsored in the UK, companies distributing medicine into the EU and selling medical devices into the EU.
<p>The macro-economic environment has an impact on long-term recruitment and planning for companies. Additional visa restrictions will also impact academics and student movement to the UK thus affecting the pool for potential portfolio companies and the quality of university partnerships.</p> <p>People:</p> <ul style="list-style-type: none"> ➤ IP Group and its portfolio companies have current employees who do not hold a UK passport and are allowed to work in the UK based on their European Citizenship. These employees are experiencing high levels of uncertainty and could be considering alternative options for working in the UK. ➤ As a result of the Brexit vote and ongoing political, economic and academic uncertainty, the UK is considered a less attractive job market on a global scale. This will impact on the Group and its portfolio companies who depend on highly skilled and specialised employees who are difficult to attract and retain. Significant impact on long-term recruitment is likely to be impacted. ➤ Individuals within the field of academia and students from overseas may face uncertainty. 	<ul style="list-style-type: none"> ➤ A employee engagement strategy was developed and communicated to relevant employees at IP Group advising of the latest advice from Government and confirming the Group's support of those affected. ➤ The Government's White Paper on immigration was reviewed and concluded that while no short term impacts are envisaged for current employees over the medium term the Group will need to closely monitor the proposed new immigration rules including salary thresholds for skilled migrants. The proposals are subject to change and the Group will continue to monitor the impact of the final changes.

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.

1. It may be difficult for the Group and its early-stage companies to attract capital	
<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>	
Change from 2017: ↑	
Link to Strategy	Actions taken by management
<p>Access to sufficient levels of capital allows the Group to invest in its investment assets, develop early-stage investment opportunities and invest in its most exciting companies to ensure future financial returns.</p>	<ul style="list-style-type: none"> - The Group has significant internal capital and managed funds capital to deploy in portfolio opportunities. - The Group operates a corporate finance function which carries out fundraising mandates for portfolio companies - The Group maintains close relationships with a wide variety of co-investors that focus on companies at differing stages of development - The Group regularly forecasts cash requirements of the portfolio and ensures all capital allocations are compliant with budgetary limits, treasury policy guidelines and transaction authorisation controls. - While Parkwalk Advisors operates independently they have been and continue to be an important co-investor of the Group supporting shared portfolio companies
KPI	
<ul style="list-style-type: none"> - Change in fair value of equity and debt investments - Total equity ("net assets") - Profit/loss attributable to equity holders 	
Examples of risks	
<ul style="list-style-type: none"> - 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 - 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 - The Group may not be able to provide the necessary capital to key strategic assets which may affect the portfolio companies' performance or dilute future returns of the Group. 	
Developments during the year	
<ul style="list-style-type: none"> - Incorporated a subsidiary in Hong Kong to act as a fund-raising hub to introduce local investors in the China region to IP Group plc and portfolio companies - Commenced management of an AUS\$100m trust for an Australian Super Fund which has a mandate to co-invest with IP Group plc portfolio companies 	

2. The returns and cash proceeds from the Group's early-stage companies can be very uncertain	
<p>Early-stage companies typically face a number of risks including not being able to secure later rounds of funding at crucial development inflexion points and not being able to source or retain appropriately skilled staff. Other risks arise where competing technologies enter the market, technology can be materially unproven and may ultimately fail, IP may be infringed, copied or stolen, may be more susceptible to cyber crime and other administrative taxation or compliance issues which may lead to company failure.</p>	
Change from 2017: ↑	
Link to Strategy	Actions taken by management
<p>Uncertain cash returns could impact the Group's ability to deliver attractive returns to shareholders when our ability to react to portfolio company funding requirements is negatively impacted or where budgeted cash proceeds are delayed.</p>	<ul style="list-style-type: none"> - The Group's employees 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 - Members of the Group's senior leadership team often serve as non-executive directors or advisors to portfolio companies to help identify and remedy critical issues promptly - Support on operational, legal and company secretarial matters is offered to minimise failures due to common administrative factors - The Group has spin-out company holdings across different sectors managed by experienced sector-specialist teams to reduce the impact of a single company failure or sector demise - 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
KPI	
<ul style="list-style-type: none"> - Change in fair value of equity and debt investments - Purchase of equity and debt investments - Proceeds from the sale of equity investments 	
Examples of risks	
<ul style="list-style-type: none"> - Portfolio company failure directly impacts the Group's value and profitability. - At any time, a large proportion of the Group's portfolio may be accounted for by very few companies which could exacerbate the impact of any impairment or failure of one or more of these companies. - The value of the Group's drug discovery and development portfolio companies may be significantly impacted by a negative clinical trial result and 	

<ul style="list-style-type: none"> - Cash realisations from the Group's portfolio through trade sales and IPOs could vary significantly from year to year. 	<p>Developments during the year</p> <ul style="list-style-type: none"> - The Group's combination with Touchstone Innovations plc in 2017 has resulted in increased diversification of the Group's portfolio - The Group's portfolio companies raised approximately £695m of capital in 2018 - The Group maintained board representation on more than 90% of its 'focus' companies by number
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3. Universities or other research-intensive institutions may terminate their partnerships or other collaborative relationships with the Group

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 UCL Technology Fund. University partners may terminate their partnerships or may move to non-exclusive sourcing models.

Change from 2017: ↓

Link to Strategy	Actions taken by management
<p>The Group's strategic objective of building and maintaining a pipeline of compelling intellectual property-based opportunities, in part depends on the quality of the commercialisation partnerships the Group holds.</p>	<ul style="list-style-type: none"> - Dedicated New Business & Partnerships team services existing partnerships and sources new opportunities for the investment partnerships - The Group continues to consider and, where appropriate, enter into new and innovative partnerships and collaborations with research institutions - The Group has been able to source opportunities through non-exclusive relationships and other sources - Members of the Group's senior team work closely with partner institutions to ensure that each commercial relationship is mutually beneficial and productive - 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
KPI	
<ul style="list-style-type: none"> - Number of new portfolio companies 	
Examples of risks	Developments during the year
<ul style="list-style-type: none"> - Termination or non-renewal of arrangements through failure to perform obligations may result in the loss of exclusive rights - The loss of exclusive rights may limit the Group's ability to secure attractive IP opportunities to commercialise - This could potentially have a material adverse effect on the Group's long-term business, results of operations, performance and prospects - Competition in the market may reduce the opportunities available to us to create new spin-out companies 	
	<ul style="list-style-type: none"> - Completed investments with two new university partnerships in Australasia

4. The Group may lose key personnel or fail to attract and integrate new personnel.

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. Scaling the team, particularly in foreign jurisdictions such as Australasia and Hong Kong, presents an additional potential risk.

Change from 2017: ↔

Link to Strategy	Actions taken by management
<p>The Group's strategic objectives of developing and supporting a portfolio of compelling intellectual property-based opportunities into robust businesses capable of delivering attractive financial returns on our assets is dependent on the Group's employees who work with the portfolio companies and those who support them.</p>	<ul style="list-style-type: none"> - Senior team succession plans have been developed and are updated regularly - The Group's corporate culture and values are well-articulated and consistently promoted - 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
KPI	

<ul style="list-style-type: none"> - Total equity - "Net assets" - Number of new portfolio companies 	<p>benefits such as flexible working and salary sacrifice arrangements</p> <ul style="list-style-type: none"> - The Group encourages employee development and inclusion through coaching and mentoring and carries out annual objective setting and appraisals - The Group promotes 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.
<p>Examples of risks</p>	<p>Developments during the year</p>
<ul style="list-style-type: none"> - Loss of key executives and employees of the Group or an inability to attract, retain and integrate appropriately skilled and experienced employees could have an adverse effect of the Group's competitive advantage, business, financial condition, operational results and future prospects 	<ul style="list-style-type: none"> - The Group completed its first staff engagement survey and are reviewing actions to improve the employee experience while working for the Group - The Group increased the level of benefits across a range of measures in 2018 including contributory pension and enhanced maternity benefit terms as part of a "best of both" integration post combination with Touchstone in early 2018 - The Group also continues to dedicate resources to remuneration and incentivisation. - Staff attrition increased during the year to 12.9% due to integration related leavers and temporary contractors who left during the year. - Approximately 37.7% of employees have been with the Company for at least 5 years.

<p>5. There may be changes to, impacts from, or failure to comply with, legislation, government policy and regulation</p>	
<p>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.</p>	
<p>Change from 2017: ↓</p>	
<p>Link to Strategy</p>	<p>Actions taken by management</p>
<p>The Group's strategic objectives of creating and maintaining a portfolio of compelling opportunities to deliver attractive returns for shareholders could be materially impacted by failure to comply with or adequately plan for a change in legislation, government policy or regulation.</p>	<ul style="list-style-type: none"> - University partners are incentivised to protect their IP for exploitation as the partnership agreements share returns between universities, academic founders and the Group - The Group utilises professional advisers as appropriate to support its monitoring of, and response to changes in, tax, insurance or other legislation - The Group has internal policies and procedures to ensure its compliance with applicable FCA regulations and these are subject to annual review - The Group maintains D&O, professional indemnity and clinical trial insurance policies - The Group reviews its data and cyber-security processes with its external outsourced IT provider and applies the UK Government's "ten steps" framework.
<p>KPI</p>	<p>Developments during the year</p>
<ul style="list-style-type: none"> - Total equity - "Net assets" 	
<p>Examples of risks</p>	
<ul style="list-style-type: none"> - Changes could result in universities and researchers no longer being able to own, exploit or protect intellectual property on attractive terms. - Changes to tax legislation or the nature of the Group's activities, in particular in relation to the Substantial 	

<p>Shareholder Exemption, may adversely affect the Group's tax position and accordingly its value and operations.</p> <ul style="list-style-type: none"> - Regulatory changes or breaches could ultimately lead to withdrawal of regulatory permissions for the Group's FCA-authorized subsidiaries 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 - The UK's decision to leave the EU could have an adverse impact on the level of research funding made available to UK universities from which the Group an element of their investment portfolio 	<ul style="list-style-type: none"> - Ongoing focus on regulatory compliance including third party reviews and utilisation of specialist advisers - UK Government has committed to university funding and has emphasised the importance of science and innovation - Specialist therapeutics advisory panel continually consulted - GDPR came into effect in 2018
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6. Macroeconomic conditions may negatively impact the Group's ability to achieve its strategic objectives.

Adverse macroeconomic conditions could reduce the opportunity to deploy capital into opportunities or may limit the ability of such portfolio companies to receive third party funding, develop profitable businesses or achieve 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 and its portfolio companies operate.

Change from 2017: ↔	
Link to Strategy	Actions taken by management
<p>The Group's strategic objectives of developing a portfolio of commercially successful portfolio companies and delivering attractive financial returns on our assets and third-party funds can be materially impacted by the current macroeconomic environment.</p>	<ul style="list-style-type: none"> - Senior management receive regular capital market and economic updates from the Group's capital markets team and its brokers - Six-monthly budget and capital allocation process and monitoring against agreed budget - Regular oversight of upcoming capital requirements of portfolio from both the Group and third parties - The Group's Risk Council conducts horizon scanning for upcoming events which may impact the Group such as a Hard Brexit
KPI	
<ul style="list-style-type: none"> - Change in fair value of equity and debt investments - Total equity - "Net assets" - Profit or loss attributable to equity holders 	
Examples of risks	Developments during the year
<ul style="list-style-type: none"> - The UK's vote to leave the EU has had, and may continue to have, an adverse effect on trading conditions and availability of capital in the UK, particularly for small businesses given the uncertainty which remains ahead of the UK leaving the EU in March 2019. - 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. - A significant proportion of the Group's portfolio value is held in 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. 	<ul style="list-style-type: none"> - Macroeconomic and geopolitical conditions remain uncertain in the UK, at the time of writing there was no agreement between the UK and the EU for the UK's withdrawal from the EU. - Brexit process remains a source of uncertainty in the year. The Group undertook a refresh of the Brexit risks facing the Group via a workshop facilitated by PwC's Brexit specialist trade team and included key people in our business representing finance, legal, capital markets, people, recruitment and investment teams. The impact on our people and the economic effects of a Hard Brexit were noted as the areas where the Group would be affected the most.

7. The Group may be negatively impacted operationally as a result of the Group's recent international expansion.

The Group may fail to comply with local laws and regulations or integrate overseas operations with similar cultures and values as the central operations. The Group may also fail to establish effective control mechanisms in new territories. Expansion in new territories may take significant senior management time and distract them from UK operations.

Change from 2017: New principal risk	
Link to Strategy	Actions taken by management
<p>The Group's strategy includes building a portfolio of compelling intellectual-property based companies across the UK, US and Australasia. The increasing scale of the Group's international operations represents increased importance of successful execution of this element of the Group's strategy.</p>	<ul style="list-style-type: none"> - Local legal and regulatory advisers have been engaged in the establishment phase of overseas operations. US and Australasian teams have their own in-house legal teams who report to Global Head of Legal in the UK

KPI	<ul style="list-style-type: none"> - IP Exec and HR are involved in senior hires for new territories. Senior international personnel include current and former UK employees, encouraging a shared culture across territories. - There is regular travel between the UK and other territories to ensure the Group is aligned in its strategy and culture. - The risk management framework in place across each business unit has been established in each international territory and is integrated into the Group's regular risk management processes and reporting. - Third party suppliers are used for accounting and payroll services to reduce the risk of fraud.
Total equity "net assets"	
Examples of risks	
<ul style="list-style-type: none"> - A legal or regulatory breach could ultimately lead to the withdrawal of regulatory permissions in Australia and Hong Kong, resulting in loss of trust management contracts, reputational damage and fines - Divergent group cultures may lead to difficulties in achieving the Group's strategic aims - A major control failure could lead to a successful fraudulent attack on the Group's IT infrastructure or access to bank accounts - Senior management may spend a significant amount of time in setting up and establishing new territories which could detract from central Group strategy and operations 	Developments during the year
	<ul style="list-style-type: none"> - Opening of Hong Kong office announced in the year

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 2018 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 2019, 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

Sir Douglas Flint
Chairman

Alan Aubrey
Chief Executive Officer

25 March 2019

Consolidated statement of comprehensive income

For the year ended 31 December 2018

	Note	2018 £m	2017 £m
Portfolio return and revenue			
Change in fair value of equity and debt investments	15	(50.4)	49.0
Gain on disposal of equity investments		2.0	0.1
Gain on deconsolidation of subsidiary		—	45.1
Change in fair value of limited and limited liability partnership interests	22	2.3	(0.2)
Licensing income		—	3.4
Revenue from services and other income		9.9	6.1
		(36.2)	103.5
Administrative expenses			
Research and development costs		—	(2.9)
Carried interest plan release/(charge)		1.1	(1.3)
Share-based payment charge	21	(1.9)	(2.4)
Goodwill impairment	12	(203.2)	—
Amortisation of intangible assets	13	(9.9)	(3.9)
Acquisition and restructuring costs	8	—	(9.1)
Other administrative expenses		(41.8)	(30.8)
		(255.7)	(50.4)
Operating (loss)/profit	7	(291.9)	53.1
Finance income		1.2	1.0
Finance costs		(3.0)	(0.7)
(Loss)/profit before taxation		(293.7)	53.4
Taxation	10	(0.1)	—
(Loss)/profit for the year		(293.8)	53.4
Other comprehensive income			
Exchange differences on translating foreign operations		(0.1)	—
Total comprehensive (loss)/income for the year		(293.9)	53.4
Attributable to:			
Equity holders of the parent		(293.8)	49.7
Non-controlling interest		(0.1)	3.7
		(293.9)	53.4
(Loss)/earnings per share			
Basic (p)	11	(27.71)	7.05
Diluted (p)	11	(27.71)	7.04

The accompanying notes form an integral part of the financial statements.

Consolidated statement of financial position

As at 31 December 2018

	Note	2018 £m	2017 ¹ £m
ASSETS			
Non-current assets			
Intangible assets:			
Goodwill	12	0.4	202.5
Acquired intangible assets	13	0.3	10.2
Property, plant and equipment		1.5	1.6
Portfolio:			
Equity investments	15	1,095.1	1,057.5
Debt investments	15	33.1	42.3
Limited and limited liability partnership interests	22	17.3	11.0
Total non-current assets		1,147.7	1,325.1
Current assets			
Trade and other receivables	16	6.6	8.3
Deposits		90.0	95.0
Cash and cash equivalents		129.0	231.3
Total current assets		225.6	334.6
Total assets		1,373.3	1,659.7
EQUITY AND LIABILITIES			
Equity attributable to owners of the parent			
Called up share capital	19	21.2	21.1
Share premium account		684.7	683.1
Merger reserve		372.6	508.6
Retained earnings		135.8	291.7
Total equity attributable to equity holders		1,214.3	1,504.5
Non-controlling interest		3.9	4.0
Total equity		1,218.2	1,508.5
Current liabilities			
Trade and other payables	17	16.5	19.7
EIB debt facility	18	15.4	6.3
Non-current liabilities			
EIB debt facility	18	82.4	97.7
Carried interest plan liability		6.8	8.0
Loans from limited partners of consolidated funds	18	23.0	13.1
Revenue share liability	15	11.0	6.4
Total equity and liabilities		1,373.3	1,659.7

Registered number: 4204490

Approved by the Board of Directors and authorised for issue on 25 March 2019 and signed on its behalf by:

Greg Smith
Chief Financial Officer

Alan Aubrey
Chief Executive Officer

¹Restated following finalisation of provisional acquisition accounting in respect of Touchstone acquisition (see note 26)

Consolidated statement of cash flows

For the year ended 31 December 2018

	Note	2018 £m	2017 £m
Operating activities			
Operating (loss)/profit for the period		(291.9)	53.1
Adjusted for:			
Change in fair value of equity and debt investments	15	50.4	(49.0)
Change in fair value of limited and limited liability partnership interests		(2.3)	0.2
Gain on disposal of equity investments		(2.0)	(0.1)
Gain on deconsolidation of subsidiary		—	(45.1)
Depreciation of property, plant and equipment		1.2	0.9
Amortisation of intangible non-current assets	13	9.9	3.9
Goodwill impairment	12	203.2	—
Long term incentive carry scheme (charge)/release		(1.1)	1.3
Fees settled in the form of equity		(0.3)	(0.5)
Share-based payment charge		1.9	2.4
Changes in working capital			
Decrease/(Increase) in trade and other receivables		1.5	(6.1)
(Decrease)/increase in trade and other payables		(3.6)	7.7
Increase in non-current liabilities		9.9	8.6
Other operating cash flows			
Net interest (paid)/received		(1.7)	0.3
Net cash outflow from operating activities		(24.9)	(22.4)
Investing activities			
Purchase of property, plant and equipment		(0.6)	(1.6)
Purchase of equity and debt investments	15	(100.9)	(71.2)
Investment in limited and limited liability partnerships		(4.8)	(1.4)
Distribution from limited partnership funds		0.8	—
Net cash flow from/(to) deposits		5.0	(95.0)
Acquisition of subsidiary undertaking		—	107.8
Proceeds from sale of equity investments		29.5	6.6
Net cash outflow from investing activities		(71.0)	(54.8)
Financing activities			
Proceeds from the issue of share capital		—	184.7
Transaction costs related to issue of share capital		—	(3.7)
Repayment of EIB facility		(6.3)	—
Proceeds from drawdown of EIB facility	18	—	15.0
Net cash inflow from financing activities		(6.3)	196.0
Net (decrease)/increase in cash and cash equivalents		(102.2)	118.8
Cash and cash equivalents at the beginning of the year		231.3	112.3
Effect of foreign exchange rate changes		(0.1)	0.2
Cash and cash equivalents at the end of the year		129.0	231.3

Consolidated statement of changes in equity

For the year ended 31 December 2018

Attributable to equity holders of the parent

	Share capital £m	Share premium ⁽ⁱ⁾ £m	Merger reserve ⁽ⁱⁱ⁾ £m	Retained earnings ⁽ⁱⁱⁱ⁾ £m	Total £m	Non-controlling interest ^(iv) £m	Total equity £m
At 1 January 2017	11.3	504.7	12.8	239.6	768.4	0.3	768.7
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
At 1 January 2018	21.1	683.1	508.6	291.7	1,504.5	4.0	1,508.5
Comprehensive income	—	—	—	(293.8)	(293.8)	(0.1)	(293.9)
IFRS3 charge – equity settled	0.1	1.6	—	—	1.7	—	1.7
Transfer between reserves on impairment of subsidiaries	—	—	(136.0)	136.0	—	—	—
Equity-settled share-based payments	—	—	—	1.9	1.9	—	1.9
At 31 December 2018	21.2	684.7	372.6	135.8	1,214.3	3.9	1,218.2

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.

The accompanying notes form an integral part of the consolidated financial information.

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 2018 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 2017 annual report and accounts. No new standards, interpretations and amendments effective for the first time from 1 January 2018 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 these financial statements.

(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 portfolio loss in 2018 of £48.4m represents a (4.3)% change against the opening balance (2017: net increase of £94.2m, 15.3% 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.

	2018			2017		
	Quoted £m	Unquoted £m	Total £m	Quoted £m	Unquoted £m	Total £m
Equity and debt investments and investments in limited partnerships	1.3	10.1	11.4	2.3	8.7	11.0

(ii) Interest rate risk

The group holds 3 EIB debt facilities with the overall balance as at 31 December 2018 amounted to £97.8m (2017: £104.0m) with £24.0m being subject to variable rate interest (2017: £39.0m) and £73.8m (2017: £65.0m) being subject to fixed rate interest of 3.22%

The variable rate consists of two elements. A facility of £30m which 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 average floating interest rate (including the fixed element) for 2018 was 2.69% (2017: 2.66%). The second facility of £9.6m is based on a floating interest rate including LIBOR and the average interest in the year was 3.42% (2017: 3.13%). There are no hedging instruments in place to cover against interest rate fluctuation as exposure is deemed insignificant.

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.

	2018				2017 ²			
	Fixed rate £m	Floating rate £m	Interest free £m	Total £m	Fixed rate £m	Floating rate £m	Interest free £m	Total £m
Financial assets								
Equity investments	—	—	1,095.1	1,095.1	—	—	1,057.5	1,057.5
Debt investments	—	—	33.1	33.1	—	—	42.3	42.3
Limited and limited liability partnership interests	—	—	17.3	17.3	—	—	11.0	11.0
Deposits	90.0	—	—	90.0	95.0	—	—	95.0
Cash and cash equivalents	—	129.0	—	129.0	7.5	223.8	—	231.3
Trade receivables	—	—	4.3	4.3	—	—	1.9	1.9
Other receivables	—	—	1.5	1.5	—	—	6.4	6.4
	90.0	129.0	1,151.3	1,370.3	102.5	223.8	1,119.1	1,445.4
Financial liabilities								
Trade payables	—	—	(1.7)	(1.7)	—	—	(2.0)	(2.0)
Other accruals and deferred income	—	—	(14.7)	(14.7)	—	—	(17.7)	(17.7)
EIB debt facility	(73.8)	(24.0)	—	(97.8)	(65.0)	(39.0)	—	(104.0)
Carried interest plan liability	—	—	(6.8)	(6.8)	—	—	(8.0)	(8.0)
Provisions for liabilities and charges	—	—	(11.0)	(11.0)	—	—	(6.4)	(6.4)
Loans from limited partners of consolidated funds	—	—	(23.0)	(23.0)	—	—	(13.1)	(13.1)
	(73.8)	(24.0)	(57.2)	(155.0)	(65.0)	(39.0)	(47.2)	(151.2)

At 31 December 2018, if interest rates had been 1% higher/lower, post-tax profit for the year, and other components of equity, would have been £1.0m (2017: £1.8m) 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.

	2018 £m	2017 £m
Credit rating		
P1	78.2	117.9
P2	134.7	208.4
Other	6.1	—
Total deposits and cash and cash equivalents	219.0	326.3

In addition to the above the group holds £6.1m with Arbuthnot Latham, a private bank with no debt in issue and accordingly on which a credit rating is not applicable.

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 2018 was the greater of 50% of total deposits or £50.0m (2017: £50.0m).

² Restated following finalisation of provisional acquisition accounting in respect of Touchstone acquisition (see note 26)

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 group's accounting policy in respect of the valuation of unquoted equity investments is set out in Note 1. In applying this policy, the key areas over which judgment are exercised include:

- Consideration of whether a funding round is sufficiently arm's length to be representative of fair value
- The length of time for which the price of recent investment remains the most appropriate measure of fair value
- In the case of companies with complex capital structures, the appropriate methodology for assigning value to different classes of equity based on their differential economic rights
- Where using alternative valuation methods such as discounted cash flows, inputs including the probability of achieving milestones and the discount rate used.

In all cases, valuations are based on the judgement of the Directors after consideration of the above and upon available information believed to be reliable, which may be affected by conditions in the financial markets. Due to the inherent uncertainty of the investment valuations, the estimated values may differ significantly from the values that would have been used had a ready market for the investments existed, and the differences could be material.

(ii) Goodwill impairment testing

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 and an estimation of the recoverable amount of the cash-generating unit ("CGU") to which goodwill is allocated.

The recoverable amount is based on value in use calculations which requires estimates of future cash flows expected from the CGU and a suitable discount rate in order to calculate present value. The key assumptions for the University Partnerships CGU are the rate of return achieved, the annual investment rate, the long term growth rate and the discount rate.

See note 12 for further details.

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 2018 and the year ended 31 December 2017, the Group's revenue and profit/loss before taxation were derived almost entirely from its principal activities within the UK.

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 capital funds focusing on early-stage UK technology companies;
- (iii) the in-licensing of drugable intellectual property from research intensive institutions, which activity ceased in 2017.

Consideration has been given to whether the UK Life sciences and Technology partnerships or the US and Australasian operations represent separate reporting segments. In light of the Executive level management of several strategic assets in the portfolio, the involvement of the Board in the investment approval process for larger investments, and following consideration of the criteria for aggregation of operating segments, we conclude that this is not the case.

These activities are described in further detail in the Strategic report above.

Year ended 31 December 2018	University partnership business management £m	Venture capital fund management £m	In-licensing activity £m	Consolidated £m
STATEMENT OF COMPREHENSIVE INCOME				
Portfolio return and revenue				
Change in fair value of equity and debt investments	(50.4)	—	—	(50.4)
Gain on disposal of equity investments	2.0	—	—	2.0
Gain on deconsolidation of subsidiary	—	—	—	—
Change in fair value of limited and limited liability partnership interests	2.3	—	—	2.3
Other portfolio income	—	—	—	—
Licensing income	—	—	—	—
Revenue from services and other income	3.4	1.6	—	5.0
Revenue from fund management services	—	4.9	—	4.9
Carried interest plan charge	1.1	—	—	1.1
Amortisation of intangible assets	(9.2)	(0.7)	—	(9.9)
Goodwill impairment	(201.1)	(2.1)	—	(203.2)
IFRS3 charge in respect of acquisition of subsidiary	—	(3.3)	—	(3.3)
Acquisition and restructuring costs	—	—	—	—
Administrative expenses	(36.2)	(4.2)	—	(40.4)
Operating loss	(288.1)	(3.8)	—	(291.9)
Finance income	1.2	—	—	1.2
Finance costs	(3.0)	—	—	(3.0)
Loss before taxation	(289.9)	(3.8)	—	(293.7)
Taxation	(0.1)	—	—	(0.1)
Loss for the year	(290.0)	(3.8)	—	(293.8)

STATEMENT OF FINANCIAL POSITION

Assets	1,351.0	20.5	1.8	1,373.3
Liabilities	(145.2)	(8.1)	(1.8)	(155.1)
Net assets	1,205.8	12.4	—	1,218.2
Other segment items				
Capital expenditure	0.6	—	—	0.6
Depreciation	(1.2)	—	—	(1.2)

Year ended 31 December 2018	UK £m	Non-UK £m	Consolidated £m
STATEMENT OF COMPREHENSIVE INCOME BY GEOGRAPHY			
Portfolio return and revenue	(50.4)	14.2	(36.2)
Administrative expenses	(247.7)	(8.0)	(255.7)
Operating (loss)/profit	(298.1)	6.2	(291.9)
Net Interest	(1.8)	—	(1.8)
(Loss)/profit before taxation	(299.9)	6.2	(293.7)
Taxation	(0.1)	—	(0.1)
(Loss)/profit for the year	(300.0)	6.2	(293.8)

Year ended 31 December 2018	UK £m	Non-UK £m	Consolidated £m
STATEMENT OF FINANCIAL POSITION BY GEOGRAPHY			
Current Assets	207.4	18.2	225.6
Non-Current Assets	1,099.8	47.9	1,147.7
Current Liabilities	(24.4)	(7.5)	(31.9)
Non-Current Liabilities	(107.5)	(15.7)	(123.2)
Total Equity	1,175.3	42.9	1,218.2

Year ended 31 December 2017	University partnership business £m	Venture capital fund management £m	In-licensing activity £m	Consolidated £m
STATEMENT OF COMPREHENSIVE INCOME				
Portfolio return and revenue				
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)
Operating profit	5.4	2.7	45.0	53.1
Finance income	1.0	—	—	1.0
Finance costs	(0.7)	—	—	(0.7)
Profit before taxation	5.7	2.7	45.0	53.4
Taxation	—	—	—	—
Profit for the year	5.7	2.7	45.0	53.4

STATEMENT OF FINANCIAL POSITION

Assets	1,642.6	17.1	—	1,659.7
Liabilities	(147.0)	(4.2)	—	(151.2)
Net assets	1,495.6	12.9	—	1,508.5
Other segment items				
Capital expenditure	1.6	—	—	1.6
Depreciation	(0.9)	—	—	(0.9)

Year ended 31 December 2017	UK £m	Non-UK £m	Consolidated £m
STATEMENT OF COMPREHENSIVE INCOME BY GEOGRAPHY			
Portfolio return and revenue	98.3	5.2	103.5
Administrative expenses	(44.9)	(5.5)	(50.4)
Operating (loss)/profit	53.4	(0.3)	53.1
Net Interest	0.3	—	0.3
(Loss)/profit before taxation	53.7	(0.3)	53.4
Taxation	—	—	—
(Loss)/profit for the year	53.7	(0.3)	53.4

Year ended 31 December 2017	UK £m	Non-UK £m	Consolidated £m
STATEMENT OF FINANCIAL POSITION BY GEOGRAPHY			
Current Assets	333.6	1.0	334.6
Non-Current Assets	1,305.5	20.4	1,325.9
Current Liabilities	(24.3)	(1.7)	(26.0)
Non-Current Liabilities	(126.0)	-	(126.0)
Total Equity	1,488.8	19.7	1,508.5

6. Auditor's Remuneration

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

	2018 £'000s	2017 £'000s
Fees payable to the Company's auditor for the audit of the Company's annual accounts	129	118
Fees payable to the Company's auditor for the audit of the Company's interim accounts	32	50
The audit of the Company's subsidiaries, pursuant to legislation	115	100
Total fees for audit services	276	268
Audit-related assurance services	—	—
Total assurance services	276	268
Tax compliance services	—	—
Taxation advisory services	—	—
All other services	9	23
Total non-assurance services	9	23

7. Operating Profit

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

	2018 £m	2017 £m
Amortisation of intangible assets	(9.9)	(3.9)
Goodwill impairment	(203.2)	—
Depreciation of tangible assets	(1.2)	(0.9)
Employee costs (see note 9)	(21.3)	(17.0)
Operating leases (see note 20)	(1.1)	(1.1)
Gain on deconsolidation of subsidiary	—	45.1

8. Acquisition and Restructuring Costs

Acquisition and restructuring costs in the year comprised:

	2018 £m	2017 £m
Financial and corporate broking advice	—	5.0
Legal advice	—	1.0
Other professional advice	—	0.2
Other costs	—	2.9
	—	9.1

Acquisition and restructuring costs incurred in 2017 related to professional fees incurred for the acquisition of Touchstone Innovations, provisions 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.

9. Employee Costs

Employee costs (including executive directors) comprise:

	2018 £m	2017 £m
Salaries	14.9	10.2
Defined contribution pension cost	1.3	0.5
Share-based payment charge (see note 21)	1.9	2.4
Other bonuses accrued in the year	1.4	2.5
Social security	1.8	1.4
	21.3	17.0

The average monthly number of persons (including executive directors) employed by the Group during the year was 167, all of whom were involved in management and administration activities (2017: 115).

10. Taxation

	2018 £m	2017 £m
Current tax		
UK corporation tax on (losses)/profits for the year	—	—
Foreign tax	0.1	—
	0.1	—
Deferred tax	—	—
Total tax	0.1	—

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 majority of investments acquired via the combination with Touchstone Innovations plc were previously held via Imperial Innovation Sàrl, which exempted dividends and gains from tax under Luxembourg law provided the conditions for the relevant participation exemption were met. During the year, the group unwound this structure and as a result the assets of Touchstone Innovations are now subject to the UK tax regime described above.

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

	2018 £m	2017 £m
(Loss)/profit before tax	(293.7)	53.4
Tax at the UK corporation tax rate of 19.0% (2017: 19.25%)	(55.8)	10.3
Expenses not deductible for tax purposes	0.2	1.6
Amortisation on goodwill arising on consolidation	40.5	—
Non-taxable income on deconsolidation of Istesso group	—	(8.7)
Fair value movement on investments qualifying for SSE	8.8	(9.4)
Movement on share-based payments	0.3	0.3
Movement in tax losses arising not recognised	6.1	5.9
Total tax charge	0.1	—

At 31 December 2018, deductible temporary differences and unused tax losses, for which no deferred tax asset has been recognised, totalled £228.3m (2017: £246.9m). An analysis is shown below:

	2018		2017	
	Amount £m	Deferred tax £m	Amount £m	Deferred tax £m
Share-based payment costs and other temporary differences	4.6	0.8	15.1	2.6
Unused tax losses	223.7	38.0	231.8	39.4
	228.3	38.8	246.9	42.0

At 31 December 2018, deductible temporary differences and unused tax losses, for which a deferred tax asset/(liability) has been recognised, totalled £nil (2017: £nil). An analysis is shown below:

	2018		2017	
	Amount £m	Deferred tax £m	Amount £m	Deferred tax £m
Temporary timing differences	8.1	1.4	7.1	1.2
Unused tax losses	(8.1)	(1.4)	(7.1)	(1.2)
	—	—	—	—

11. (Loss)/earnings per Share

	2018 £m	2017 £m
(Loss)/earnings		
(Loss)/earnings for the purposes of basic and dilutive earnings per share	(293.8)	49.7

	2018 Number of shares	2017 Number of shares
Number of shares		
Weighted average number of ordinary shares for the purposes of basic earnings per share	1,058,678,987	704,227,751
Effect of dilutive potential ordinary shares:		
Options or contingently issuable shares	—	657,673
Weighted average number of ordinary shares for the purposes of diluted earnings per share	1,058,678,987	704,885,424

No adjustment has been made to the basic loss per share in the year ended 31 December 2018, as the exercise of share options would have the effect of reducing the loss per ordinary share, and therefore is not dilutive.

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

	2018 £m	2017 ³ £m
Opening	202.5	57.1
Adjustment of provisional acquisition accounting in respect of Touchstone acquisition (see note 26)	—	30.4
Recognised on acquisition of subsidiary undertakings	—	115.0
Recognised on buyout of minority interest in US platform	1.1	—
Impairment of goodwill	(203.2)	—
	0.4	202.5

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.

	2018 £m	2017 ³ £m
University partnership CGU	—	200.0
Fund management CGU	—	2.1
Parkwalk Advisors CGU	0.4	0.4
	0.4	202.5

Impairment review of the university partnership CGU

The recoverability of this CGU was based on its value in use, determined by discounting the future cash flows to be generated from the continuing use of the CGU. The key assumptions used in the estimation of 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 this CGU, there is a range of possible alternative values. The key variable ranges are set out below:

	2018	2017
Rate of return achieved	12-14%	15%–20%
Annual investment rate	£80m-£90m	£125m–£135m ⁽¹⁾
Long term growth rate	1.5%-1.7%	1.5%–1.7%
Discount rate	9%-10%	10%-15%

¹⁾ The 2017 values have been represented to include capital investment in the Touchstone Innovations portfolio

During the year, the Group has experienced negative portfolio returns as a result of a broad deterioration in equity market sentiment which has impacted the value of the Group's quoted portfolio, as well as the specific impact of the failure of Diurnal plc's Phase III clinical trial for Chronocort. Management view these factors as potential indicators of impairment and have considered their impact on the assumptions used the Group's goodwill impairment model.

The rate of return estimate has previously been based on the Group's long term returns forecast, which was supported by the Group's cumulative IRR performance. As a result of the factors noted above, in 2018 there was a significant divergence between forecast and actual portfolio returns performance, accompanied by a drop in the Group's cumulative IRR performance. As a result, management no longer deem it appropriate to base the rate of return assumption on forecast portfolio returns and have instead based it on the Group's

³ Restated following finalisation of provisional acquisition accounting in respect of Touchstone acquisition (see note 26)

historic cumulative IRR performance to date. The resulting reduction in the forecast IRR is the primary factor resulting in the full impairment of goodwill in this CGU.

The annual investment rate has been projected taking into account the group's average anticipated portfolio investment level over the period covered by its financial forecasting period. The decline in the projected annual investment rate reflects the completion of the integration of the IP Group and Touchstone portfolios, with the combined investment teams focussing on the most promising opportunities in the combined portfolio.

The discount rate was a pre-tax measure estimated based on an industry average weighted cost of capital. The long term growth rate was based on the International Monetary Fund's 5 year UK real GDP growth rate, which the Directors believe appropriately reflects the long term growth assumption that a market participant would make.

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:

	2018	2017
	£m	£m
Discount rate	9-10%	9%-11%
Number of funds under management	3	3
Remaining average fund life (years)	1.5	2.5
Annual management fee	2%-3.25%	2%-3.25%
Cost inflation	1.5%	2.5%
Long term growth rate	1.7%	1.9%

The recoverability of this CGU was based on its value in use, determined by discounting the future cash flows to be generated from the continuing use of the CGU. The group's value in use model includes an estimate of fund management fees earned during the lifetime of its fixed life funds, which currently include investments from a number of EU-funded bodies. As a result of uncertainty around the nature of future investments by EU-funded bodies, no extension in the life of these funds is now assumed. The resulting reduction in the anticipated level of management fees gives rise to a full impairment of goodwill in the Group's venture capital fund management CGU.

13. Intangible Assets

	£m
Cost	
At 1 January 2018	30.6
Additions acquired through business combinations	—
At 31 December 2018	30.6
Accumulated amortisation	
At 1 January 2018	20.4
Charge for the year	9.9
At 31 December 2018	30.3
Net book value	
At 31 December 2018	0.3
At 31 December 2017	10.2

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 up to 17 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 £m	Amortised cost £m	Total £m
Financial assets			
At 31 December 2018			
Equity investments	1,095.1	—	1,095.1
Debt investments	33.1	—	33.1
Other financial assets	—	—	—
Limited and limited liability partnership interests	17.3	—	17.3
Trade and other receivables	—	5.8	5.8
Deposits	—	90.0	90.0
Cash and cash equivalents	—	129.0	129.0
Total	1,145.5	224.8	1,370.3
At 31 December 2017⁴			
Equity investments	1,057.5	—	1,057.5
Debt investments	42.3	—	42.3
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
Total	1,110.8	334.6	1,445.4

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 (2017: £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 (2017: 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.

⁴ Restated following finalisation of provisional acquisition accounting in respect of Touchstone acquisition (see note 26)

15. Net Investment Portfolio

Note 1 includes a description of the fair value hierarchy used, including the subdivision of Level 3 into Level 3a and Level 3b.

	Level 1	Level 3			Total £m
	Equity investments in quoted spin- out companies £m	Level 3a		Level 3b	
		Equity investments in unquoted spin- out companies £m	Unquoted debt investments in spin-out companies £m	Equity investments in unquoted spin- out companies £m	
At 1 January 2018	225.0	308.2	42.3	524.3	1,099.8
Investments during the year	11.2	68.0	17.5	4.2	100.9
Transaction-based reclassifications during the year	4.7	11.9	(17.0)	0.4	—
Other transfers between hierarchy levels during the year	—	210.4	—	(210.4)	—
Disposals	(7.9)	(1.4)	(8.0)	(10.2)	(27.5)
Fees settled via equity	—	0.2	—	—	0.2
Change in revenue share	—	0.4	—	4.8	5.2
Change in fair value in the year ⁽ⁱ⁾	(99.8)	59.6	(1.7)	(8.5)	(50.4)
At 31 December 2018	133.2	657.3	33.1	304.6	1,128.2
At 1 January 2017 ⁵	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	35.2	137.6	17.0	131.6	321.4
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 ⁽ⁱ⁾	(1.1)	26.9	(0.4)	23.6	49.0
At 31 December 2017	225.0	308.2	42.3	524.3	1,099.8

- (i) The change in fair value in the year includes a gain of £3.1m (2017: loss of £1.1m) in exchange differences on translating foreign currency investments. The total unrealised change in fair value in respect of Level 3 investments was a gain of £49.4m (2017: gain of £50.1m).

The Group's policy is to classify equity investments in unquoted investments 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 31.6% (2017: 23.0%) of the equity investments in unquoted spin-out companies would be reclassified to Level 3b.

Investments in 119 (2017: 190) 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 £30.5m (2017: £52.4m), with a corresponding increase if the unobservable inputs were to increase by 10%.

The majority of the assets held within Level 3 are valued based on unobservable inputs related to the price of recent investments. Assets totalling £33.2m are valued on a discounted cash flow basis; these valuations are sensitive to the discount rate assumed in the valuation of each asset.

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.

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 levels 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 level 3a, and those changes post are attributed to level 1.

⁵ Restated following finalisation of provisional acquisition accounting in respect of Touchstone acquisition (see note 26)

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 £nil (2017: £13.4m).

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 (2017: no such instances).

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 £471.9m (2017: £26.7m).

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 £164.6m (2017: £280.0m).

Within level 3a equity investments, the distribution by portfolio company holding value is as follows: investments >£10m: £505.5m (2017: £177.4m), investments £5-£10m: £97.6m (£63.7m), investments £1.5-£5m: £47.7m (2017: 54.5m), investments < £1.5m: £6.5m (2017: £6.6m).

Within level 3a debt investments, the distribution by portfolio company holding value is as follows: investments >£10m: £10.5m (2017: £29.1m), investments £5-£10m: £7.5m (£5.2m), investments £1.5-£5m: £10.7m (2017: 5.4m), investments < £1.5m: £4.4m (2017: £5.5m).

Within level 3b equity investments, the distribution by portfolio company holding value is as follows: investments >£10m: £197.0m (2017: £451.8m), investments £5-£10m: £48.6m (£40.6m), investments £1.5-£5m: £41.9m (2017: 38.2m), investments < £1.5m: £17.1m (2017: £27.5m).

	2018	2017
	£m	£m
Change in fair value in the year		
Fair value gains	103.3	99.3
Fair value losses	(153.7)	(50.3)
	(50.4)	49.0

The Company's interests in subsidiary undertakings are listed in note 2 to the Company's financial statements.

16. Trade and Other Receivables

	2018	2017
	£m	£m
Trade debtors	4.3	1.9
Prepayments	0.8	1.4
Other receivables	1.5	5.0
	6.6	8.3

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. Trade and Other Payables

	2018	2017
	£m	£m
Current liabilities		
Trade payables	1.7	2.0
Social security expenses	0.7	0.7
Deferred consideration payable	2.8	4.3
Redundancy and restructuring cost accrual	—	2.4
Bonus accrual	2.1	2.8
Current tax payable	0.1	—
Other accruals and deferred income	9.1	7.5
	16.5	19.7

18. Borrowings

	2018	2017
	£m	£m
Non-current liabilities		
EIB debt facility	82.4	97.7
Loans drawn down from the Limited Partners of consolidated funds	23.0	13.1
	105.4	110.8

	2018	2017
	£m	£m
Current liabilities		
EIB debt facility	15.4	6.3
	15.4	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. The classification of these loans as non-current reflects the forecast timing of returns and subsequent repayment of loans, which is not anticipated to occur within 1 year.

EIB debt facility

The group has a number of debt facilities with the European Investment Bank which it has used to fund UK university spin-out companies as they develop and mature. The terms of the facilities are summarised below:

Description	Initial amount	Date drawn	Interest rate	Repayment terms	Repayment commencement date
IP Group Facility, tranche 1	£15m	Dec 2015	Floating, linked to LIBOR	5 years	Jan 2019
IP Group Facility, tranche 2	£15m	Dec 2017	Fixed 3.016%	5 years	Jan 2019
Touchstone Facility A	£30m	Jul 2013	Floating, linked to LIBOR	12 years	Jan 2015
Touchstone Facility B	£50m	Feb 2017	Fixed 3.026%	8 years	Jul 2018

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.

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 Group closely monitors that the covenants are adhered to on an ongoing basis and has complied with these covenants throughout the year. The Group will continue to monitor the covenants position against forecasts and budgets to ensure that it operates within the prescribed limits.

	2018	2017
	£m	£m
The maturity profile of the borrowings was as follows:		
Due within 6 months	7.7	1.6
Due 6 to 12 months	7.7	4.7
Due 1 to 5 years	61.7	61.7
Due after 5 years	21.0	36.4
At 31 December⁽ⁱ⁾	98.1	104.4

	2018	2017
	£m	£m
A reconciliation in the movement in debt is as follows:		
Opening	104.4	14.9
Drawdown of debt	—	15.0
Repayment of debt	(6.3)	—
Acquisition of subsidiary	—	74.5
At 31 December⁽ⁱ⁾	98.1	104.4

There were no non-cash movements in debt.

(i) These are gross amounts repayable and exclude costs of £0.3m (2017: £0.4m) incurred on obtaining the loans and amortised over the life of the loans.

19. Share Capital

	2018		2017	
	Number	£m	Number	£m
Issued and fully paid:				
Ordinary Shares of 2p each				
At 1 January	1,057,383,601	21.1	565,221,967	11.3
Issued under share placings	—	—	131,913,567	2.6
Issued as consideration in acquisitions	—	—	359,304,235	7.2
Issued in respect of post-acquisition services	1,519,849	0.1	—	—
Issued under employee share plans	241,145	—	943,832	—
At 31 December	1,059,144,595	21.2	1,057,383,601	21.1

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.

On 5th April 2018, the Group issued 1,519,849 new Ordinary Shares as consideration to the sellers of Parkwalk Advisors (see Note 26). These amounts are deemed, under IFRS3, to represent payment for post-acquisition services.

On 16th April 2018, the Group issued 241,145 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 21)

20. Operating Lease Arrangements

	2018	2017
	£m	£m
Payments under operating leases recognised in the statement of comprehensive income for the year	1.1	1.1

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

	2018	2017
	£m	£m
Within one year	1.8	1.7
In the second to fifth years inclusive	3.4	4.6
	5.2	6.3

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.

21. Share-Based Payments

In 2018, 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 2018	Weighted -average exercise price 2018	Number of options 2017	Weighted -average exercise price 2017
At 1 January	394,494	—	837,995	—
AIS deferral shares award during the year	468,901	—	—	—
Exercised during the year	(241,145)	—	(436,689)	—
Lapsed during the year	(16,609)	—	(6,812)	—
At 31 December	605,641	—	394,494	—
Exercisable at 31 December	153,349	—	—	—

The options outstanding at 31 December 2018 had an exercise price of £nil (2017: £nil) and a weighted-average remaining contractual life of 0.6 years (2017: 0.3 years).

The weighted average share price at the date of exercise for share options exercised in 2018 was 127p (2017: 139.17p).

As the 2018 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 2018.

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 2018 LTIP awards were made on 10 May 2018. The awards will ordinarily vest on 31 March 2021, 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 2018 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 2018 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 2018 to 31 December 2020, and TSR increasing by 15% per year on a cumulative basis from the date of award to 31 March 2021, 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 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 did not meet the threshold performance target and lapsed on 31 March 2018.

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

	Number of options 2018	Weighted- average exercise price 2018	Number of options 2017	Weighted- average exercise price 2017
At 1 January	9,066,117	—	5,614,837	—
Lapsed during the year	(1,262,697)	—	(1,227,666)	—
Forfeited during the year	(452,484)	—	(3,766)	—
Vested during the year	—	—	—	—
Notionally awarded during the year	5,025,302	—	4,682,712	—
At 31 December	12,376,238	—	9,066,117	—
Exercisable at 31 December	—	—	—	—

The options outstanding at 31 December 2018 had an exercise price in the range of £nil (2017: £nil) and a weighted-average remaining contractual life of 1.3 years (2017: 1.6 years).

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

	2018	2017
Share price at date of award	£1.355	£1.151
Exercise price	£nil	£nil
Fair value at grant date	£0.57	£0.34
Expected volatility (median of historical 50-day moving average)	36%	36%
Expected life (years)	3.0	3.0
Expected dividend yield	0%	0%
Risk-free interest rate	1.0%	0.4%

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, an exchange ratio set out in the Offer Document for the acquisition (the "Exchange Ratio").

2016 schemes:

It was proposed that given the short period of time since grant, awards would not become exercisable in connection with the Offer and therefore that no progress towards meeting performance targets had been made. Instead 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 and the exercise price was set at 3.33 pence divided 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 Net Asset Value ("NAV") condition will be adjusted to reflect Touchstone's portfolio being part of the enlarged group following the acquisition and b) the Total Shareholder Return ("TSR") condition will be adjusted so that TSR shall be 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 the existing starting share price of 290 pence by the exchange ratio detailed above. The TTO specific targets remain the same.

	Number of options 2018	Weighted- average exercise price 2018	Number of options 2017	Weighted- average exercise price 2017
At 1 January	2,875,606	—	—	—
Replacement shares awarded on 17 October 2018	—	—	2,875,606	—
Forfeited during the year	(1,728,796)	—	—	—
Vested during the year	—	—	—	—
At 31 December	1,146,810	—	2,875,606	—
Exercisable at 31 December	—	—	—	—

The options outstanding at 31 December 2018 had an exercise price of £0.015 (2017: £0.015) and a weighted-average remaining contractual life of 1.7 years (2017: 2.7 years).

2006 schemes:

Holders of 2006 Touchstone 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. The exercise period and time-based vesting provisions for the replacement awards remained the same as the original Touchstone awards but the shareholder return performance condition will be updated by reference to the Exchange Ratio. Awards under the 2006 scheme were exercisable to some extent at the time of the grant of replacement awards, subject to meeting the applicable vesting conditions.

	Number of options 2018	Weighted- average exercise price 2018	Number of options 2017	Weighted- average exercise price 2017
At 1 January	1,808,001	—	—	—
Forfeited during the year	(529,167)	—	—	—
Replacement shares awarded on 17 October 2018	—	—	1,808,001	—
At 31 December	1,278,834	2.14	1,808,001	£2.13
Exercisable at 31 December	1,278,834	2.14	1,808,001	£2.13

The options outstanding at 31 December 2018 had an exercise price of £2.14 (2017: £2.13) and a weighted-average remaining contractual life of 5.9 years (2017: 6.9 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:

	2018	2017
At 1 January	—	1,338,000
Expired during the year	—	(1,338,000)
At 31 December	—	—

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 £1.9m (2017: £2.4m).

22. Limited and Limited Liability Partnership Interests

	£m
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)
At 1 January 2018	11.0
Additions during the year	4.8
Realisations in the year	(0.8)
Change in fair value during the year	2.3
At 31 December 2018	17.3

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.

23. 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:

	2018	2017
	£m	£m
Statement of comprehensive income		
Revenue from services	0.5	0.7

	2018	2017
	£m	£m
Statement of financial position		
Investment in limited partnerships	5.8	2.6
Amounts due from related parties	1.2	0.7

b) Key management personnel

i) Key management personnel transactions

Key management had investments in the following spin-out companies as at 31 December 2018:

Director/ PDMR	Company name	Shares held at 1 January 2018	Number of shares acquired/ (disposed) in the period	Number of shares held at 31 December 2018	%
Alan Aubrey	Accelercomm Limited	333	305	638	0.24%
	Alesi Surgical Limited	18	—	18	0.14%
	Amaethon Limited — A Shares	104	—	104	3.12%
	Amaethon Limited — B Shares	11,966	—	11,966	1.04%
	Amaethon Limited — Ordinary shares	21	—	21	0.32%
	Avacta Group plc	202,761	(11,427)	191,334	0.17%
	Boxarr Limited	1,732	—	1,732	0.24%
	Capsant Neurotechnologies Limited ⁽ⁱ⁾	11,631	—	11,631	0.81%
	Crysalin Limited	1,447	—	1,447	0.13%
	Deep Matter Group plc ⁽ⁱⁱ⁾	2,172,809	—	2,172,809	0.39%
	Ditto AI Limited	120,434,525	50,534,071	170,968,596	12.20%
	Diurnal Group plc	15,000	—	15,000	<0.1%
	EmDot Limited	15	—	15	0.87%
	Getech Group plc	15,000	—	15,000	<0.1%
	hVivo plc	37,160	—	37,160	<0.1%
	Ilika plc	69,290	(54,814)	14,476	<0.1%
	Istesso Limited	1,185,150	—	1,185,150	1.57%
	Itaconix plc	88,890	—	88,890	<0.1%
	Karus Therapeutics Limited	223	—	223	<0.1%
	Microbotica Limited	10,000	—	10,000	<0.1%
	Mirriad Advertising plc	33,333	—	33,333	<0.1%
	MDL 2016 Limited — Ordinary shares ⁽ⁱⁱⁱ⁾	3,226	(3,226)	0	0.00%
	MDL 2016 Limited — A shares ⁽ⁱⁱⁱ⁾	229	(229)	0	0.00%
	Modern Water plc	519,269	—	519,269	0.54%
	Oxbotica Limited	0	16	16	<0.1%
	Oxford Advanced Surfaces Limited ^(iv)	8,402	(8,401)	1	<0.1%
	Oxford Nanopore Technologies Limited	101,208	—	101,208	0.35%
	Perachem Holdings plc	108,350	—	108,350	0.29%
	Salunda Limited	53,639	—	53,639	<0.1%
	Structure Vision Limited	212	—	212	1.00%
Surrey Nanosystems Limited	453	—	453	0.22%	
Tissue Regenix Group plc	2,389,259	—	2,389,259	0.20%	
Xeros Technology Group plc	40,166	(17,319)	22,847	<0.1%	
Zeetta Networks Limited	424	—	424	<0.1%	
Mike Townend	Amaethon Limited — A Shares	104	—	104	3.12%
	Amaethon Limited — B Shares	11,966	—	11,966	1.04%
	Amaethon Limited — Ordinary shares	21	—	21	0.32%
	Applied Graphene Materials plc	22,619	—	22,619	<0.1%
	Avacta Group plc	20,001	—	20,001	<0.1%
	Capsant Neurotechnologies Limited ⁽ⁱ⁾	11,282	—	11,282	0.79%
	Creavo Technologies Limited	117	—	117	<0.1%
	Crysalin Limited	1,286	—	1,286	0.11%
	Deep Matter Group plc ⁽ⁱⁱ⁾	932,944	—	932,944	0.17%
	Ditto AI Limited	613,048	—	613,048	<0.1%
	Diurnal Group plc	15,000	—	15,000	<0.1%
	EmDot Limited	14	—	14	0.81%
	Getech Group plc	20,000	—	20,000	<0.1%
	Istesso Limited	1,185,150	—	1,185,150	1.57%
	Ilika plc	10,000	—	10,000	<0.1%
	Itaconix plc	64,940	—	64,940	<0.1%
	Mirriad Advertising plc	25,000	—	25,000	<0.1%
	MDL 2016 Limited ⁽ⁱⁱⁱ⁾	1,756	(1,756)	0	0%
	Modern Water plc	575,000	—	575,000	0.60%
	Oxford Advanced Surfaces Limited ^(iv)	5,000	(4,999)	1	<0.1%
	Oxford Nanopore Technologies Limited	30,967	—	30,967	<0.1%
	Perachem Holdings plc	113,222	—	113,222	0.30%
	Structure Vision Limited	212	—	212	1.00%
Surrey Nanosystems Limited	404	—	404	0.20%	

Director/ PDMR	Company name	Shares held at 1 January 2018	Number of shares acquired/ (disposed) in the period	Number of shares held at 31 December 2018	%
	Tissue Regenix Group plc	1,950,862	—	1,950,862	0.17%
	Ultrahaptics Holdings Limited	1,224	—	1,224	<0.1%
	Xeros Technology Group plc	35,499	—	35,499	<0.1%
Greg Smith	Alesi Surgical Limited	2	—	2	<0.1%
	Avacta Group plc	3,904	—	3,904	<0.1%
	Capsant Neurotechnologies Limited ⁽ⁱ⁾	896	—	896	<0.1%
	Crysalin Limited	149	—	149	<0.1%
	Ditto AI Limited	144,248	—	144,248	<0.1%
	Diurnal Group plc	15,000	—	15,000	<0.1%
	EmDot Limited	4	—	4	0.23%
	Getech Group plc	8,000	—	8,000	<0.1%
	hVivo plc	61,340	—	61,340	<0.1%
	Istesso Limited	313,425	—	313,425	0.41%
	Itaconix plc	4,500	—	4,500	<0.1%
	Perachem Holdings plc	4,830	—	4,830	<0.1%
	Mirriad Advertising plc	16,667	—	16,667	<0.1%
	MDL 2016 Limited — Ordinary shares ⁽ⁱⁱⁱ⁾	361	(361)	0	0%
	MDL 2016 Limited — A shares ⁽ⁱⁱⁱ⁾	28	(28)	0	0%
	Modern Water plc	7,250	—	7,250	<0.1%
	Oxbotica Limited	0	8	8	<0.1%
	Oxford Nanopore Technologies Limited	1,581	—	1,581	<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%
David Baynes	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	0.12%
	Mirriad Advertising plc	16,667	—	16,667	<0.1%
	Oxford Nanopore Technologies Limited	174	—	174	<0.1%
	Ultrahaptics Holdings Limited	26	2,574	2,600	<0.1%
	Zeetta Networks Limited	424	—	424	0.13%
Mark Reilly	Actual Experience plc	65,500	—	65,500	0.15%
	Ceres Power Holdings plc	5,697	—	5,697	<0.1%
	Diurnal Group plc	7,500	—	7,500	<0.1%
	Mirriad Advertising plc	33,333	—	33,333	<0.1%
	Oxbotica Limited	0	8	8	<0.1%
	Ultrahaptics Holdings Limited	1,700	—	1,700	<0.1%
	Wave Optics Limited	0	308	308	<0.1%
Sam Williams	Accelercomm Limited	66	61	127	<0.1%
	Alesi Surgical Limited	1	—	1	<0.1%
	Creavo Medical Technologies Limited	23	—	23	<0.1%
	Diurnal Group plc	46,748	5,500	52,248	<0.1%
	Genomics plc	0	333	333	<0.1%
	Istesso Limited	7,048,368	—	7,048,368	9.32%
	Microbotica Limited	7,000	—	7,000	<0.1%
	Mirriad Advertising plc	3,333	—	3,333	<0.1%
	Oxford Nanopore Technologies Limited	340	—	340	<0.1%
	Ultrahaptics Holdings Limited	558	—	558	<0.1%

I. Capsant Neurotechnologies Limited commenced voluntary liquidation proceedings on 13th August 2018

II. Deep Matter Group plc was formerly known as Cronin Group plc

III. MDL 2016 Limited was dissolved on 6th March 2018

IV. Oxford Advanced Surfaces Limited had a share consolidation of 5000:1 on 12th March 2018

ii) Key management personnel compensation

Key management personnel compensation comprised the following:

	2018 £m	2017 £m
Short-term employee benefits ^{(i)*}	2,402	2,144
Post-employment benefits ⁽ⁱⁱ⁾	114	116
Other long-term benefits	—	—
Termination benefits	—	—
Share-based payments ⁽ⁱⁱⁱ⁾	1,089	837
Total	3,605	3,097

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 21 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:

	2018 £m	2017 £m
Statement of comprehensive income		
Revenue from services	4.3	1.9

	2018 £m	2017 £m
Statement of financial position		
Trade receivables	0.9	0.5

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:

	2018 £m	2017 £m
Statement of comprehensive income		
Net gains/(losses) on disposals	1.1	0.7
Change in fair value of equity and debt investments	(21.6)	49.0

	2018 £m	2017 £m
Statement of financial position		
Equity and debt investments	618.1	619.5

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:

	2018 £m	2017 £m
Statement of financial position		
Intercompany balances with other Group companies	3.6	3.2

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

24. 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 2018, the Group's strategy, which was unchanged from 2017, 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 18.

25. Capital Commitments

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 2018:

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	7.6	2.4
UCL Technology Fund LP	2016	24.8	10.2	14.6
Apollo Therapeutics LLP	2016	3.3	1.0	2.3
Total		41.2	21.8	19.4

26. Acquisition of subsidiaries

Touchstone Innovations plc:

On 17 October 2017 the Group acquired control of 100% of the ordinary shares in Touchstone Innovations plc. The Group has recognised the assets and liabilities acquired in accordance with IFRS 3 'Business Combinations'. Certain assets, primarily holdings in unlisted portfolio companies that have been accounted for using non-market based valuation techniques, were provisionally determined and for a 12-month measurement period post-acquisition, adjustments are made to these assets to the extent that new information has been obtained about facts and circumstances that were in existence at the acquisition date. As at the reporting date, an adjustment of £30.4m (which comprises £30.8m portfolio valuation decrease, £0.4m decrease in other assets and £0.8m decrease in non-current liabilities) has been made to net assets acquired.

	2018 £m	2017 ⁸ £m
Net Assets Acquired		
Acquired intangible assets	—	6.9
Investment portfolio	—	321.4
Other non-current assets	—	6.3
Trade and other receivables	—	2.9
Cash and cash equivalents	—	119.1
Current liabilities	—	(6.7)
Non-current liabilities	—	(88.3)
Net assets	—	361.6
Goodwill	—	138.9
Total consideration	—	500.5

Consideration satisfied by:

Issue of share capital (357,518,520 IP Group ordinary shares at 140.0 pence per share ⁽⁹⁾)	500.5
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⁸ Restated following finalisation of provisional acquisition accounting in respect of Touchstone acquisition.

⁹ Being the closing price of IP Group plc shares on 17 October 2017, the date of acquisition

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.

	2018	2017
	£m	£m
Net Assets Acquired		
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

27. 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 financial statements 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		
			2018 £m	2017 ⁶ £m	
Hard NAV	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.	Total equity	1,218.2	1,508.5
			<i>Excluding:</i> Goodwill	0.4	202.5
			Other intangible assets	0.3	10.2
			Hard NAV	1,217.5	1,295.8
Hard NAV per share	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.	Hard NAV	£1,217.5m	£1,295.8m
			Shares in issue	1,059,144,595	1,057,383,601
			Hard NAV per share	115.0p	122.5p
Return on Hard NAV	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	Total comprehensive income	(293.9)	53.4
			<i>Excluding:</i> Amortisation of intangible assets	9.9	3.9

⁶ Restated following finalisation of provisional acquisition accounting in respect of Touchstone acquisition (see note 26)

APM	Reference for reconciliation	Definition and purpose	Calculation		
			2018 £m	2017 ⁶ £m	
		in respect of deferred and contingent consideration deemed to represent post acquisition services under IFRS3 which is anticipated to be a non-recurring item.	Goodwill impairment	203.2	—
		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.	Share based payment charge	1.9	2.4
		The measure shows a summary of the income statement gains and losses which directly impact Hard NAV.	IFRS3 charge in respect of acquisition of subsidiary	3.3	4.4
			Return on Hard NAV	(75.6)	64.1
Return on Hard NAV excluding acquisition and restructuring costs	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.	Return on Hard NAV <i>Excluding:</i> Acquisition and restructuring costs	(75.6) —	64.1 9.1
			Return on Hard NAV excluding acquisition and restructuring costs	(75.6)	73.2
Loss for the year before exceptional goodwill impairment	Primary statements	Loss for the year, excluding goodwill impairment which is anticipated to be a non-recurring charge in the current year	(Loss)/profit for the year <i>Excluding:</i> Goodwill impairment	(293.8) 203.2	53.4 —
			Loss for the year before exceptional goodwill impairment	(90.6)	53.4
Net portfolio gains/(losses)	Note 15	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. 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 a performance metric for directors' and employees' incentives.	Change in fair value of equity and debt investments Gain on disposal of equity investments Gain on disposal of subsidiary	(50.4) 2.0 —	49.0 0.1 45.1
			Net portfolio (losses)/gains	(48.4)	94.2
Net overheads	Financial Review	Net overheads are defined as the group's core overheads less operating income. The measure reflects the Group's controllable net operating 'cash-equivalent' central cost base and is used as a performance metric in the Group's	Other income Other administrative expenses (see statement of	9.9 (41.8)	6.1 (30.8)

APM	Reference for reconciliation	Definition and purpose	Calculation	
			2018 £m	2017 ⁶ £m
		annual incentive scheme. Core overheads exclude items such as share based payments, amortisation of intangibles and consolidated portfolio company costs	comprehensive income) <i>Exclude:</i> Administrative expenses – Istesso Limited Administrative expenses – consolidated portfolio companies IFRS3 charge in respect of acquisition of subsidiary	— 0.6 2.1 4.4
			Net overheads	(26.0) (17.6)

28. Post Balance Sheet Events

On 28 February 2019, the Group completed an agreement with Imperial College London in respect of the commercialisation activities undertaken by the Group's technology transfer office ("TTO") team, Imperial Innovations, on behalf of Imperial College. This agreement sees the transfer of future commercialisation operations of the TTO, including the majority of the TTO employees, to the College. The Group retains its existing licenses and patents developed prior to the transfer. On 22 March 2019, the Group signed a lease surrender agreement in respect of the 7 Air Street, the former Touchstone head office. This surrender relieves the Group of all future obligations in respect of the office.