RICARDO

Creating a world fit for the future

10 September 2020

Ricardo plc

Preliminary results for the full year ended 30 June 2020

HIGHLIGHTS

- Good performance in H1 with COVID-19 impacting performance in H2;
- Energy & Environment, Defense and Rail all delivered an increase in profits on the prior year;
- Automotive-related businesses were significantly impacted with lower profits than prior year;
- We experienced a delay in some orders being placed and some challenges in the delivery of projects due to Ricardo and customers working remotely, leading to reduced levels of efficiency and lower margins;
- Automotive-related businesses restructured to provide lower cost base (c. £10m per annum) and realign it to anticipated demand;
- Disposal of DTC test business and exit from Santa Clara, in line with agile and asset-light strategy.
- Acquired businesses in Australia integrated and performing well;
- Good cash performance with positive working capital for the year – net debt was flat for the COVID-19 impacted H2. Cash resources increased by £50m and liquidity of £143m at 30 June 2020;
- Majority of offices and all assembly lines now open and operational following significant disruption during H2; and
- Interim dividend of 6.24p paid in April 2020 – no final dividend proposed.

			% Change			
	FY 2019/20	FY 2018/19	(Decline)/growth		Organic[6][7]	
Order intake (£m)	**368.7**	386.0	(4)		(10)	
Order book (£m)	**314.0**	314.0	-		-	
Revenue (£m)	**352.0**	384.4	(8)		(12)	
Underlying[1]						
- Operating profit margin (%)	**5.7**	10.3	(4.6)	pp	(5.2)	pp
- Profit before tax (£m)	**15.6**	37.0	(58)		(62)	
- Basic earnings per share[2] (p)	**21.3**	53.7	(60)		(60)	
Statutory						
- Operating (loss)/profit margin (%)	**(0.3)**	7.6	(7.9)	pp	(8.6)	pp
- (Loss)/profit before tax (£m)	**(5.3)**	26.5	(120)		(118)	
- Basic (loss)/earnings per share (p)	**(12.2)**	37.1	(133)		(133)	
Underlying[1] cash conversion[3] (%)	**102.1**	75.3	26.8	pp	26.1	pp
Cash conversion[3] (%)	**112.9**	74.4	38.5	pp	37.6	pp
Net debt[4] (£m)	**(73.4)**	(47.4)	(55)		n/a	
Dividend per share (p)	**6.24**	21.28	(71)		n/a	
Headcount[5] (no.)	**3,003**	2,981	1		-	

References in superscript are defined in the glossary of terms.

Commenting on the results, Dave Shemmans, Chief Executive Officer, said:

"The pandemic has made this a time of extreme global volatility. The resilience of our business has helped us weather the storm well - thanks to the agility and passion of our team and the underpinning strategy to be active in diverse geographies and sectors. I couldn't be prouder of our team as they transitioned to home working and focused on finding solutions in a "new normal" to deliver products and services to our global clients.

"We enter the new financial year with a good order book and we secured over £70m of new orders in July and August 2020. We have an agile business that has proven its resilience in a highly uncertain environment. We continue to see good opportunities for Ricardo in the markets that we serve, and through the execution of our strategy we are well positioned to continue to grow our Group as a sustainable business that delivers value for all of our stakeholders."

About Ricardo plc

Ricardo is a global engineering, technical, environmental and strategic consultancy business. We also manufacture and assemble low-volume, high-quality and high-performance products and develop advanced virtual engineering tools for conventional and electrified powertrains as well as for complex physical systems.

Our ambition is to be the world's pre-eminent organisation focused on the design, development and application of solutions to meet the challenges within the markets of automotive, rail, environmental & planning, resource management and defence. Our vision is *to create a world fit for the future*, and we will achieve this through the activities of our portfolio of businesses, each of them underpinned by our talented team of professionals.

Analyst and investor presentation

The analyst and investor presentation of the Group's preliminary results for the year ended 30 June 2020 will be available online from Thursday 10th September 2020 at https://ricardo.com/investors/financial-reporting/results-presentations. There will also be a presentation for analysts and investors at 9:30am GMT on Thursday 10th September 2020.

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Cautionary Statement

Note: Certain statements in this press release are forward-looking. Although these forward-looking statements are made in good faith based on the information available to the Directors at the time of their approval of the press release, we can give no assurance that these expectations will prove to have been correct. Because these statements involve risks and uncertainties, actual results may differ materially from those expressed or implied by these forward-looking statements. We undertake no obligation to update any forward-looking statements whether as a result of new information, future events or otherwise.

Glossary of terms – cross-referenced to superscript in the financial tables and commentary

(1) Underlying measures exclude the impact on statutory measures of specific adjusting items as set out in Note 2 and Note 4. Underlying measures are considered to provide a more useful indication of underlying performance and trends over time.

(2) Underlying earnings also exclude a tax credit to statutory earnings of £3.0m (FY 2018/19: £1.6m) for the specific adjusting items in Note 4.

(3) Cash conversion is a key measure of the Group's cash generation is the conversion of profit into cash. This is the reported cash generated from operations (defined as operating cash flow, less movements in net working capital and defined benefit pension deficit contributions) divided by earnings before interest, tax, depreciation and amortisation ('EBITDA'), expressed as a percentage.

(4) Net debt, as set out in Note 9, is defined as current and non-current borrowings less cash and cash equivalents, including hire purchase agreements, but excluding any impact of IFRS 16 lease liabilities. The transitional impact of the adoption of IFRS 16 *Leases* is set out in Note 10. Management believes this definition is the best for monitoring the indebtedness of the Group and is consistent with the treatment in the Group's banking agreements.

(5) Headcount is calculated as the number of employees on the payroll at the reporting date and includes subcontractors on a full-time equivalent basis.

(6) The organic result for the prior period includes the performance of acquisitions for an equivalent period to FY 2019/20. Transport Engineering (now Ricardo Rail Australia, or 'RRA') was acquired on 31 May 2019. Had RRA been acquired and consolidated from 1 July 2018 such that results for FY 2018/19 included RRA for an equivalent period to FY 2019/20, revenue for FY 2018/19 would have been £14.0m higher. Operating profit for FY 2018/19 would have been £3.2m higher and profit before tax for FY 2018/19 would have been £2.9m higher. PLC Consulting (now Ricardo Energy, Environment and Planning, or 'REEP') was acquired on 31 July 2019. Had REEP been acquired and consolidated from 31 July 2018 such that results for FY 2018/19 included REEP for an equivalent period to with FY 2019/20, revenue for FY 2018/19 would have been £2.1m higher. Operating profit for FY 2018/19 would have been £0.8m higher and profit before tax would have been £0.7m.

(7) Organic growth/decline is calculated as the growth/decline in the result for the current year compared to the prior year, after adjusting for the performance of acquisitions or disposals, to include the results of those acquisitions for an equivalent period in each financial year.

(8) Constant currency organic growth/decline is calculated by translating the result for the current year using foreign currency exchange rates applicable to the prior year. This provides an indication of the growth/decline of the business, excluding the impact of foreign exchange.

Trading summary

The Group's headline financial results are presented above. Compared to the prior year, the Group's performance reflects market challenges in our automotive-related businesses and the COVID-19 outbreak, which had a negative impact on trading in the second half of the year.

Energy & Environment ('EE') and Defense delivered increases in profits in the year. Both benefited from buoyant markets and a largely public sector customer base, which helped to maintain performance during the COVID-19 crisis. Our Defense operations are deemed essential by the US Government. The Australian acquisition in EE performed in line with plan.

Rail delivered an increase in profits, driven by the performance of its recent acquisition in Australia, which has performed strongly since its acquisition. This was offset by challenges in the UK and Asia, with reduced volumes and delays to major projects. Restructuring actions were completed during the year to realign the business to match demand.

Our automotive-related businesses were impacted by continuing challenging market conditions and the COVID-19 crisis. COVID-19 resulted in a slow-down in project delivery, due to customers either closing down their operations or working remotely due to various lockdown restrictions. This first impacted our China operations in late January 2020, before spreading to the US and Europe in March 2020. Action has been taken to address these challenges through the restructuring of our automotive-related activities including the disposal of test facilities and reductions in the cost base, creating a more agile business, as set out in the comments on specific adjusting items below.

Performance Products ('PP') delivered a lower volume of high-performance engines and transmissions than the prior year due to the closure of some of our customers' production lines as a result of COVID-19 in the final quarter of the financial year. Our customers have since returned to production.

The segmental results are discussed in more detail in the Operating Segments review below.

Order intake down 4% on FY 2018/19 with closing order book at £314.0m

The Group's overall order intake reduced by 4% to £368.7m in the year, reflecting the challenging trading conditions, with delays in orders being placed during the COVID-19 pandemic. Order intake averaged £27m per month in the second half of the year, compared to £35m in the first half. The closing order book was £314.0m (FY 2018/19: £314.0m), demonstrating that the Group continues to win work during these challenging conditions. Order intake includes £16.3m in respect of Transport Engineering (renamed Ricardo Rail Australia, or 'RRA') and PLC Consulting (renamed Ricardo Energy, Environment and Planning, or 'REEP') which were acquired on 31 May 2019 and 31 July 2019, respectively.

Headline trading performance		**Underlying[1]**		**Reported**	
	Revenue	**Operating profit**	**Profit before tax**	**Operating (loss)/ profit**	**(Loss)/ profit before tax**
FY 2019/20 (£m)	**352.0**	**20.0**	**15.6**	**(0.9)**	**(5.3)**
FY 2018/19 (£m)	384.4	39.6	37.0	29.1	26.5
Add performance of acquisitions[6] (£m)	16.1	4.0	3.6	4.0	3.6
Organic FY 2018/19[6] (£m)	400.5	43.6	40.6	33.1	30.1
Decline (%)	**(8)**	**(49)**	**(58)**	**(103)**	**(120)**
Organic decline[7] (%)	**(12)**	**(54)**	**(62)**	**(103)**	**(118)**
Constant currency organic decline[8] (%)	**(12)**	**(53)**	**(61)**	**(102)**	**(117)**

References in superscript are defined in the glossary of terms.

Revenue down 8% on FY 2018/19

Against what was a challenging market backdrop, reported Group revenue reduced by 8% to £352.0m (FY 2018/19: £384.4m). Revenue was 12% lower on an organic basis, after normalising the prior year result for the impact of RRA and REEP.

Underlying operating profit down 49% on FY 2018/19, with a reported operating loss of £0.9m (FY 2018/19: profit of £29.1m)

Underlying operating profit, which excludes net finance costs and specific adjusting items, as set out in Note 2, decreased by 49% to £20.0m (FY 2018/19: £39.6m). Underlying operating profit margin decreased to 5.7% (FY 2018/19: 10.3%), reflecting the lower order intake and inefficiencies from the slow-down in project delivery in the second half of the year.

Trading summary

EE, Defense and Rail delivered increased operating profit. Rail's result reflects a strong performance from RRA since its acquisition. Operating profit declined in the Automotive & Industrial ('A&I'), Performance Products and Strategic Consulting & Software segments. On an organic basis, underlying operating profit declined by 54%. The FY 2019/20 reported operating loss was £0.9m (FY 2018/19: £29.1m), with the reduction driven by an increase in specific adjusting items, as set out below.

Underlying profit before tax down 58% on FY 2018/19, with a reported loss before tax of £5.3m (FY 2018/19: profit of £26.5m)

Underlying profit before tax decreased by 58% to £15.6m (FY 2018/19: £37.0m). On an organic underlying basis, profit before tax declined by 62%.

FY 2019/20 reported profit before tax includes £20.9m of costs relating to specific adjusting items (FY 2018/19: £10.5m). FY 2019/20 specific adjusting items include £11.9m (FY 2018/19: £3.4m) of reorganisation costs, which reflect actions taken to restructure the Group and right-size the cost base in the wake of the challenging market conditions and the economic downturn. It also included the sale of our engine test business in Detroit in June 2020, for an initial cash consideration of £2.8m and loss on disposal of £2.1m. These are discussed in more detail below.

Net debt up 55% to £73.4m

Closing net debt was £73.4m (FY 2018/19: £47.4m). The increase in net debt in the year (£26.0m) was driven by the purchase of the Detroit Technology Campus ('DTC') facility (comprising north and south buildings) in August 2019 for a consideration of £14.2m (see further details below), the purchase of REEP (£3.8m, net of cash acquired), £1.3m of other acquisition-related cash costs, and £1.5m of net restructuring cash costs (net of the £2.8m of initial cash consideration received in relation to the sale of the Detroit engine test business). The net cash inflow from working capital, excluding specific adjusting items, was £4.5m in the period, reflecting a strong focus on cash collections combined with lower levels of trading in the second half of the year. The composition of net debt is defined in Note 9. Details on the Group's banking facilities are set out below.

Basis of preparation

The financial statements have been prepared in accordance with International Financial Reporting Standards ('IFRS') and International Financial Reporting Standards Interpretations Committee ('IFRS IC') interpretations adopted by the European Union ('EU') and the Companies Act 2006 applicable to companies reporting under IFRS. The Group's principal accounting policies are detailed in Note 1 to the Annual Report & Accounts 2019/20. Those accounting policies that have been identified as being particularly sensitive to complex or subjective judgements or estimates are disclosed in Note 1(c) to the Annual Report & Accounts 2019/20.

New accounting standards

The Group adopted IFRS 16 *Leases* as of 1 July 2019. The Group adopted the modified retrospective approach to transition. Under this approach, the Group has not restated comparative financial information which remains presented under IAS 17. As set out in more detail in Note 10, the transitional impact from the application of IFRS 16 was a reduction to opening reserves as at 1 July 2019 of £3.7m after tax. The impact of IFRS 16 on the Group's underlying operating profit was an increase of £0.9m and there was a £0.2m negative impact on the Group's underlying profit before tax for the year ended 30 June 2020. The impact of IFRS 16 on the Group's reported operating profit was an increase of £4.8m and there was a £3.7m increase in the Group's reported profit before tax for the year ended 30 June 2020.

Acquisitions and acquired intangibles

As set out in more detail in Note 7, the Group acquired the entire issued share capital of PLC Consulting Pty Ltd - renamed Ricardo Energy, Environment and Planning, or 'REEP' - on 31 July 2019 for an initial cash consideration of £4.2m (AUD 7.4m), which included an adjustment of £0.3m (AUD 0.4m) for cash and normalised levels of net working capital, paid in November 2019. The maximum contingent cash consideration payable is £1.5m (AUD 2.6m), based on a combination of the achievement of certain performance targets over a two-year period and the continuing employment of sellers in the business. £0.7m (AUD 1.3m), representing an accrual for the fair value of the expected year-one earn-out payment, has been recognised in the income statement within specific adjusting items.

This investment added goodwill of £2.6m (AUD 4.6m) to the Ricardo EE cash-generating unit and acquired intangible assets of £1.3m (AUD 2.4m), which have a net book value at year-end of £0.9m (AUD 1.7m). Amortisation of £0.4m (AUD 0.7m) has been charged to the income statement as a specific adjusting item in the period since acquisition, together with £0.2m (AUD 0.4m) of expenditure incurred in relation to the post-deal integration of the business (see Note 4).

In the prior year, the Group acquired the entire share capital of Transport Engineering Pty Ltd (renamed Ricardo Rail Australia, or 'RRA') for an initial cash consideration of £21.7m (AUD 39.5m), including an adjustment for cash and normalised net working capital of £0.5m (AUD 0.9m), which was paid in August 2019, together with the accrued provisional fair value of contingent cash consideration payable of £5.1m (AUD 9.4m).

The maximum contingent cash consideration payable is £8.1m (AUD 15.0m), based on the achievement of annual performance targets across a two-year earn-out period. £2.1m (AUD 3.8m has been accrued within specific adjusting items (see Note 4) in the current year, reflecting the increase in the fair value of contingent consideration payable based on RRA's results for the year to 30 June 2020.

Amortisation of £1.9m (AUD 3.6m) on acquired intangibles has been charged to the income statement as a specific adjusting item in the financial year, together with £0.2m of expenditure incurred in relation to the post-deal integration of the business (see Note 4).

Specific adjusting items

As set out in more detail in Note 2 and 4, the Group's underlying profit before tax for the year excludes costs incurred during the year that have been charged to the income statement as specific adjusting items of £20.9m (FY 2018/19: £10.5m).

Reconciliation of underlying profit before tax to reported (loss)/profit before tax

£m	FY 2019/20		FY 2018/19
Underlying profit before tax		**15.6**	37.0
Amortisation of acquired intangibles		**(6.0)**	(4.0)
Acquisition-related expenditure		**(3.0)**	(1.8)
Reorganisation costs:			
- A&I US - DTC purchase and impairment	**(3.6)**		-
- A&I US - Test business loss on disposal	**(2.1)**		-
- Asset purchases and disposals		**(5.7)**	-
- A&I US - exit of SCTC and other reorganisation costs	**(0.9)**		-
- Other reorganisation costs	**(5.3)**		(3.4)
- Total other reorganisation costs		**(6.2)**	(3.4)
GMP equalisation		**-**	(1.3)
Reported (loss)/profit before tax		**(5.3)**	26.5

£6.0m of amortisation on acquired intangibles was charged in FY 2019/20. In addition to amortisation in respect of RRA and REEP, £3.7m was charged in respect of acquisitions made in prior years.

Acquisition-related expenditure of £3.0m was incurred in FY 2019/20 (FY 2018/19: £1.8m). FY 2019/20 costs include £2.8m of accrued earn-out payments for RRA and REEP. A total of £1.3m was recognised in respect of external transaction fees, acquisition and post-deal integration costs. In addition, a £1.1m gain was recognised from the settlement of a foreign exchange option contract, which was taken out to finance an aborted overseas acquisition. FY 2018/19 costs included £0.4m of accrued earn out costs and £1.4m of external deal fees and acquisition costs.

Reorganisation costs include £6.6m of costs in relation to the major restructuring of our US A&I business, in line with our strategy of realigning its cost base in order to make it a more operationally efficient business. These costs have been included as specific adjusting items since they are significant in quantum and would distort the underlying trading performance if included. In August 2019, we purchased the freehold property at DTC (comprising the north test buildings and south office building) for £14.2m (USD 17.3m), thereby removing the US A&I business from its long-term lease commitment on the property. We immediately marketed it for sale, together with our DTC test assets, which were held for sale at the end of the prior financial year, and recognised a £6.7m impairment charge to write down the value of the facility to its fair value. This was partially offset by the release of a £3.1m lease liability on its purchase.

In June 2020, we sold our test operations in DTC (test assets together with the DTC north building) for an initial cash consideration of £2.8m (USD 3.5m), which could increase to £4.4m (USD 5.5m) depending on the volume of testing work placed into the facility by Ricardo over the next two years. A loss of £2.1m was recognised on the sale. In addition, we also exited the aftertreatment business at our Santa Clara Technical Centre ('SCTC'), incurring £0.4m of exit costs and the write off of equipment. £0.5m of redundancy and incremental contractor costs were incurred in the year in connection with these actions. The DTC south building continues to be marketed and remains held for sale.

£4.0m of redundancy costs were incurred in FY 2019/20 across the Group's automotive-related businesses (A&I in Europe, Performance Products and RSC & Software, totalling £2.6m) and Rail (£1.4m). In our automotive-related businesses, these actions were taken as a result of major restructuring required to right-size the cost base in these businesses in response to the challenging trading conditions.

The Rail costs represent the completion of a restructuring process which commenced in the prior year to realign the business to market demand. As part of these restructuring actions, a charge of £0.6m was recognised in respect of the vacant portion of the Cambridge Technical Centre ('CaTC'). £0.4m of professional fees and £0.3m of incremental contractor costs were incurred in relation to the restructuring initiatives in FY 2019/20. The total costs of these restructuring actions have been included as specific adjusting items since, together, they are significant in quantum and would distort the underlying trading performance if included. In the prior year, £2.4m of redundancy costs were incurred in A&I Europe and Rail, together with £0.7m of costs in relation to onerous contracts and £0.3m of incremental contractor costs. The FY 2018/19 A&I restructuring costs were not linked to the FY 2019/20 restructuring programme.

Research and Development ('R&D') and capital investment

The Group continues to invest in R&D and spent £12.5m (FY 2018/19: £13.4m) before government grant income of £1.1m (FY 2018/19: £2.2m). Costs capitalised in the year were £8.0m (FY 2018/19: £7.6m), reflecting continued investment in our Software segment, together with new technology, tools and processes in our A&I and EE segments. During the year, we successfully completed the sale the Group's CryoPower intellectual property to FPT Industrial S.p.A.

Additions to property, plant and equipment, excluding right-of-use assets, were £22.0m (FY 2018/19: £7.6m). Excluding the DTC facility purchase, additions were £7.8m, reflecting continued investment in our business operations, including new and upgraded test-cell equipment, machinery and IT equipment.

The total Research and Development Expenditure Credit ('RDEC') recognised in the year was £7.6m (FY 2018/19: £7.6m). This comprised an estimated RDEC credit in respect of the current year of £6.6m (FY 2018/19: £6.9m), together with £1.0m (FY 2018/19: £0.2m) arising from the routine amendment of open applications as a result of further analysis of the qualifying expenditure incurred.

Net finance costs

Finance income was £0.4m (FY 2018/19: £0.5m) and finance costs were £4.8m (FY 2018/19: £3.1m) for the year, giving net finance costs of £4.4m (FY 2018/19: £2.6m). The increase was primarily due to the adoption of IFRS 16 *Leases*, which resulted in the recognition of £1.2m of interest costs in relation to leases brought on to the balance sheet.

Taxation

The total tax charge for the year was £1.1m (FY 2018/19: £6.6m) and the total effective tax rate was negative at (20.8)% (FY 2018/19: positive 24.9%). The underlying effective tax rate for the year was 26.3% (FY 2018/19: 22.2%), with the increase reflecting the impact on deferred tax as a result of the UK Government's decision not to implement a reduction in the tax rate from 19% to 17%.

Deferred tax assets of £9.4m (FY 2018/19: £6.7m) include £5.1m (USD 6.3m) (FY 2018/19: £4.9m (USD 6.3m)) of R&D tax credits in the US, which continue to be recognised and have been partially utilised during the year. The Directors have considered the recoverability of these assets and remain satisfied that it is probable that sufficient taxable profits will be generated in the foreseeable future, against which the recognised assets can be utilised.

Earnings per share

Basic loss per share was 12.2p (FY 2018/19: earnings per share 37.1p). The Directors consider that underlying earnings per share provides a more useful indication of performance and trends over time. Underlying basic earnings per share for the year decreased to 21.3p (FY 2018/19: 53.7p).

Basic earnings per share is disclosed in Note 5, alongside a reconciliation to underlying basic earnings per share, which excludes the net-of-tax impact of specific adjusting items.

Dividend

The Group paid its FY 2019/20 interim dividend of 6.24 pence per share (£3.3m) on 6 April 2020. The Group paid a total dividend of 21.28 pence per share (£11.5m) in relation to FY 2018/19 performance. Due to the reduced performance experienced by the Group in the second half of FY 2019/20, after careful consideration, the Board have decided not to recommend a final dividend for the year. This difficult decision has been taken to protect Group's financial position. The Board recognises the importance of dividends to Shareholders and intends to resume dividend payments as soon as it is appropriate to do so.

Banking facilities

On 5 May 2020, the Group exercised £50m of the accordion option of its banking facilities, thereby increasing the Revolving Credit Facility to £200m and increasing the amount undrawn and available to £70m. This provides the Group with increased committed funding available for the remaining term through to July 2023.

Trading summary

In addition to the increased committed funding available, the Adjusted Leverage (defined as net debt over underlying EBITDA) covenant was increased from 3.0x to 3.75x for the next two test dates of 30 June 2020 and 31 December 2020. Following the year end, on 9 September 2020, the definition of the Adjusted Leverage covenant for the December 2020 covenant test date was amended to be based on two times the six months' EBITDA to December 2020. In addition, the June 2021 covenant was increased to 3.75. The only other financial covenant is Interest Cover. This remains at 4.0x for each test date, but with the December 2020 test based on two times the six months' EBITDA to December 2020.

Net debt of £73.4m at 30 June 2020 comprised cash and cash equivalents of £66.3m and borrowing and overdrafts of £139.7m excluding finance leases. Total facilities before borrowings are £216.6m. This provides total cash and liquidity of £143.1m as at 30 June 2020.

The Group's committed facilities are denominated in Pounds Sterling and have variable rates of interest dependent upon the Group's adjusted leverage, which range from 1.4% to 2.2% (FY 2018/19: 1.4% to 2.2%) above LIBOR.

The group continues to have good access to liquidity and the Board remains focused on ensuring that that Group has the appropriate capital structure to ensure its ability to trade resiliently in these uncertain times as well as having the ability to successfully pursue its growth strategy.

Foreign exchange

On consolidation, revenue and costs are translated at the average exchange rates for the year. The Group is exposed to movements in the Pound Sterling exchange rate, principally from work carried out with customers that transact in Euros, US Dollars and Chinese Renminbi. Compared to the prior year, the average value of the Pound Sterling weakened by 3% against the US Dollar, and strengthened marginally against the Euro and the Chinese Renminbi. On a constant currency basis, underlying and underlying profit before tax on an organic basis would both have been £0.2m higher.

Pensions

The Group's defined benefit pension scheme operates within the UK. The fair value of the scheme's assets at the end of the year was £150.4m (FY 2018/19: £137.5m). The accounting deficit measured in accordance with IAS 19 Employee Benefits was £6.7m before tax (FY 2018/19: £8.5m).

The £1.8m decrease in the pre-tax pension accounting deficit during the year was due a positive return on plan assets, offset by a reduction in the discount rate. £4.6m of cash contributions were paid to the scheme in the year. Ricardo continues to fund the pension at £4.6m per annum until 31 July 2022.

Coronavirus ('COVID-19')

COVID-19 initially started impacting the business in China in late January, with the closure of our offices in China, as well as those of the majority of our customers. The impact spread to Europe and the US in March and April, resulting in a slow down in order intake and the progress of ongoing projects, due to the inefficiencies caused by customer staff and our own staff working remotely.

From the beginning of the crisis, we set out a "Healthy People, Healthy Business" agenda. This focused on supporting our employees and their families, together with the health and wellbeing of our clients, suppliers and the communities in which we operate.

We took swift action to ensure that an appropriate IT infrastructure was in place to allow staff to work from home and as efficiently as possible, with the minimum of disruption to the business.

We also acted quickly, with the support of our banks, to increase liquidity and headroom on our banking facilities.

We completed our face shield programme in May, having donated and distributed approximately 10,000 face shields to communities around our Midlands, Shoreham, Derby and Harwell locations in the UK, and 5,000 in the US. Colleagues in other locations also donated face shields using our rapid prototyping capabilities as well as personal equipment.

By the end of the year, all of our manufacturing and testing facilities were operating and delivering client requirements with appropriate social distancing controls to meet the guidance of governments. Our offices are all open for employees who wish to return to work there and can do so safely. We are encouraging return for those who can and supporting those that cannot yet return so they can fully contribute to the business. Our IT resources continue to support the business across a mix of home-based and office-based working.

"Digital first" is still the core strategy for client and supplier communication. Our business travel has been very limited in recent months. Some travel within Europe, China and US has commenced. There has been little long-haul travel and we expect that situation to continue in the coming months.

Trading summary

Brexit

Across the Group, we have prepared for a range of possibilities for the outcome of trade negotiations between the UK and the EU and any disruption that may arise. Where possible we are now contracting with customers directly through our European-based subsidiaries and we have secured a European accreditation route for our Rail business to supplement our existing UKAS accreditation, which will allow us to continue to offer our services across Europe. We have also assessed inventory holding patterns for our McLaren production line and have appropriate plans in place to mitigate any short-term disruption to the supply chain.

Group Outlook

Ricardo's diversified business creates and delivers cross-sector solutions, tools and products which help our clients address some of the most pressing issues in the areas of decarbonised and secure transport, clean air and the sustainability of scarce resources. We enter the new financial year with a good order book, and we secured over £70m of new orders in July and August 2020. We have an agile business which has proven its resilience in a highly uncertain environment.

We continue to see good opportunities for Ricardo in the markets that we serve, and through the execution of our strategy we are well positioned to continue to grow our Group as a sustainable business which delivers value for all of our stakeholders.

By order of the Board:

Dave Shemmans
Chief Executive Officer

Ian Gibson
Chief Financial Officer

9 September 2020

Operating segments review

From 1 July 2019, the Group has reported the following reportable operating segments: Energy & Environment ('EE'), Rail, Automotive and Industrial ('A&I'), Defense, and Performance Products ('PP'). There is also an 'all other segments' segment, which comprises the results of Ricardo Strategic Consulting & Software, combined due to their size. Neither of these met the quantitative thresholds for reportable segments in FY 2019/20 or FY 2018/19. This change was driven by successful acquisitions in Rail and EE, increasing the prominence of these businesses within the Group, combined with the wish to provide more granularity into the key drivers of performance within the Group.

	Revenue		Underlying[1] operating profit		Underlying[1] operating profit margin	
For the year ended 30 June	**2020**	2019	**2020**	2019	**2020**	2019
	£m	£m	**£m**	£m	**%**	%
Energy & Environment ('EE')	**50.8**	44.6	**6.3**	5.0	**12.4**	11.2
Rail	**75.3**	67.4	**5.8**	5.2	**7.7**	7.7
Automotive & Industrial ('A&I')	**105.9**	129.3	**0.5**	16.1	**0.5**	12.5
Defense	**32.8**	25.2	**5.1**	3.2	**15.5**	12.7
Performance Products ('PP')	**69.0**	95.4	**5.0**	9.9	**7.2**	10.4
Strategic Consulting & Software ('other')	**18.2**	22.5	**0.1**	3.9	**0.5**	17.3
Operating segments total	**352.0**	384.4	**22.8**	43.3	**6.5**	11.3
Plc costs	**-**	-	**(2.8)**	(3.7)	**-**	-
Total	**352.0**	384.4	**20.0**	39.6	**5.7**	10.3

References in superscript are defined in the glossary of terms.

EE, Rail, A&I, Defense (excluding the anti-lock braking system/electronic stability control ('ABS/ESC') product), and Strategic Consulting were previously reported within the Technical Consulting operating segment. PP, the ABS/ESC product, and Software were previously reported within the Performance Products operating segment. Plc costs includes the costs of running the public limited company. FY 2018/19 segmental analysis has been reported on a consistent basis to aid comparability.

Operating segments review

ENERGY & ENVIRONMENT

Ricardo Energy & Environment ('EE') works with clients to solve some of the world's most complex environmental challenges, and provides governments, public agencies and businesses with industry-leading analysis, advice and data.

EE works across the value chain from gathering and evaluating evidence, setting policy measures, and working with its customers, partners and stakeholders to support the implementation of a wide range of solutions. For example, EE assesses the information impacting air quality within a city, work with stakeholders and leaders to derive policy options to improve air quality, and then support the delivery of measures such as vehicle charging zones, bus retrofits or electric charging infrastructure. EE has over 500 expert consultants, including engineers, scientists, economists and data specialists operating in over 75 countries.

Financial and operational highlights

	FY 2019/20	FY 2018/19	Growth (%)	Organic[7] (%)
Order intake (£m)	**56.0**	46.1	21	12
Order book (£m)	**41.7**	35.6	17	13
Revenue (£m)	**50.8**	44.6	14	9
Underlying[1] operating profit (£m)	**6.3**	5.0	26	9
Underlying[1] operating profit margin (%)	**12.4**	11.2	1.2 pp	-
Headcount[5] (no.)	**571**	487	17	13

References in superscript are defined in the glossary of terms.

In FY 2019/20, EE's revenue grew by 14% to £50.8m (FY 2018/19: £44.6m) and underlying operating profit grew by 26% to £6.3m (FY 2018/19: £5.0m). FY 2019/20 was a successful year for EE, with the growth in revenue and operating profit reflecting a combination of organic growth and the successful acquisition, on 31 July 2019, of PLC Consulting Pty Ltd (renamed Ricardo Energy, Environment and Planning, or 'REEP'), which focuses on the waste and planning sectors in Victoria, Australia. On an organic basis, after normalising for the impact of the REEP acquisition, revenue and underlying operating profit grew by £4.0m (9%) and £0.5m (9%), respectively. Underlying operating profit margin increased from 11.2% in FY 2018/19 to 12.4% in FY 2019/20, driven by increased utilisation of staff and leverage of the cost base.

Order intake for FY 2019/20 was £56.0m (FY 2018/19: £46.1m), growth of 21%. At 30 June 2020, EE's order book was £41.7m (FY 2018/19: £35.6m). Of this, £0.8m relates to REEP.

International projects have expanded significantly, due to three principal factors: the acquisition of REEP, increased demand for our air quality and waste services in the Middle East, and growth in Europe, driven by economic and policy studies for the European Commission. EE has also won new projects in previously untapped territories, including a major air quality project in Lima, Peru, and a series of sustainable energy opportunities in the Caribbean.

EE has continued to see steady growth in work with UK public-sector customers, with increasing demand driven by the climate emergency and Net Zero agenda, as local authorities seek to take action in cities and counties across the UK. This has added to EE's 40-plus year track record in operating a wide range of air quality/greenhouse gas modelling, inventory and monitoring projects, delivered on behalf of the UK Government. EE has also won a four-year extension to the Resource Efficiency Scotland programme, supporting small businesses in implementing energy and resource efficiency actions across Scotland.

EE has continued to see growth in UK private-sector work, where its principal clients are in the water and energy sectors. 2020 has seen the commencement of the new five-year UK Water Sector Asset Management Planning ('AMP') cycle. Although there had been a slight decrease in demand for EE's strategic water resource planning skills at the conclusion of the previous AMP cycle, EE has secured a range of new framework contracts, to run for the next five year AMP cycle with many of the largest water companies – including Southern Water, United Utilities, Yorkshire Water and Thames Water – to support them in planning the long-term future for sustainable water resources.

In the UK Energy sector, EE has won a major innovation project with Western Power Distribution ('WPD') and Electricity North West Limited ('ENWL') to trial a novel solution that enables increased numbers of high-power electric vehicle chargers to be connected to the electricity network at lower cost.

EE also supports the chemicals sector in the UK, including a relationship with the UK emergency services that goes back 45 years; the practice also has international relationships with over 600 global chemical clients. This part of the business has seen revenue grow in this financial year as it sought to broaden its services to include a wider range of chemical regulatory consultancy, and work on Poison Centre notifications.

Operating segments review

EE was not significantly disrupted by COVID-19, as the business found innovative solutions by working closely with our clients to ensure that we could maintain our services during a period of highly restricted travel. In order to continue to support its clients, the business adapted quickly to the challenges presented by remote working and the suspension of international travel.

Outlook

EE ended the financial year with an order book and secured revenue that were both ahead of the prior year. Although the full extent of COVID-19 recovery plans and financing mechanisms are not yet known, EE is confident that economic stimuli will have a positive impact on its markets in FY 2020/21 and create opportunities, in particular the potential for re-alignment of UK and global economies to create a "clean and green" recovery. EE expects continuing growth across sectors, with recovery-led infrastructure projects driving the requirement for specialist input and support across EE disciplines.

Brexit preparedness has continued throughout the year with additional recruitment into European locations and continued close working with Ricardo colleagues operating within the EU.

EE's focus for FY 2020/21 will be on enhancing activity across EE's spectrum of services, from evidence and policy work through to supporting implementation solutions for clients. EE plans to continue to grow its air quality and greenhouse gases evidence expertise as well as developing its policy offerings to include new environmental topics and additional sectors. EE is already seeing strong demand in Europe with the implementation of the "Green New Deal" and expects to see stronger growth in the private sector, particularly in the UK water sector.

Operating segments review

RAIL

Ricardo Rail ('Rail') serves the global rail market through two separate operations: a consultancy unit that provides technical advice and engineering services, and a separate, independent entity, Ricardo Certification, that performs accredited assurance services.

Both have a similar geographic footprint across Europe, Asia-Pacific and the Middle East, and support a client base that includes rail operators, infrastructure managers, regulatory bodies and industry suppliers. Ricardo Rail employs 623 rail engineers, technicians, auditors and support staff, with key hubs in the UK, the Netherlands, China and Australia.

Financial and operational highlights

	FY 2019/20	FY 2018/19	Growth (%)	Organic[7] (%)
Order intake (£m)	**80.7**	61.0	32	(2)
Order book (£m)	**110.7**	109.1	1	1
Revenue (£m)	**75.3**	67.4	12	(7)
Underlying[1] operating profit (£m)	**5.8**	5.2	12	(31)
Underlying[1] operating profit margin (%)	**7.7**	7.7	-	(2.6) pp
Headcount[5] (no.)	**623**	636	(2)	(2)

References in superscript are defined in the glossary of terms.

In FY 2019/20, Rail's revenue grew by 12% to £75.3m (FY 2018/19: £67.4m) and underlying operating profit grew by 12% to £5.8m (FY 2018/19: £5.2m). Underlying operating profit margin was stable at 7.7%. The growth in revenue and underlying operating profit was driven by the performance of Ricardo Rail Australia ('RRA'), which was acquired on 31 May 2019, and delivered a very strong set of results in the current year, in line with plan. The performance of RRA was offset by challenges in other areas of the business, in particular the UK, with reduced volumes on major UK certification projects, and Asia, with delayed mobilisation on large infrastructure projects. On an organic basis, after normalising for the impact of the RRA acquisition, revenue and underlying operating profit declined by £6.0m (7%) and £2.6m (31%), respectively.

FY 2019/20 order intake was £80.7m (an increase of £19.7m on FY 2018/19). £14.0m of the FY 2019/20 order intake was generated by RRA. The closing order book was £110.7m (FY 2018/19: £109.1m), of which £26.7m related to RRA (FY 2018/19: £30.1m).

The performance of RRA in its first full year under Ricardo ownership reflects the success of its established, long-term relationships with clients such as Transport for New South Wales, for which it has provided technical support throughout the introduction of new fleets onto the rail networks. RRA was successfully integrated into the wider Rail business. Synergies from complimentary skills have been realised. RRA has supported Rail's Middle East business, and UK Rail personnel have been actively involved in supporting major bids for RRA.

The Dutch consultancy team won several major assignments with Nederlandse Spoorwegen ('NS'), the principal passenger railway operator in the Netherlands, underlining the team's position as the pre-eminent engineering consultancy in Dutch rolling stock.

The UK consulting team had a challenging year with reduced volumes and personnel changes. COVID-19 also had some impact in the last quarter. Restructuring actions were completed during the year to align the business to market demand.

Performance in Asia was also mixed. This was the first region to be widely affected by the COVID-19 pandemic, with the Hong Kong operations already having experienced significant disruption as the office had been forced to close on several occasions during the autumn 2019 demonstrations. By way of a positive contrast, in Taiwan and Korea, the technical teams were engaged in some of the largest systems engineering projects of recent years.

The performance of Ricardo Certification remained resolute. The China team has a strong order book; the Middle East team secured notable wins in Qatar; whilst in Europe the team continues to support London's Crossrail and the re-signalling of the Danish rail network, and awaits the commencement of several rolling stock projects.

Outlook

Looking ahead, the Rail segment has a healthy and varied portfolio of projects. These include projects in new areas such as digital resilience and vehicle decarbonisation, as well as traditional assurance projects such as Seoul's Great Train eXpress and Beijing Metro Line 17. As a result, Rail enters FY 2020/21 with one of its largest ever order books.

Operating segments review

Due to its presence in a number of European Union countries and having moved quickly to organise the necessary accreditations in Denmark and the Netherlands, Ricardo Rail is well positioned to continue consulting projects and certification work in the EU without disruption after Brexit.

Whilst there is no doubt that the COVID-19 pandemic will continue to impact travel habits over the short and medium term, there is little to suggest any serious long-term ramifications for the rail sector. Rail, whether in the form of rapid transport systems in major city centres or as national networks of high-speed routes, remains an essential component of sustainable travel policies. As well as new builds to support growing urban centres, we expect to see continued investment in the modernisation of mature networks to seek continued improvement in safety, efficiency and performance.

Operating segments review

AUTOMOTIVE & INDUSTRIAL

Ricardo Automotive & Industrial ('A&I') serves as a trusted global engineering design and development partner for the provision of clean, efficient, integrated propulsion and energy solutions across the areas of hybrid and electric systems, electrification, engines, driveline and transmissions, testing, and vehicle engineering. Customers span the transportation and industrial markets, including automotive, aerospace, defence, energy, off-highway and commercial, marine, motorcycle and light-personal transport, and rail.

A&I has 1,154 staff, operating from engineering centres and sales offices within the UK, Europe, US, and Asia (primarily in China).

Financial and operational highlights

	FY 2019/20	FY 2018/19	(Decline)/ growth (%)
Order intake (£m)	**115.3**	123.6	(7)
Order book (£m)	**77.5**	75.2	3
Revenue (£m)	**105.9**	129.3	(18)
Underlying[1] operating profit (£m)	**0.5**	16.1	(97)
Underlying[1] operating profit margin (%)	**0.5**	12.5	(12) pp
Headcount[5] (no.)	**1,154**	1,218	(5)

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A&I was impacted by continuing challenging economic and political conditions during the year. China's slowing economic growth, trade tensions between the US and China, reduced credit availability in India, Brexit and the UK General Election all had an impact on customer activity and orders. This was compounded by the impact of COVID-19 in the second half of the year, initially within China and then Europe and the US. With populations in lockdown, customers responded by temporarily shutting down their operations, implementing part-time working, mothballing manufacturing facilities, and implementing significant cost-reduction measures.

Order intake held up relatively well, reducing by 7% from £123.6m in FY 2018/19 to £115.3m in FY 2019/20. The economic circumstances had a more significant impact on revenue and operational efficiency as a number of customers delayed non-business critical projects. Revenue decreased from £129.3m in FY 2018/19 to £105.9m in FY 2019/20, and underlying operating profit decreased from £16.1m in FY 2018/19 to £0.5m in FY 2019/20, with underlying operating margin decreasing from 12.5% to 0.5%. Within this, our business in Europe remained profitable. Our US business continued to be loss-making and has taken significant steps to restructure its operations, as set out below. Our China business ended the year with a small loss.

New Managing Directors joined A&I's European and US operations during the year. Both have had, and continue to have, a focus on strategy and business development, whilst continuing to ensure that the resources within the engineering teams are suitably matched with client needs and market opportunities.

A&I has continued with its strategy to create a more flexible cost base and become an operationally efficient consultancy. In August 2019, the Detroit Technology Campus ('DTC'), comprising its engine testing and office buildings, was purchased in order to extricate the business from a long-term lease on the property. In June 2020, the Detroit engine testing business (together with the DTC engine testing building) was sold to a non-competitive strategic partner for an initial cash consideration of £2.8m (USD 3.5m), with up to £1.6m (USD 2.0m) deferred, reducing A&I's fixed cost base and allowing A&I to continue to offer test services locally in its overall offering to customers. The DTC office building is currently being marketed and is held-for-sale on the June 2020 balance sheet. In June 2020, we also exited our Santa Clara Technical Centre ('SCTC') and aftertreatment business and set up new premises in Southern California, in order to develop new market opportunities aligned with the business' strategic goals.

Subsequent to the opening of the Southern California site, A&I strengthened the US team with a senior appointment to lead the transformation of engineering operations, particularly in the areas of electrification and software. The team in Southern California recently secured a £3.2m win with the US Department of Energy to advance the development of high efficiency silicon carbide inverters for electric vehicle applications.

As the COVID-19 pandemic developed and lockdown hit the various parts of the business, A&I responded immediately. Almost overnight, those who could work from home did, whilst those who were not able to work from home continued supporting the business and client projects on-site, with the business ensuring staff were able to work safely by amending working practices in-line with safety guidelines. A&I also re-evaluated its strategy and made the difficult decisions required to quickly reduce the cost base and help protect our employees, including some use of local furlough schemes.

Operating segments review

Over the course of the year, A&I secured and delivered a range of successful customer programmes across the transportation and industrial markets, which included: supporting CNH Industrial with the development of a biomethane-powered tractor; selling its CryoPower clean engine intellectual property to FPT Industrial S.p.A whilst continuing to assist in their development of this innovative and high-efficiency combustion engine; delivering a highly versatile and cost-effective vehicle demonstrator for general service defence purposes, adapted from Ford's iconic *Ranger* series, Europe's best-selling pick-up truck; partnering with Nexperia to produce a technology demonstrator for an EV inverter based gallium nitride technology; and delivering safety-critical transmission control software for China Euro Vehicle Technology AB for a 7-speed dual clutch transmission in a compact luxury crossover SUV. In addition, A&I also played a crucial role in the development of JCB's Fastrac tractor, in which Guy Martin set a new Guinness World Records' speed record, as shown on the Channel 4 documentary, *Guy Martin: The World's Fastest Tractor*.

During the COVID-19 lockdown period, A&I has focused on how to support its customers in innovative ways. A&I implemented a 'world first' in virtual vehicle certification, whereby customers and certification bodies could observe tests via a secure, live 3-way feed to the automation and data management systems of A&I's advanced UK test facilities. Reflecting the needs of global customers working from home, but still wanting to access our thought leadership and interact with our technical experts, A&I prioritised digital engagement. A&I subject matter experts delivered 14 webinars (3 with Automotive World, 11 our own label Ricardo Technology Webinars) which saw us engage with just over 6,000 contacts on key industry challenges where we offer world-leading technical solutions such as preparing for Euro 7, fuel cells for heavy duty trucks, off-highway electrification, xEV holistic thermal management, and the road to zero carbon. As part of its digital first strategy, A&I also focused on LinkedIn as a primary engagement channel for customers, and broader audiences across industry, media, government, academia and communities across the world. The A&I corporate presence on LinkedIn attracted particularly strong engagement in relation to content posts about its design, assembly and delivery of PPE, and grew its community of followers to just over 50,000.

Outlook

Carbon dioxide ('CO_2') emissions targets continue to drive the global agenda, with industry increasing its investment in electrification and alternative energy propulsion, together with its digitalisation of processes and products. Whilst COVID-19 may affect some markets in the coming year, the global agenda still continues to provide a significant longer-term pipeline of opportunities to A&I for the provision of innovative clean, efficient, integrated propulsion and energy solutions for customers within our transportation and industrial markets.

Operating segments review

DEFENSE

Ricardo Defense ('Defense') is focused on the delivery of services, software and products that protect life and reduce defence programme costs and waste. Defense delivers wide-ranging engineering programmes across light and heavy land and sea theatres of operation, supporting clients to improve processes to streamline the fielding, modification, maintenance and support of complex systems, used in operational planning. This includes providing enterprise software to enable the electronic distribution of technical data, ensuring data integrity and cyber security across disrupted communication environments. Defense also provides anti-lock braking system/electronic stability control ('ABS/ESC') systems for all new production High Mobility Multipurpose Wheeled Vehicles ('HMMWV' or 'Humvee') for the US Army and National Guard.

Our staff of 162 technical professionals is based across the US, including major centres in Michigan and California.

Financial and operational highlights

	FY 2019/20	FY 2018/19	(Decline)/ growth (%)
Order intake (£m)	**29.0**	39.0	(26)
Order book (£m)	**15.6**	20.3	(23)
Revenue (£m)	**32.8**	25.2	30
Underlying[(1)] operating profit (£m)	**5.1**	3.2	59
Underlying[(1)] operating profit margin (%)	**15.5**	12.7	2.8 pp
Headcount[(5)] (no.)	**162**	138	17

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Defense delivered strong growth in FY 2019/20, with revenue increasing by 30% to £32.8m (FY 2018/19: £25.2m) and underlying operating profit increasing by 59% to £5.1m (FY 2018/19: £3.2m). Underlying operating profit margin increased from 12.7% in FY 2018/19 to 15.5% in FY 2019/20. Growth was driven by increased activity in the engineering services business and sales of the ABS/ESC product. The underlying operating profit margin was low in the prior period as costs were increased in preparation for the delivery of ABS/ESC units.

Order intake reduced by 26% to £29.0m (FY 2018/19: £39.0m): this reflects the timing of ABS/ESC orders, with Defense having secured a large order from the US Government in the prior year, delivering these units in FY 2019/20. The FY 2019/20 closing order book was £15.6m (FY 2018/19: £20.3m), with the reduction reflecting the timing of ABS/ESC orders.

Defense designed, developed and integrated the ABS/ESC kit to address an ongoing HMMWV rollover issue. The system has been proven by the US Army to mitigate vehicle rollover and loss-of-control accidents. Defense delivered 2,464 ABS/ESC kits for new HMMWVs production vehicles in FY 2019/20 (FY 2018/19: 1,650). This includes the first shipments of retrofit kits to a non-US country to upgrade the safety, performance, and reliability of their HMMWVs.

Underpinning our commitment to quality, Defense again achieved Capability Maturity Model Integration ('CMMI') Level 3 certification for its systems and software development processes. Defense is supporting the US Army and Marine Corps in the integration of a wireless, dismounted communication system solution for ground support vehicles; the system enhances the safety and situational awareness for combat personnel conducting dismounted operations on or around vehicle platforms. Through operational user testing, integration and sustainment planning, and cybersecurity strategy, Ricardo Defense uses commercial-off-the-shelf solutions to provide mission-ready, cost-effective solutions that protect lives and enhance communication in a rapid and efficient manner.

As the US Department of Defense seeks more agile development and deployment of enhanced technologies, Defense is providing solutions for designing, acquiring, integrating and sustaining future systems through model-based system engineering methodologies. These methodologies enable rapid and robust analysis, configuration, change management, and integration of emerging disruptive technologies. By creating "digital twins" of vehicle systems, Defense supports the US military in developing, fielding, maintaining and effectively using the most capable equipment in order to maximise the safety of serving personnel.

COVID-19 has not had a significant impact on Defense, which has been designated by the US Government as critical to US infrastructure. During the COVID-19 pandemic, the majority of Defense's employees continued delivering programmes safely and securely through remote work-from-home during the US "Stay Safe, Stay at Home" mandate.

Outlook

The market outlook for our Defense business is positive. The US President's FY21 Defense Budget reflects funding priorities of USD 740 billion for national defence. The proposed budget includes a mix of funding for the procurement

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and deployment of the ABS/ESC retrofit kit and additional new production kit orders. Accordingly, Defense has expanded its ABS/ESC operations to meet anticipated demand for the coming year.

In addition, Defense expects growth in its software business as well as significant growth in its established capability areas of system life cycle management, field support services, and condition-based maintenance. Ricardo Defense is firmly embedded in nearly every end-to-end architecture node of the U.S. Army's fielding strategy. Defense's systems engineers, software developers, and logisticians provide integrated life cycle support services that will improve the operational readiness of US and allied assets worldwide.

Operating segments review

PERFORMANCE PRODUCTS

Ricardo Performance Products ('PP') manufactures and assembles niche high-quality components, prototypes and complex products, including engines, transmissions and other precision and performance-critical products. PP also provides manufacturing and supply-chain services to enable products to move from concept to production for customers around the globe. PP manages the complete process, from establishing a robust supply chain, to the efficient delivery of the tested end-product to its prestigious customer base. These products are either designed by the motorsport products design team, other Ricardo divisions or by PP customers. PP serves customers manufacturing low-volume, high-performance products in markets such as motorsport, automotive, aerospace, defence and rail.

PP employs 311 staff, with specialist capabilities in product design and development, production and operations management, supply-chain development, industrial engineering and skilled production, all based in the UK. PP is backed by Ricardo's global support network with technical and engineering centres around the world.

Financial and operational highlights

	FY 2019/20	FY 2018/19	(Decline)/ growth (%)
Order intake (£m)	**71.1**	96.2	(26)
Order book (£m)	**62.8**	66.5	(6)
Revenue (£m)	**69.0**	95.4	(28)
Underlying[(1)] operating profit (£m)	**5.0**	9.9	(49)
Underlying[(1)] operating profit margin (%)	**7.2**	10.4	(3.2) pp
Headcount[(5)] (no.)	**311**	307	1

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In FY 2019/20, PP's revenue reduced by 28% to £69.0m (FY 2018/19: £95.4m) and underlying operating profit declined by 49% to £5.0m (FY 2018/19: £9.9m). Underlying operating profit margin decreased from 10.4% in FY 2018/19 to 7.2% in FY 2019/20. Order intake was £71.1m in FY 2019/20, a reduction of £25.1m compared to order intake of £96.2m in FY 2018/19. As at 30 June 2020, the order book was £62.8m (FY 2018/19: £66.5m).

The reductions across the key metrics were primarily due to a reduced volume of engines supplied to McLaren. In the first half of the financial year, engine output was lower than the previous six months, in line with an agreed production plan. In the second half of the year, output was significantly disrupted due to the effects of the COVID-19 lockdown, with McLaren suspending vehicle production from March onwards. The volume of engines delivered in FY 2019/20 was approximately 40% lower than the prior year. Over this period, two new engine variants entered production, including the latest vehicle in McLaren's Ultimate Series, the "Speedtail". The engine for this vehicle, code-named P23, sits at the heart of an advanced hybrid powertrain and powers the car to over 250mph (400 km/h), making this the fastest McLaren ever produced. FY 2019/20 also saw the completion of significant pre-production activities in readiness for the new engine variant to be launched in FY 2020/21.

FY 2019/20's results were also impacted by the scheduled end of the Porsche 991 Cup transmission programme in FY 2018/19. During the year, PP was successful in securing a replacement programme of an equivalent size and duration (which is reflected in the FY 2019/20 order intake). Deliveries to this programme are on track to start in the first half of FY 2020/21.

A programme to supply transmissions for the Aston Martin Valkyrie, which was expected to go into production in 2020, is now confirmed for the FY 2020/21 business year. A significant number of prototypes for this programme were delivered in FY 2019/20 to support the successful testing and validation of this advanced hybrid hypercar. PP continues to support Bugatti with the supply of the complete driveline system for the Chiron hypercar. Demand for Bugatti transmissions continued in line with expectations.

PP's contract with the Ministry of Defence, to refurbish gearboxes for their Combat Vehicle Reconnaissance (Tracked) ('CVR(T)') vehicle, successfully started in FY 2019/20 and remains on track to be completed ahead of customer expectations in December 2020.

PP remains a key supplier into the motorsport sector, with effective cost of ownership solutions for the customer racing market and the ability to adapt to the ever-changing regulations in all forms of factory racing to deliver a competitive advantage to customers. PP remains ever present at the top tier of world motorsport and has manufactured transmissions components to teams competing in F1, Formula E, GT3, R5, Super Formula and Indy Lights. PP's customers have secured world championships and key victories in Formula E, WRC and GTE. During the year, PP extended its collaboration with DS Performance, building on an incredible 2019 season, in which PP designed and supplied transmissions for the team which won both the drivers' and teams' championships.

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Outlook

McLaren engine production resumed in July 2020, with a planned gradual ramp-up of output through the year as part of its plans to initially focus on limited-series models (predominately the 'Ultimate' and 'Super Sports' series of cars).

Although PP's transmission manufacturing capabilities were not significantly impacted by COVID-19 during FY 2019/20, and production continued throughout the outbreak under carefully controlled manufacturing conditions, the pandemic has created delays and cancellations of multiple races and championships, with the potential to impact some of PP's motorsport clients.

PP will continue to focus its efforts on established markets such as high-performance automotive, motorsport and aerospace; additional focus will be applied to both the defence and the rail markets, where significant contract opportunities exist. These opportunities are enhanced by PP's ability to utilise the in-depth design capabilities of Ricardo's engineering consulting divisions, providing a comprehensive set of solutions across all PP's targeted markets.

With both customers and suppliers in the EU, PP has established processes and procedures to address a variety of potential Brexit scenarios. These capabilities were successfully deployed in both 2018 and 2019 in readiness for possible hard exits from the European Union and remain in place for 2020 onwards.

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STRATEGIC CONSULTING & SOFTWARE

Ricardo Strategic Consulting ('RSC') is a leading management consultancy dedicated to serving the automotive, transportation, and mobility industries. It offers a comprehensive portfolio of services, advising global leaders on high-impact strategic issues and resolving operational challenges. RSC provides both corporate and strategic business advice which spans the full product life cycle, including product development, manufacturing and supply chain management, procurement, sales, marketing and distribution, and integrated cost reduction.

Software helps customers solve problems through technology exploration and process innovation. It also delivers advanced virtual engineering tools and solutions, supported by a team of technical experts, to global customers across the automotive, rail, motorcycle, off-highway, defence, energy and environment industries. Software's leading-edge simulation software provides customer solutions to reduce cost, resources and time to market, while efficiently managing complexity and safety.

Combined, RSC and Software employ 182 staff, based across the UK, continental Europe, and the US.

Financial and operational highlights

	FY 2019/20	FY 2018/19	Decline (%)
Order intake (£m)	**16.6**	20.2	(18)
Order book (£m)	**5.7**	7.1	(20)
Revenue (£m)	**18.2**	22.5	(19)
Underlying[1] operating profit (£m)	**0.1**	3.9	(97)
Underlying[1] operating profit margin (%)	**0.5**	17.3	(16.8) pp
Headcount[5] (no.)	**182**	195	(7)

References in superscript are defined in the glossary of terms.

Strategic Consulting & Software revenue reduced to £18.2m in FY 2019/20 from £22.5m in FY 2018/19. Underlying operating profit reduced from £3.9m to £0.1m in the same period. Underlying operating profit margin fell to 0.5% from 17.3%. The declines seen over the period reflect a combination of challenging trading conditions in the automotive market and the impact of customers reducing spending during the COVID-19 pandemic in the second half of FY 2019/20.

During FY 2019/20, RSC delivered growth in order intake in Europe and Asia following the investment in its regional sales teams. However, in the second half of the year there was a reduction in orders across the business, as long-running programmes came to an end and new order intake became challenging. RSC was immediately impacted by COVID-19, with the pandemic leading to the postponement of certain projects and delays in client decisions.

A softening in the US market has impacted profits, but the strong relationship with Ford has continued. In addition to long-running integrated cost reduction programmes, RSC supported them in managing distressed supplier scenarios, which has become a key area of growth.

In FY 2019/20, Software order intake was below the prior year, driven by lower one-off perpetual licence sales, particularly in China, due to the slowdown in the Chinese automotive market and impact of COVID-19. The pandemic led to some delays in new business wins, due to travel restrictions and the closure of some customer sites. Licence renewals were also below the prior year driven by some customers reducing the number of licence seats they hold. There has been good growth in order intake for application engineering and solutions in the year, which has partially offset the reduced order intake from one-off perpetual licence sales and renewals.

Outlook

Strategic Consulting & Software's core automotive markets are expected to remain challenging over the next financial year. RSC is focusing on diversification into new sectors and service lines, which has progressed with the development of the TRNTY online consulting platform and Ricardo Knowledge (RSC's digital channel) products. These products provide an efficient route to market to commercialise Ricardo's expertise. The investment made in the year in these new product offerings will begin to deliver revenue growth in the new financial year. In addition, RSC, in partnership with Ricardo EE, have combined environmental expertise with strategic advice to offer a unique external Taskforce on Climate-related Financial Disclosures ('TCFD') service offering, aimed at improving business resilience in the face of climate change.

Software's strategy is focused on building an integrated market-leading portfolio of products and solutions that work across different engineering domains to provide value to customers. In the year ahead, this will include a move to offering web- and consumption-based licensing models to complement its traditional on-premise annual lease and perpetual licence business. As travel restrictions are expected to persist, Software will maximise local regional resources and digital technology to win new business.

Condensed financial statements

Consolidated income statement
for the year ended 30 June

	Note	2020 Underlying £m	2020 Specific adjusting items[1] £m	2020 Total £m	2019 Underlying £m	2019 Specific adjusting items[1] £m	2019 Total £m
Revenue	*3*	**352.0**	**-**	**352.0**	384.4	-	384.4
Cost of sales		**(236.9)**	**-**	**(236.9)**	(249.5)	-	(249.5)
Gross profit		**115.1**	**-**	**115.1**	134.9	-	134.9
Administrative expenses		**(96.4)**	**(20.9)**	**(117.3)**	(96.3)	(10.5)	(106.8)
Other income		**1.3**	**-**	**1.3**	1.0	-	1.0
Operating profit/(loss)	*3*	**20.0**	**(20.9)**	**(0.9)**	39.6	(10.5)	29.1
Finance income		**0.4**	**-**	**0.4**	0.5	-	0.5
Finance costs		**(4.8)**	**-**	**(4.8)**	(3.1)	-	(3.1)
Net finance costs		**(4.4)**	**-**	**(4.4)**	(2.6)	-	(2.6)
Profit/(loss) before taxation		**15.6**	**(20.9)**	**(5.3)**	37.0	(10.5)	26.5
Tax expense		**(4.1)**	**3.0**	**(1.1)**	(8.2)	1.6	(6.6)
Profit/(loss) for the year		**11.5**	**(17.9)**	**(6.4)**	28.8	(8.9)	19.9
Profit/(loss) attributable to:							
- Owners of the parent		**11.4**	**(17.9)**	**(6.5)**	28.7	(8.9)	19.8
- Non-controlling interests		**0.1**	**-**	**0.1**	0.1	-	0.1
		11.5	**(17.9)**	**(6.4)**	28.8	(8.9)	19.9
(Loss)/earnings per ordinary share attributable to owners of the parent during the year							
Basic	*5*			**(12.2)p**			37.1p
Diluted	*5*			**(12.2)p**			36.9p

(1) Specific adjusting items are disclosed separately in the financial statements where it is necessary to do so to provide further understanding of the financial performance. Further details are given in Note 2 and Note 4.

Consolidated statement of comprehensive income
for the year ended 30 June

	2020 **£m**	2019 £m
(Loss)/profit for the year	**(6.4)**	19.9
Other comprehensive (expense)/income		
Items that will not be reclassified to profit or loss:		
Remeasurements of the defined benefit pension scheme	**(2.7)**	(7.9)
Deferred tax on remeasurements of the defined benefit pension scheme	**1.1**	1.4
Total items that will not be reclassified to profit or loss	**(1.6)**	(6.5)
Items that may be subsequently reclassified to profit or loss:		
Currency translation on foreign currency net investments	**0.5**	1.2
Fair value gains on foreign currency cash flow hedges	**(0.1)**	0.1
Total items that may be subsequently reclassified to profit or loss	**0.4**	1.3
Total other comprehensive expense for the year (net of tax)	**(1.2)**	(5.2)
Total comprehensive (expense)/income for the year	**(7.6)**	14.7
(Expense)/income attributable to:		
- Owners of the parent	**(7.7)**	14.6
- Non-controlling interests	**0.1**	0.1
	(7.6)	14.7

Consolidated statement of financial position
as at 30 June

	Note	2020 £m	2019 £m
Assets			
Non-current assets			
Goodwill		**87.8**	84.2
Other intangible assets		**39.9**	41.0
Property, plant and equipment		**45.4**	44.6
Right-of-use assets		**23.9**	-
Other receivables		**3.2**	-
Deferred tax assets		**9.4**	6.7
		209.6	176.5
Current assets			
Inventories		**20.1**	14.5
Trade, contract and other receivables		**115.6**	141.4
Derivative financial assets		**3.9**	0.3
Current tax assets		**5.7**	-
Cash and cash equivalents	*9*	**66.3**	36.3
		211.6	192.5
Non-current assets held for sale	*8*	**5.3**	2.9
		216.9	195.4
Total assets		**426.5**	371.9
Liabilities			
Current liabilities			
Borrowings	*9*	**(10.6)**	(4.0)
Lease liabilities		**(6.7)**	-
Trade, contract and other payables		**(72.0)**	(84.8)
Current tax liabilities		**(7.5)**	(3.5)
Derivative financial liabilities		**(6.5)**	(1.2)
Provisions		**(3.2)**	(2.2)
		(106.5)	(95.7)
Net current assets		**110.4**	99.7
Non-current liabilities			
Borrowings	*9*	**(129.1)**	(79.7)
Lease liabilities		**(22.6)**	-
Trade, contract and other payables		**(3.6)**	(5.1)
Retirement benefit obligations		**(6.7)**	(8.5)
Deferred tax liabilities		**(5.6)**	(7.3)
Provisions		**(3.3)**	(3.7)
		(170.9)	(104.3)
Total liabilities		**(277.4)**	(200.0)
Net assets		**149.1**	171.9
Equity			
Share capital		**13.4**	13.4
Share premium		**14.3**	14.3
Other reserves		**17.4**	16.9
Retained earnings		**103.5**	126.8
Equity attributable to owners of the parent		**148.6**	171.4
Non-controlling interests		**0.5**	0.5
Total equity		**149.1**	171.9

Consolidated statement of changes in equity
for the year ended 30 June

	Attributable to owners of the parent						
	Share capital £m	Share premium £m	Other reserves £m	Retained earnings £m	Total £m	Non-controlling interests £m	Total equity £m
At 1 July 2018	13.4	14.3	15.7	124.3	167.7	0.4	168.1
Profit for the year	-	-	-	19.8	19.8	0.1	19.9
Other comprehensive income/(expense) for the year	-	-	1.2	(6.4)	(5.2)	-	(5.2)
Total comprehensive income for the year	-	-	1.2	13.4	14.6	0.1	14.7
Equity-settled transactions	-	-	-	1.0	1.0	-	1.0
Purchases of own shares to settle awards	-	-	-	(0.9)	(0.9)	-	(0.9)
Ordinary share dividends	-	-	-	(11.0)	(11.0)	-	(11.0)
At 30 June 2019	13.4	14.3	16.9	126.8	171.4	0.5	171.9
Adoption of IFRS 16 (net of tax)	**-**	**-**	**-**	**(3.7)**	**(3.7)**	**-**	**(3.7)**
At 1 July 2019 (adjusted)	**13.4**	**14.3**	**16.9**	**123.1**	**167.7**	**0.5**	**168.2**
Loss for the year	**-**	**-**	**-**	**(6.5)**	**(6.5)**	**0.1**	**(6.4)**
Other comprehensive income/(expense) for the year	**-**	**-**	**0.5**	**(1.7)**	**(1.2)**	**-**	**(1.2)**
Total comprehensive income/(expense) for the year	**-**	**-**	**0.5**	**(8.2)**	**(7.7)**	**0.1**	**(7.6)**
Equity-settled transactions	**-**	**-**	**-**	**0.6**	**0.6**	**-**	**0.6**
Purchases of own shares to settle awards	**-**	**-**	**-**	**(0.5)**	**(0.5)**	**-**	**(0.5)**
Ordinary share dividends	**-**	**-**	**-**	**(11.5)**	**(11.5)**	**(0.1)**	**(11.6)**
At 30 June 2020	**13.4**	**14.3**	**17.4**	**103.5**	**148.6**	**0.5**	**149.1**

Consolidated statement of cash flows
for the year ended 30 June

	Note	2020 £m	2019 £m
Cash flows from operating activities			
(Loss)/profit before tax		**(5.3)**	26.5
Adjustments for:			
Share-based payments		**0.6**	1.0
Fair value losses/(gains) on derivative financial instruments		**0.3**	(0.8)
Loss on disposal of property, plant and equipment		**(1.0)**	(0.7)
Net finance costs		**4.4**	2.6
Depreciation, amortisation and impairment		**30.3**	15.4
Operating cash flows before movements in working capital		**29.3**	44.0
Increase in inventories		**(5.6)**	(1.2)
Decrease/(increase) in trade, contract and other receivables		**25.4**	(5.2)
Decrease in trade, contract and other payables		**(12.3)**	(1.1)
Increase in provisions		**1.0**	0.2
Defined benefit pension scheme payments in excess of past service costs		**(4.6)**	(4.3)
Cash generated from operations		**33.2**	32.4
Net finance costs		**(4.2)**	(2.3)
Income tax paid		**(5.3)**	(4.9)
Net cash generated from operating activities		**23.7**	25.2
Cash flows from investing activities			
Acquisitions of subsidiaries, net of cash acquired	*7*	**(4.3)**	(18.9)
Purchases of property, plant and equipment		**(22.0)**	(7.6)
Proceeds from disposal of property, plant and equipment		**2.8**	0.7
Purchases of intangible assets and capitalised development costs		**(9.2)**	(9.1)
Net cash used in investing activities		**(32.7)**	(34.9)
Cash flows from financing activities			
Purchases of own shares to settle awards		**(0.6)**	(0.9)
Principal element of lease payments		**(5.6)**	-
Principal element of lease receivables		**0.2**	-
Proceeds from borrowings	*9*	**140.3**	64.7
Repayment of borrowings	*9*	**(90.7)**	(34.8)
Dividends paid to shareholders	*6*	**(11.6)**	(11.0)
Net cash generated from financing activities		**32.0**	18.0
Effect of exchange rate changes on cash and cash equivalents		**0.4**	0.3
Net increase in cash and cash equivalents		**23.4**	8.6
Net cash and cash equivalents at 1 July		**32.4**	23.8
Net cash and cash equivalents at 30 June	*9*	**55.8**	32.4
At 1 July			
Cash and cash equivalents		**36.3**	33.1
Bank overdrafts		**(3.9)**	(9.3)
Net cash and cash equivalents at 1 July		**32.4**	23.8
At 30 June			
Cash and cash equivalents		**66.3**	36.3
Bank overdrafts		**(10.5)**	(3.9)
Net cash and cash equivalents at 30 June		**55.8**	32.4

Notes to the financial statements

for the year ended 30 June

1) General information

Ricardo plc (the 'Company'), a public company limited by shares, is listed on the London Stock Exchange and incorporated and domiciled in the United Kingdom. The address of its registered office is Shoreham Technical Centre, Shoreham-by-Sea, West Sussex, BN43 5FG, England, United Kingdom, and its registered number is 222915.

This preliminary announcement is based on the audited Annual Report & Accounts 2020, which was approved for issue on 9 September 2020, and which has been prepared in accordance with International Financial Reporting Standards ('IFRS'), IFRS Interpretations Committee ('IFRS-IC') interpretations adopted by the European Union ('EU') and those parts of the Companies Act 2006 applicable to companies reporting under IFRS. The financial information herein does not amount to full statutory accounts within the meaning of Section 434 of the Companies Act 2006.

2) Alternative Performance Measures

Throughout this document the Group presents various alternative performance measures ('APMs') in addition to those reported under IFRS. The measures presented are those adopted by the Chief Operating Decision Maker ('CODM', deemed to be the Chief Executive Officer), together with the main Board, and analysts who follow us in assessing the performance of the business. Explanations of how they are calculated and how they are reconciled to an IFRS statutory measure are set out below.

a) Group profit and earnings measures

Underlying profit before tax ('PBT') and underlying operating profit: These measures are used by the Board to monitor and measure the trading performance of the Group. They exclude certain items which the Board believes distort the trading performance of the Group. These include the amortisation of acquired intangibles, acquisition-related expenditure, reorganisation costs, and other specific adjusting items.

The Group's strategy includes geographic and sector diversification, including targeted acquisitions and disposals. By excluding acquisition-related expenditure from underlying PBT and underlying operating profit, the Board has a clearer view of the performance of the Group and is able to make better operational decisions to support its strategy.

Acquisition-related expenditure includes the costs of acquisitions, deferred and contingent consideration fair value adjustments (including the unwinding of discount factors), transaction-related fees and expenses, and post-deal integration costs.

Reorganisation costs arising from major restructuring activities, profits or losses on the disposal of businesses, and significant impairments of property, plant and equipment, are excluded from underlying PBT and underlying operating profit as they are not reflective of the Group's trading performance in the year, as are any other specific adjusting items deemed to be one-off in nature.

The related tax effects on the above and other tax items which do not form part of the underlying tax rate are also taken into account. Items are treated consistently year-on-year, and these adjustments are also consistent with the way that performance is measured under the Group's incentive plans and its banking covenants. A reconciliation is shown below. Further details of the nature of the specific adjusting items are given in Note 4.

Reconciliation of underlying profit before tax to reported (loss)/profit before tax

	2020			2019		
	Underlying £m	**Specific adjusting items £m**	**Total £m**	Underlying £m	Specific adjusting items £m	Total £m
Revenue	**352.0**	**-**	**352.0**	384.4	-	384.4
Cost of sales	**(236.9)**	**-**	**(236.9)**	(249.5)	-	(249.5)
Gross profit	**115.1**	**-**	**115.1**	134.9	-	134.9
Administrative expenses and other income	**(95.1)**	**-**	**(95.1)**	(95.3)	-	(95.3)
Amortisation of acquired intangibles	**-**	**(6.0)**	**(6.0)**	-	(4.0)	(4.0)
Acquisition-related expenditure	**-**	**(3.0)**	**(3.0)**	-	(1.8)	(1.8)
Reorganisation costs	**-**	**(11.9)**	**(11.9)**	-	(3.4)	(3.4)
GMP equalisation	**-**	**-**	**-**	-	(1.3)	(1.3)
Operating profit/(loss)	**20.0**	**(20.9)**	**(0.9)**	39.6	(10.5)	29.1
Net finance costs	**(4.4)**	**-**	**(4.4)**	(2.6)	-	(2.6)
Profit/(loss) before tax taxation	**15.6**	**(20.9)**	**(5.3)**	37.0	(10.5)	26.5
Tax expense	**(4.1)**	**3.0**	**(1.1)**	(8.2)	1.6	(6.6)
Profit/(loss) for the year	**11.5**	**(17.9)**	**(6.4)**	28.8	(8.9)	19.9

The FY 2019/20 results include the impact of IFRS 16 *Leases*, which was adopted on 1 July 2019. The impact of IFRS 16 on the Group's underlying operating profit was an increase of £0.9m and there was a £0.2m negative impact on the Group's underlying profit before tax for the year ended 30 June 2020. The impact of IFRS 16 on the Group's reported operating profit was an increase of £4.8m and there was a £3.7m increase in the Group's reported profit before tax for the year ended 30 June 2020. Comparative APMs have not been updated to reflect the adoption of IFRS 16. In the year ended 30 June 2019, as IAS 17 charge of £8.5m was incurred.

Underlying earnings attributable to the owners of the parent: The Group uses underlying earnings attributable to the owners of the parent as the input to its adjusted EPS measure. This profit measure excludes the amortisation of acquired intangibles, acquisition-related expenditure, reorganisation costs and other specific adjusting items, but is an after-tax measure. The Board considers underlying EPS to be more reflective of the Group's trading performance in the year. A reconciliation between earnings attributable to the owners of the parent and underlying earnings attributable to the owners of the parent is shown in Note 5.

Organic growth/decline: Organic growth/decline is calculated as the growth/decline in the result for the current year compared to the prior year, after adjusting for the performance of acquisitions or disposals, to include the results of those acquisitions for an equivalent period in each financial year.

Constant currency organic growth/decline: The Group generates revenues and profits in various territories and currencies because of its international footprint. Those results are translated on consolidation at the foreign exchange rates prevailing at the time. Constant currency organic growth/decline is calculated by translating the result for the current year using foreign currency exchange rates applicable to the prior year. This provides an indication of the growth/decline of the business, excluding the impact of foreign exchange.

Headline trading performance		Underlying		Reported	
	Revenue	Operating profit	Profit before tax	Operating (loss)/ profit	(Loss)/ profit before tax
FY 2019/20 (£m)	**352.0**	**20.0**	**15.6**	**(0.9)**	**(5.3)**
FY 2018/19 (£m)	384.4	39.6	37.0	29.1	26.5
Add performance of acquisitions (£m)	16.1	4.0	3.6	4.0	3.6
Organic FY 2018/19 (£m)	400.5	43.6	40.6	33.1	30.1
Decline (%)	**(8)**	**(49)**	**(58)**	**(103)**	**(120)**
Organic decline (%)	**(12)**	**(54)**	**(62)**	**(103)**	**(118)**
Constant currency organic decline (%)	**(12)**	**(53)**	**(61)**	**(102)**	**(117)**

Transport Engineering (now Ricardo Rail Australia, or 'RRA') was acquired on 31 May 2019. Had RRA been acquired and consolidated from 1 July 2018 such that results for FY 2018/19 included RRA for an equivalent period to FY 2019/20, revenue for FY 2018/19 would have been £14.0m higher. Operating profit for FY 2018/19 would have been £3.2m higher and profit before tax for FY 2018/19 would have been £2.9m higher. PLC Consulting (now Ricardo Energy, Environment and Planning, or 'REEP') was acquired on 31 July 2019. Had REEP been acquired and consolidated from 31 July 2018 such that results for FY 2018/19 included REEP for an equivalent period to with FY 2019/20, revenue for FY 2018/19 would have been £2.1m higher. Operating profit for FY 2018/19 would have been £0.8m higher and profit before tax would have been £0.7m.

Segmental underlying operating profit: This is presented in our segmental disclosures and reflects the underlying trading of each segment, as assessed by the main Board. This excludes segment-specific amortisation of acquired intangibles, acquisition-related expenditure and other specific adjusting items, such as reorganisation costs. It also excludes unallocated Plc costs, which represent the costs of running the public limited company and specific adjusting items which are outside of the control of segment management. A reconciliation between segment underlying operating profit, the Group's underlying operating profit and operating profit is presented in Note 3.

b) Cash flow measures

Cash conversion: A key measure of the Group's cash generation is the conversion of profit into cash. This is the reported cash generated from operations (defined as operating cash flow, less movements in net working capital and defined benefit pension deficit contributions) divided by earnings before interest, tax, depreciation and amortisation ('EBITDA'), expressed as a percentage.

Underlying cash conversion: This is underlying cash generated from operations (defined as reported cash generated from operations, adjusted for the cash impact of specific adjusting items) divided by underlying EBITDA (defined as reported EBITDA, adjusted for the impact of specific adjusting items). A reconciliation between the two is shown below.

Cash conversion	2020 Underlying	 Specific adjusting items	 Total	2019 Underlying	 Specific adjusting items	 Total
	£m	**£m**	**£m**	£m	£m	£m
Operating profit/(loss)	**20.0**	**(20.9)**	**(0.9)**	39.6	(10.5)	29.1
Depreciation and amortisation	**17.6**	**6.7**	**24.3**	11.4	-	11.4
Amortisation of acquired intangibles	**-**	**6.0**	**6.0**	-	4.0	4.0
EBITDA	**37.6**	**(8.2)**	**29.4**	51.0	(6.5)	44.5
Movement in working capital	**4.5**	**4.0**	**8.5**	(7.8)	0.5	(7.3)
Pension deficit payments	**(4.6)**	**-**	**(4.6)**	(4.3)	-	(4.3)
Loss/(profit) on disposal of assets	**-**	**(1.0)**	**(1.0)**	(0.7)	0.7	0.0
Share based payments	**0.6**	**-**	**0.6**	1.0	-	1.0
Fair value losses/(gains) on derivative financial instruments	**0.3**	**-**	**0.3**	(0.8)	-	(0.8)
Cash generated from/(used in) operations	**38.3**	**(5.2)**	**33.1**	38.4	(5.3)	33.1
Cash conversion	**101.9%**		**112.6%**	75.3%		74.4%

Net debt: is defined as current and non-current borrowings less cash and cash equivalents, including hire purchase agreements, but excluding any impact of IFRS 16 lease liabilities. The transitional impact of the adoption of IFRS 16 *Leases* is set out in Note 10. Management believes this definition is the best for monitoring the indebtedness of the Group and is consistent with the treatment in the Group's banking agreements.

c) Tax measures

Underlying effective tax rate ('ETR'): We report one adjusted tax measure, which is the tax rate on underlying profit before tax. This is the tax charge applicable to underlying profit before tax expressed as a percentage of underlying profit before tax.

3) Operating segments

For the year ended 30 June 2020	EE	Rail	A&I	Defense	PP	All other segments	Plc	Total
	£m	£m	£m	£m	£m	£m	£m	£m
Total segment revenue	**51.7**	**75.4**	**108.8**	**32.8**	**70.7**	**19.1**	**-**	**358.5**
Inter-segment revenue	**(0.9)**	**(0.1)**	**(2.9)**	**-**	**(1.7)**	**(0.9)**	**-**	**(6.5)**
Revenue from external customers	**50.8**	**75.3**	**105.9**	**32.8**	**69.0**	**18.2**	**-**	**352.0**
Segment underlying operating profit	**6.3**	**5.8**	**0.5**	**5.1**	**5.0**	**0.1**	**-**	**22.8**
Plc costs	**-**	**-**	**-**	**-**	**-**	**-**	**(2.8)**	**(2.8)**
Underlying operating profit	**6.3**	**5.8**	**0.5**	**5.1**	**5.0**	**0.1**	**(2.8)**	**20.0**
Specific adjusting items(*)	**(1.7)**	**(5.5)**	**(10.1)**	**(0.5)**	**(0.1)**	**(0.5)**	**(2.5)**	**(20.9)**
Operating profit/(loss)	**4.6**	**0.3**	**(9.6)**	**4.6**	**4.9**	**(0.4)**	**(5.3)**	**(0.9)**
Net finance costs								**(4.4)**
Loss before taxation								**(5.3)**

For the year ended 30 June 2019	EE	Rail	A&I	Defense	PP	All other segments	Plc	Total
	£m	£m	£m	£m	£m	£m	£m	£m
Total segment revenue	45.1	67.5	131.7	25.5	99.3	23.7	-	392.8
Inter-segment revenue	(0.5)	(0.1)	(2.4)	(0.3)	(3.9)	(1.2)	-	(8.4)
Revenue from external customers	44.6	67.4	129.3	25.2	95.4	22.5	-	384.4
Segment underlying operating profit	5.0	5.2	16.1	3.2	9.9	3.9		43.3
Plc costs	-	-	-	-	-	-	(3.7)	(3.7)
Underlying operating profit	5.0	5.2	16.1	3.2	9.9	3.9	(3.7)	39.6
Specific adjusting items(*)	(1.1)	(2.9)	(2.9)	(0.5)	-	-	(3.1)	(10.5)
Operating profit	3.9	2.3	13.2	2.7	9.9	3.9	(6.8)	29.1
Net finance costs								(2.6)
Profit before taxation								26.5

* - See Note 4

4) Specific adjusting items

Specific adjusting items are disclosed separately in the financial statements where it is necessary to do so to provide further understanding of the financial performance of the Group. These items comprise the amortisation of acquired intangible assets, acquisition-related expenditure, reorganisation costs and other non-recurring items that are included due to the significance of their nature or amount. Acquisition-related expenditure is incurred by the Group to effect a business combination, including the costs associated with the integration of acquired businesses. Reorganisation costs relate to non-recurring expenditure incurred as part of fundamental restructuring activities, significant impairments of property, plant and equipment, and other items deemed to be one-off in nature.

	2020	2019
	£m	£m
Amortisation of acquired intangible assets	**6.0**	4.0
Acquisition-related expenditure	**3.0**	1.8
Reorganisation costs		
- Purchases and disposals	**5.7**	-
- Other reorganisation costs	**6.2**	3.4
Guaranteed Minimum Pensions ('GMP') equalisation	**-**	1.3
Total before tax	**20.9**	10.5
Tax credit on specific adjusting items	**(3.3)**	(1.6)
Tax charge on prior year specific adjusting item	**0.3**	-
Total after tax	**17.9**	8.9

Amortisation of acquired intangible assets
On acquisition of a business, the purchase price is allocated to assets such as customer contracts and relationships. Amortisation occurs on a straight-line basis over its useful economic life, which is between 3 and 9 years. The increase in the year is due to the acquisition of Transport Engineering Pty Ltd on 31 May 2019 and PLC Consulting Pty Ltd on 31 July 2019 (see Note 7(a)).

Acquisition-related expenditure
The current year charge comprises £2.8m of earn out and employee retention costs, accrued in relation to the two acquisitions detailed in Note 7). In addition, £0.4m of costs were incurred in relation to the post-deal integration of these businesses. £0.8m of costs were incurred on acquisition processes in the year (including the acquisition of PLC Consulting Pty Ltd and other aborted processes), comprising external professional fees and the costs of running an internal acquisitions department to effect acquisition processes.

Partially offsetting these, £1.1m of income was recognised in relation to a gain on the settlement of a foreign exchange option contract, which was taken out to hedge an aborted overseas acquisition. This has been classified as a specific adjusting item due to the non-recurring nature and significance of the amount. The prior year charge included £0.4m of earn-out costs and £1.4m of acquisition-related fees and costs.

Reorganisation costs

Purchases and disposals
Major restructuring actions were taken in the year to address performance issues in the A&I US business and realign the cost base to make it more operationally efficient. The charge in the current year comprises £6.7m (£5.6m in property, plant and equipment and £1.1m in non-current assets held for sale (see Note 8)) of impairments and £3.1m of income from the release of a lease liability following the acquisition of the freehold property of the Detroit Technology Campus ('DTC') on 21 August 2019, in order to remove the business from a long term lease commitment on the property. In addition, the current year charge includes a loss on disposal of £2.1m in relation to the sale of Ricardo's Detroit test cell assets on 3 June 2020. These items have been included as specific adjusting items as they are significant in quantum and would distort the underlying trading performance if included. See Note 8 for further details on the disposal of the test cell assets.

Other reorganisation costs
In addition to the actions taken above, as part of the A&I US major restructuring actions in FY 2019/20, Ricardo exited the aftertreatment business at our Santa Clara Technical Centre ('SCTC'), incurring £0.4m of exit costs and the write off of equipment. £0.3m of redundancy costs and £0.2m of incremental contractor costs were incurred in the year in connection with the management of these restructuring actions. These contractors are incremental to the business and non-revenue generating.

£2.6m of redundancy costs were incurred in FY 2019/20 across the Group's automotive-related businesses (A&I in Europe, Performance Products, RSC & Software). These actions were taken as a result of major restructuring required to right-size the cost base in these businesses in response to the unforeseen challenging trading conditions and customer plant shut-downs in the second half of the financial year. As part of these restructuring actions, a charge of £0.6m was recognised in respect of the vacant portion of the Cambridge Technical Centre ('CaTC') due to a reduction in headcount at this site as a result of restructuring actions taken. £0.5m of professional fees and £0.1m of contractor costs were incurred. These fees and contractor costs were incremental to the business and directly related to the restructuring actions taken, being a combination of professional advice taken and management of the restructuring process.

In the prior year, £2.0m of redundancy costs, together with £0.7m of costs in relation to onerous contracts and £0.3m of incremental contractor costs, were incurred in A&I Europe in relation to the completion of a programme to re-set the global automotive business in response to a fundamental shift in market dynamics. The FY 2019/20 actions were not linked to those taken in FY 2018/19.

£1.4m of redundancy costs were incurred in Rail in FY 2019/20. The Rail costs represent the completion of a restructuring process which commenced in the prior year to realign the business to market demand. £0.5m of redundancy costs were incurred in relation to this process, which straddled the prior year end.

The total costs of these restructuring actions have been included as specific adjusting items since, together, they are significant in quantum and would distort the underlying trading performance if included.

Guaranteed Minimum Pensions ('GMP') equalisation
In October 2018, the High Court issued a judgement confirming that pension schemes are required to equalise male and female members' benefits for the effect of Guaranteed Minimum Pensions ('GMP'). The past service cost due to GMP equalisation is considered to be non-recurring in nature and significant in its amount.

Tax charge on prior year specific adjusting items
During FY 2019/20, a tax charge was recognised in relation to adjustments to the prior year tax charge arising on the sale of the Germany test business in June 2018.

5) Earnings per share

Basic earnings per share is calculated by dividing the earnings attributable to ordinary shareholders by the weighted average number of shares outstanding during the year, excluding those held by an employee benefit trust for the Long-Term Incentive Plan ('LTIP') and by the Share Incentive Plan ('SIP') for the free share scheme which are treated as cancelled for the purposes of the calculation.

For diluted earnings per share, the weighted average number of ordinary shares in issue is adjusted to assume conversion of all dilutive potential ordinary shares. These include potential awards of LTIP shares and options granted to employees. The assumed proceeds from these is regarded as having been received at the average market price of ordinary shares during the year.

Reconciliations of the earnings and the weighted average number of shares used in the calculations are set out below. Underlying earnings per share is also shown because the Directors consider that this provides a more useful indication of underlying performance and trends over time.

For the year ended 30 June	**2020** **£m**	2019 £m
(Loss)/ earnings attributable to owners of the parent	**(6.5)**	19.8
Add back the net-of-tax impact of:		
- Amortisation of acquired intangible assets	**4.5**	3.4
- Acquisition-related expenditure	**2.9**	1.2
- Asset purchases and disposals	**4.8**	-
- Other reorganisation costs	**5.4**	3.0
- Guaranteed Minimum Pensions ('GMP') equalisation	**-**	1.3
- Tax charge on prior year specific adjusting item	**0.3**	-
Underlying earnings attributable to owners of the parent	**11.4**	28.7

For the year ended 30 June	**2020** **Number of shares millions**	2019 Number of shares millions
Basic weighted average number of shares in issue	**53.4**	53.4
Effect of dilutive potential shares	**-**	0.2
Diluted weighted average number of shares in issue	**53.4**	53.6

(Loss)/earnings per share	**2020** **pence**	2019 pence
Basic	**(12.2)**	37.1
Diluted	**(12.2)**	36.9

Underlying earnings per share	**2020** **pence**	2019 pence
Basic	**21.3**	53.7
Diluted	**21.3**	53.5

Underlying earnings per share is also shown because the Directors consider that this provides a more useful indication of underlying performance and trends over time.

6) Dividends

Dividends are one type of shareholder return, historically paid to our shareholders in April and November.

	2020	2019
	£m	£m
Final dividend for the year ended 30 June 2019 of 15.28p (2018: 14.71p) per share	**8.2**	7.8
Interim dividend for the year ended 30 June 2020 of 6.24p (2019: 6.00p) per share	**3.3**	3.2
Equity dividends paid	**11.5**	**11.0**

A dividend of £0.1m was issued during the year by a subsidiary of the Group to a non-controlling party of that subsidiary.

7) Acquisitions

a) Acquisitions in the current period - PLC Consulting

On 31 July 2019, the Group acquired the entire issued share capital of PLC Consulting Pty Ltd ('PLC Consulting') for initial cash consideration of £4.2m (AUD 7.4m), which includes an adjustment for cash and normalised net working capital of £0.3m (AUD 0.4m), paid in November 2019.

PLC Consulting is an Australian firm with a strong technical advisory capability across the project life cycle in infrastructure, environment and planning, including supporting the environmental requirements of master-planning, business cases, procurement, design, construction and operation. PLC Consulting was renamed Ricardo Energy Environment and Planning ('REEP') on 5 August 2019. The following tables set out the fair value of cash consideration payable to acquire PLC Consulting, together with the fair value of net assets acquired.

Fair value of cash consideration	**£m**
Initial cash consideration	4.2
Total fair value of cash consideration	**4.2**

Fair value of identifiable net assets acquired	**£m**
Customer contracts and relationships	1.3
Trade, contract and other receivables	0.5
Cash and cash equivalents	0.4
Trade, contract and other payables	(0.2)
Deferred tax liabilities	(0.4)
Fair value of identifiable net assets acquired	**1.6**
Goodwill	2.6
Total fair value of cash consideration	**4.2**

The maximum contingent cash payable is £1.4m (AUD 2.5m). The amounts payable will be based on the achievement of a range of annual performance targets measured against the earnings before interest, tax, depreciation and amortisation of PLC Consulting across a two-year earn-out period. These payments are dependent upon the continuing employment of the sellers in the business and are not considered to be consideration. £0.7m (AUD 1.3m), representing an accrual for the fair value of the expected year one payment, has been accrued within specific adjusting items (see Note 4).

Adjustments have been made for the recognition of customer-related intangible assets separable from goodwill amounting to £1.3m (AUD 2.4m). The fair value of the contingent cash consideration and identifiable net assets acquired were identified in accordance with the requirements of IFRS 3 *Business Combinations* and the sale and purchase agreement.

The goodwill arising on acquisition can be ascribed to the existence of a skilled, active workforce, developed expertise and processes and the opportunities to obtain new contracts and develop the business. None of these meet the criteria for recognition as intangible assets separable from goodwill. None of the goodwill recognised on consolidation is expected to be deductible for tax purposes.

The net assets acquired of £1.6m (AUD 3.0m) includes trade receivables of £0.5m (AUD 0.9m), all of which have been

collected.

Acquisition-related expenditure of £0.2m representing costs incurred to integrate the business post-acquisition, together with £0.4m of amortisation on acquired intangibles, has been charged to the income statement for the year ended 30 June 2020 and is included as a specific adjusting item in Note 4.

The revenue included in the income statement in relation to the acquired business was £3.0m. The underlying operating profit over the same period was £0.9m. This is reported in the EE segment in Note 3.

Had PLC Consulting been acquired and consolidated from 1 August 2018, revenue and operating profit in the prior period income statement would have been £2.1m and £0.8m higher, respectively.

b) Acquisitions in the prior year - Transport Engineering

On 31 May 2019, the Group acquired the entire issued share capital of Transport Engineering Pty Ltd ('Transport Engineering') for initial cash consideration payable of £21.7m (AUD 39.5m) which includes an adjustment for cash and normalised net working capital of £0.5m (AUD 0.9m) paid in August 2019, together with the accrued fair value of contingent cash consideration payable of £5.1m (AUD 9.4m). Transport Engineering is a leading rail technical services consultancy based in Australia. It expands the Group's existing capabilities within the growing Asia-Pacific rail market and provides a footprint for other Ricardo businesses in Australia. Transport Engineering was renamed Ricardo Rail Australia ('RRA') on 11 June 2019. The following tables set out the fair value of cash consideration payable to acquire Transport Engineering, together with the assessment of the fair value of net assets acquired.

Fair value of cash consideration	**£m**
Initial cash consideration	21.7
Fair value of contingent cash consideration	5.1
Total fair value of cash consideration	**26.8**

Fair value of identifiable net assets acquired	**£m**
Customer contracts and relationships	9.7
Property, plant and equipment	0.1
Trade, contract and other receivables	2.3
Cash and cash equivalents	2.3
Trade, contract and other payables	(1.7)
Current tax liabilities	(0.9)
Deferred tax liabilities	(2.9)
Fair value of identifiable net assets acquired	**8.9**
Goodwill	17.9
Total fair value of cash consideration	**26.8**

The Group also acquired all of Transport Engineering's shareholding in its associate, Wamarragu Transport Services Pty Ltd, the financial results of which are immaterial to the Group. The cash impact of the acquisition in the prior year was £18.9m (AUD 34.4m), being the initial cash consideration of £21.2m (AUD 38.6m) paid on completion, less cash acquired of £2.3m (AUD 4.2m). £0.5m (AUD 0.9m) was paid for cash and normalised net working capital in the current year. The maximum contingent cash consideration payable is £8.1m (AUD 15.0m). The fair value of the contingent cash consideration is considered to be Level 3 of the fair value hierarchy within IFRS 13 *Fair Value Measurement*. The fair value is valued based on a financial forecast using the Group's own data, with a probability applied for the likely outcome. Significant unobservable inputs are order intake, pipeline of opportunities and historical performance. The stronger these inputs, the higher the estimated fair value. The amounts payable will be based on the achievement of annual performance targets measured against the profit before tax of Transport Engineering across a two-year earn-out period. Each earn-out is only payable in full if the performance target is achieved. £2.1m (AUD 3.8m) (2019: £0.2m – AUD 0.4m) has been accrued within specific adjusting items (see Note 4) in the current year, reflecting the increase in the fair value of contingent consideration payable based on RRA's results for the year ended 30 June 2020, together with the associated unwind in the discount rate. This is included within non-current liabilities as the amount is not due to be paid until after 30 June 2021.

Adjustments have been made to identifiable net assets acquired to reflect their fair value. These include the recognition of customer-related intangible assets separable from goodwill amounting to £9.7m (AUD 17.8m). The fair value of the contingent cash consideration and identifiable net assets acquired were identified in accordance with the requirements of IFRS 3 *Business Combinations* and the sale and purchase agreement.

The goodwill arising on acquisition can be ascribed to the existence of a skilled, active workforce, developed expertise and processes and the opportunities to obtain new contracts and develop the business. None of these meet the criteria for recognition as intangible assets separable from goodwill. None of the goodwill recognised on consolidation is expected to be deductible for tax purposes.

The fair value of trade, contract and other receivables acquired of £2.3m (AUD 4.2m) included trade receivables of £0.3m (AUD 0.6m) and amounts recoverable on contracts of £1.8m (AUD 3.2m), all of which have been collected. Had Transport

Engineering been acquired and consolidated from 1 July 2018, revenue and underlying operating profit in the income statement in the prior period would be £14.0m and £3.1m higher, respectively.

Acquisition-related expenditure of £0.2m (2019: £0.5m) representing costs incurred to integrate the business post-acquisition, together with £1.9m (2019: £0.2m) of amortisation on acquired intangibles, has been charged to the income statement for the year ended 30 June 2020 and is included as a specific adjusting item in Note 4. This is reported in the Rail segment in Note 3.

8) Non-current assets held for sale

Movement in held for sale	Freehold land and buildings £m	Plant and machinery £m	Total £m
At 30 June 2019	-	2.9	2.9
Transferred from property, plant and equipment	8.6	1.1	9.7
Disposals	(2.1)	(4.0)	(6.1)
Impairment loss	(1.1)	-	(1.1)
Exchange rate adjustments	(0.1)	-	(0.1)
At 30 June	**5.3**	**-**	**5.3**

In January 2019, the Directors made a decision to commence a process to market actively its test cell assets at DTC for sale, which had a net book value of £2.9m (USD 3.7m) at 1 July 2019. During the year, the Group continued to invest in these assets to improve their desirability, increasing the held for sale net book value to £4.0m (USD 4.9m). These assets were sold on 3 June 2020, as discussed below.

As explained in Note 4, on 21 August 2019, the Group purchased the freehold property of DTC, comprising the north building, which housed the test cell assets, and the south office building, for £14.2m (USD 17.3m). Subsequently, the Group commenced a process to market the newly acquired freehold property, together with the DTC test cell assets. The freehold property was immediately written down to £8.6m (USD 10.5m) as part of being classified as held for sale, as the purchase price was predicated on Ricardo's long-term tenancy, crystallising an impairment charge of £5.6m. The impairment charge was partially offset by the write-off of a £3.1m (USD 4.0m) net lease liability under IFRS 16. The DTC north building was sold on 3 June 2020, as discussed below. The DTC south building is still being marketed and remains held for sale at a value of £5.3m (USD 6.5m), as a further impairment charge of £1.1m (USD 1.3m) was recognised to reflect current market conditions. Due to the nature and significance of the amount the impairment charge (together with the balance of the lease liability) have been recognised in the income statement within specific adjusting items. They are included within the A&I segment and within administrative expenses in the reported result.

Detroit test cell business and north building of Detroit Technology Campus

Fair value of cash consideration	£m
Initial cash consideration	2.8
Provisional fair value of contingent cash consideration:	
- less than one year	0.5
- more than one year	0.7
Total fair value of cash consideration	**4.0**

Carrying value of property, plant and equipment disposed	
- Leasehold property	(2.1)
- Plant and machinery	(4.0)
Total carrying value of property, plant and equipment disposed	**(6.1)**

Loss on disposal before tax	**(2.1)**

In June 2020, the Group sold the test cell assets and the DTC north building to a non-competitive strategic partner for an initial cash consideration of £2.8m (USD3.5m), which could increase to a maximum of £4.4m (USD5.5m), depending on the volume of testing work placed into the facility by Ricardo over the next two years. The total fair value of cash consideration is £4.0m (USD 4.9m), which includes the accrued provisional fair value of contingent cash consideration payable of £1.2m (USD1.5m). A loss of £2.1m (USD2.6m) was recognised on the sale. Due to the nature and significance of the amount, the loss on disposal was recognised in the income statement within specific adjusting items.

9) Net debt

Analysis of net debt	2020 £m	2019 £m
Current assets - cash and cash equivalents:		
- Cash and cash equivalents	**66.3**	36.3
Total cash and cash equivalents	**66.3**	36.3
Current liabilities - borrowings:		
- Bank overdrafts repayable on demand	**(10.5)**	(3.9)
- Hire purchase liabilities maturing within one year	**(0.1)**	(0.1)
Total current borrowings	**(10.6)**	(4.0)
Non-current liabilities - borrowings:		
- Hire purchase liabilities maturing after one year	**(0.4)**	(0.6)
- Bank loans maturing after one year	**(128.7)**	(79.1)
Total non-current borrowings	**(129.1)**	(79.7)
At 30 June	**(73.4)**	(47.4)

Total cash and cash equivalents at 30 June	**66.3**	36.3
Total borrowings at 30 June	**(139.7)**	(83.7)
Total net debt at 30 June	**(73.4)**	(47.4)

Movement in net debt	2020 £m	2019 £m
Net debt at beginning of year	**(47.4)**	(26.1)
Increase in cash and cash equivalents, and bank overdrafts	**23.4**	8.6
Repayments of/(proceeds from) hire purchase	**0.2**	(0.7)
Proceeds from bank loans	**(140.3)**	(64.0)
Repayments of bank loans	**90.7**	34.8
At 30 June	**(73.4)**	(47.4)

10) Changes in significant accounting policies – IFRS 16 *Leases*

Adjustment to the financial statements - Consolidated statement of financial position (extract)

As at 1 July 2019	Previously reported £m	IFRS 16 transitional adjustment £m	Adjusted under IFRS 16 £m
Assets			
Non-current assets			
Right-of-use assets	-	37.1	37.1
Other receivables	-	2.3	2.3
Deferred tax assets	6.7	1.1	7.8
Total non-current assets	176.5	40.5	217.0
Current assets			
Trade, contract and other receivables	141.4	(0.5)	140.9
Total current assets	192.5	(0.5)	192.0
Total current assets and non-current assets held for sale	195.4	(0.5)	194.9
Total assets	371.9	40.0	411.9
Liabilities			
Current liabilities			
Lease liabilities	-	(4.7)	(4.7)
Trade, contract and other payables	(84.8)	1.4	(83.4)
Total current liabilities	(95.7)	(3.3)	(99.0)
Net current assets	99.7	(3.8)	95.9
Non-current liabilities			
Lease liabilities	-	(40.9)	(40.9)
Provisions	(3.7)	0.5	(3.2)
Total non-current liabilities	(104.3)	(40.4)	(144.7)
Total liabilities	(200.0)	(43.7)	(243.7)
Net assets	171.9	(3.7)	168.2
Equity			
Retained earnings	126.8	(3.7)	123.1
Equity attributable to owners of the parent	171.4	(3.7)	167.7
Total equity	171.9	(3.7)	168.2

Reconciliation between operating lease commitments and lease liabilities

The following table explains the differences between the operating lease commitments disclosed applying IAS 17 at 30 June 2019 and the lease liabilities recognised on transition to IFRS 16 on 1 July 2019.

	£m
Total operating lease commitments under IAS 17 at 30 June 2019	61.2
Discounting	(12.9)
Exempt lease payments	(0.8)
Non-lease component payments	(1.9)
Lease liabilities recognised on transition to IFRS 16 at 1 July 2019	45.6

11) Events after the reporting date

On 5 May 2020, the Group exercised £50m of the accordion option of its banking facilities, thereby increasing the Revolving Credit Facility to £200m and increasing the amount undrawn and available to £70m. This provides the Group with increased committed funding available for the remaining term through to July 2023. In addition to the increased committed funding available, the Adjusted Leverage (defined as net debt over underlying EBITDA) covenant was increased from 3.0x to 3.75x for the next two test dates of 30 June 2020 and 31 December 2020. Following the year end, on 9 September 2020, the definition of the Adjusted Leverage covenant for the December 2020 covenant test date was amended to be based on two times the six months' EBITDA to December 2020. In addition, the June 2021 covenant was increased to 3.75. The only other financial covenant is Interest Cover. This remains at 4.0x for each test date, but with the December 2020 test based on two times the six months' EBITDA to December 2020.