28 February 2018

Ricardo plc
Interim results for the six months ended 31 December 2017

Ricardo plc is a global engineering, technical, environmental and strategic consultancy business, which also manufactures and assembles niche, high-quality and high-performance products.

HIGHLIGHTS

- Record order book at £302m, up £54m on June 2017;
- Strong order intake at £238m, up £57m on HY 2016/17;
- Revenue up 9% to £183m and underlying PBT up 8% to £16.3m on HY 2016/17;
- Net debt reduced from £38m at June 2017 to £32m (after £6m acquisition of Control Point);
- A good mix of orders in terms of geography, sector and size with increased orders in hybrid/EV activity at 24% of total Group order intake, up from 17% in FY 2016/17;
- Acquisition of Control Point completed in the period and performing well; and
- Outlook remains positive with a good pipeline.

			% Change	
	HY 2017/18	HY 2016/17	Reported	Organic(3)
Order book (£m)	**302**	244	+24	+22
Order intake (£m)	**238**	181	+31	+28
Revenue (£m)	**182.6**	167.0	+9	+7
Underlying(1)				
Profit before tax (£m)	**16.3**	15.1	+8	+6
Basic earnings per share(2) (p)	**23.6**	22.3	+6	+3
Statutory				
Profit before tax (£m)	**12.5**	12.1	+3	+1
Basic earnings per share (p)	**16.7**	17.7	-6	-9
Dividend per share (p)	**5.75**	5.42	+6	n/a
Net debt	**(31.5)**	(47.0)	+33	n/a

(1) Excludes specific adjusting items which have impacted reported profit before tax, comprised of amortisation of acquired intangible assets of £2.2m (HY 2016/17: £1.9m), acquisition-related expenditure of £0.5m (HY 2016/17: £1.1m) and reorganisation costs of £1.1m (HY 2016/17: £Nil).
(2) In the current period, a non-recurring tax charge of £1.1m arising from the reduction in the US federal tax rate was also classified as a specific adjusting item, which has impacted reported profit after tax.
(3) Excludes the performance of acquisitions (Control Point Corporation).

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

"Our growth strategy remains focused on the strategic diversification of our business through organic and acquisitive actions. We continue to develop the technology and innovative solutions that will help our clients meet the global challenges of urbanisation, energy security and efficiency, increasing environmental and emissions regulations and rising demand for natural resources.

"We have traded in line with our expectations and I am pleased to see the strong order intake resulting in an increase of 31% compared to the first half of the prior year. We have also seen a good spread of orders across both our Technical Consulting and Performance Products businesses. This provides a good base as we head into our traditionally more profitable second half of the year. I am also particularly pleased with our cash performance in the period, driven by a strong working capital focus. We look forward to continued progress in the second half of the year."

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MANAGEMENT REVIEW

GROUP RESULTS

The Group has delivered an underlying operating result which is in line with the Board's expectations for the period. Total Group revenues increased to £182.6m, which was a 9% increase on the prior period (HY 2016/17: £167.0m). Underlying profit before tax, which excludes specific adjusting items as set out in more detail in Note 3, increased by 8% to £16.3m (HY 2016/17: £15.1m), with the margin reducing slightly to 8.9% from 9.0% in the prior period.

This growth in underlying profit before tax includes an additional £0.3m from the performance of Control Point Corporation ('CPC'), an acquisition completed during the period. Using exchange rates consistent with the prior period, revenue and underlying profit before tax would have been £182.9m and £16.6m respectively, both of which represent growth of 10% on the prior period.

HY 2017/18	**Revenue £m**	**PBT £m**
Underlying	**182.6**	**16.3**
Less performance of acquisitions:		
Control Point Corporation	(3.4)	(0.3)
Organic	**179.2**	**16.0**
Underlying growth	**9%**	**8%**
Organic growth	**7%**	**6%**
Organic growth (constant currency basis)	**7%**	**8%**

Organic growth in revenues and underlying profit before tax was 7% and 6% respectively, which excludes the performance of acquisitions. Using exchange rates consistent with the prior period, organic revenue and organic underlying profit before tax would have been £179.5m and £16.3m, which represents growth on the prior period of 7% and 8%, respectively.

The period ended with another record closing order book of £302m, which increased by 24% on the prior period (31 December 2016: £244m) and 22% on the year-end (30 June 2017: £248m). Organic growth on the year-end order book was 20%, which excludes £4m of orders secured through the acquisition of CPC. Our order book comprises the value of all unworked purchase orders received.

The closing order book comprises a higher proportion of orders that are for delivery beyond this financial year (31 December 2017: 54%; 31 December 2016: 52%), providing the Group with greater visibility over the medium-term. This, together with a good pipeline of further opportunities, continues to represent a diversified spread of orders across market sectors, customers and geographies.

Reported profit before tax for the period increased by 3% to £12.5m (HY 2016/17: £12.1m). The increase is due to a £0.8m improvement in organic performance, £0.3m of profit generated from acquisitions in the period, a £0.6m decrease in acquisition-related expenditure and a £0.1m increase in interest receivable. This movement is partially offset by a £0.3m increase in the amortisation charge on acquired intangible assets and reorganisation costs of £1.1m.

SEGMENTAL RESULTS

The segmental results for the Group's operating segments are as follows:

Revenue	Technical Consulting £m	Performance Products £m	Total £m
Underlying HY 2017/18	**142.0**	**40.6**	**182.6**
Less performance of acquisitions	(3.4)	-	(3.4)
Organic HY 2017/18	**138.6**	**40.6**	**179.2**
Underlying HY 2016/17	133.6	33.4	167.0
Underlying growth	**6%**	**22%**	**9%**
Organic growth	**4%**	**22%**	**7%**

Operating profit	Technical Consulting £m	Performance Products £m	Total £m
Underlying HY 2017/18	**13.5**	**3.9**	**17.4**
Less performance of acquisitions	(0.3)	-	(0.3)
Organic HY 2017/18	**13.2**	**3.9**	**17.1**
Underlying HY 2016/17	12.9	3.4	16.3
Underlying growth	**5%**	**15%**	**7%**
Organic growth	**2%**	**15%**	**5%**

Technical Consulting results

Technical Consulting saw revenues increase by 6% to £142.0m (HY 2016/17: £133.6m) and underlying operating profits increase by 5% to £13.5m (HY 2016/17: £12.9m). The performance of the acquired CPC business has been included in the Technical Consulting segment (see Note 6). Underlying organic revenues and operating profit, which exclude performance from acquisitions as noted above, increased to £138.6m and £13.2m, which represents growth on the prior period of 4% and 2%, respectively.

Our global business, operating across the Automotive and Commercial Vehicles sectors, delivered a record order intake in the period, securing significant multi-year orders from a number of clients across Europe, Japan and China. This has extended the ageing of the order book, which also contains a greater degree of material content than in the prior period. The improvement in the flow of orders in the period has enabled a return to more efficient levels of operation, leading to a more profitable business.

The market in Detroit remains challenging and this is reflected in the order intake during the period. We are implementing plans to reposition the business and enhance our electrification and autonomous vehicle service offering. Although our US Automotive business ended the period with another loss, the level of losses incurred have reduced compared to the prior period.

The Rail business saw strong order intake across key geographies and significant growth in the closing order book, particularly in Asia. The business continues to perform well.

Order intake for the Energy & Environment business was in line with the prior period. The closing order book includes a number of multi-year orders for UK Government programmes and reflects a broad private sector and international customer base.

Performance Products results

Performance Products had a strong first half. Revenues increased on the prior period by 22% to £40.6m (HY 2016/17: £33.4m) and underlying operating profits increased on the prior period by 15% to £3.9m (HY 2016/17: £3.4m). The current period performance was principally driven by increased volumes of engines for McLaren, particularly for the higher value 720S engine, together with increased volumes of transmissions for both Bugatti and Porsche. These have been partially offset by a reduction in sales to the Motorsport and Defence sectors. The software business also continues to perform well.

MARKET AND STRATEGY UPDATE

We have won good levels of new business across all sectors in the period. Ricardo's strategic focus on diversification and the ongoing development of innovative products and technologies, together with the management of complex, large-scale turnkey programmes, underpins the growth of our Technical Consulting business. Our Performance Products business also continues to perform well.

In addition to the organic growth generated by our existing activities, the acquired CPC business is now being integrated into our Ricardo Defense Systems ('RDS') business. This acquisition expands upon the Group's vehicle engineering capabilities in the Defence sector and adds expertise in distributed software-based systems and fleet management technologies.

In this period we have also expanded our Santa Clara Technical Centre and opened a new electrification and vehicle laboratory to support innovation in the next generation of clean, electrified and increasingly autonomous vehicles. In addition, we have extended our collaboration with Roke to develop robust solutions for autonomous and connected transport systems against cyber attacks.

Our strategy continues to be underpinned by long-term trends – population growth, urbanisation, energy security and efficiency, rising demand for natural resources and increasing environmental and emission regulations.

These global and strategic changes require new technologies, strategic oversight, programme management and certification – this is Ricardo's heritage, and through our future-focused technology roadmapping, it is our business both today, and tomorrow.

We continue to monitor the risk and potential impact of the referendum vote for the UK to leave the European Union and the subsequent triggering of 'Article 50', as disclosed on pages 39 and 40 of the Group's Annual Report & Accounts for the year ended 30 June 2017. These risks are mitigated by the strategy of broadening the base of the business to reduce exposure to any one specific customer, territory or market sector, and is shown by the spread of the Group's order intake across these categories.

Ricardo is well placed to assist major international private and public sector customers across sectors including Automotive, Off-Highway & Commercial Vehicles, High-Performance Vehicles & Motorsport, Rail, Energy & Environment, and Defence, and we continue to seek opportunities to grow both organically and through partnerships and acquisitions.

We believe that our overall strategy offers risk mitigation through the avoidance of cyclicality and the promotion of growth, supported by investment in excellent people through our apprenticeship programmes, graduate recruitment, and industry hires, together with our investment in the right technologies and the right assets.

TECHNICAL CONSULTING

Ricardo's Technical Consulting businesses provide innovation-focused services in engineering, technical and strategic consulting to the Automotive, Rail and Environmental consulting markets, together with independent safety assurance and accreditation services to private and public sector customers in the rail industry.

Our capabilities are based on the application of intellectual property, know-how and knowledge developed through our investment in research and development ('R&D') and our participation in collaborative R&D programmes in several industries and geographies. These capabilities are complemented by a wide range of design, test and development tools and equipment.

Our staff includes specialists in: electronics; software and control strategy; mechanical and electrical design; test and development; vehicle attribute development; prototype build; programme management; independent assurance; signalling; critical system design and development; cost estimation; atmospheric pollutant modelling; environmental science; and environmental economics.

We have a global infrastructure that helps us to meet the needs of our customers. Ricardo has 50 sites in 20 countries, with technical centres in the US, the UK, Netherlands, Germany, Italy, Czech Republic and China, supported by offices where a local presence is needed to service our customers. Engineers from the technical centres are deployed on projects across the globe using common engineering processes.

Our Energy & Environment consulting services are delivered mainly from the UK but the business is making increasing use of Ricardo's global network in support of its growth objectives. Ricardo's Rail and Strategic Consulting businesses have global teams operating from a number of different locations.

Energy & Environment

Ricardo Energy & Environment is underpinned by a variety of multi-year contracts for clients that include governments, their agencies, the infrastructure and utilities sector and major corporate customers. Our value proposition is based on our in-depth knowledge of legislative challenges and future technology developments in the energy and environmental consulting sectors.

The key focus for growth in our environmental consulting business is in providing additional support and developing common services for our infrastructure and utility sector clients. Our international growth is underpinned by our work to support the international climate change process following the Paris Conference of the Parties ('COP') at COP 21 in 2015, and we had a significant presence at COP 23 in Bonn. Our major area of interest at COP this year has been in climate finance; facilitating private and public partnerships to provide financial support for climate change programmes.

Key themes for the business are: air quality and emissions; climate change and sustainability; energy networks and smart grids; resource efficiency and waste management; sustainable transport; water resource management; and chemical risk.

Our energy engineering business retains a focus on the development of large-scale generator sets, but increasingly we are seeing collaborations around 'smart grids', energy economics and technologies as part of the electrification agenda. Across the renewables business, we continue to pursue a range of opportunities in offshore wind, community scale solutions and energy storage applications.

Rail
Our Rail business has continued the strong performance of the previous year, with a record order intake reported for the opening months of the current period. Activity in Europe remains buoyant, with operations in the UK, Netherlands, Spain and Denmark successfully securing new assignments.

The Asian market is proving particularly strong, with a notable increase in demand across the region for systems engineering expertise including 'reliability, availability, maintainability and safety' ('RAMS') analysis, human factors engineering, and ensuring electromagnetic compatibility. These are areas in which our technical consultancy offering has long-established capability.

This is perhaps best illustrated by the new partnerships recently forged with Asia's major rolling stock OEMs, where Ricardo's expertise is being used to support the introduction of their railway vehicles into service in cities such as Chicago, Boston, Tel Aviv and Melbourne.

Automotive
In the first half of the year we have seen good levels of activity within Passenger Cars, Motorcycles and High-Performance Vehicles in China and across Europe, while activity in the US has been focused on growth in clean energy vehicle activities led by our technical centre in Silicon Valley.

We have secured a range of programmes in the electrified vehicle market across both light- and heavy-duty applications and 24% of the Group's order intake in the period was in connection with vehicle electrification programmes. This compares to 17% of the Group's order intake for the year to 30 June 2017. The pipeline remains strong, especially with the growth of new entrants seeking Ricardo's engineering expertise.

We continue to invest in advanced combustion and other key technologies in areas related to improving overall vehicle efficiency, such as intelligent driveline and electrification. Fuel economy, electrification and CO_2 reduction remain the top global industry priorities and the future of mobility solutions – connected and autonomous vehicle technology, in particular, continues to attract significant interest across all geographies.

Off-Highway & Commercial Vehicles
We have seen growth and secured a number of large engine, transmission and vehicle integration projects for both medium- and heavy-duty vehicles. We continue to see demand for Ricardo's capabilities in the Commercial Vehicles sector across Asia, in particular. The order book and pipeline is based around a broad mix of opportunities with a growing proportion of electrification and autonomous vehicle development programmes. In the US, greenhouse gas and low nitrogen oxide ('NOx') standards are driving interest in powertrain efficiency as well as the latest requirement for in-use compliance testing in support of our customers' existing fleets.

We are seeing market interest in the areas where we have focused on developing our product offering, such as ultra-low emissions, fuel economy improvement, system optimisation, platooning and hybridisation.

In the Off-Highway business, activity remains at a relatively low level in Europe following the recent implementation of Stage IV emissions standards, while in Asia the industry is showing renewed growth, especially in the transmission and driveline areas; here, Ricardo is securing an increasing number of projects, including large, multi-year programmes.

We see increasing demand for high-speed diesel generator sets and main propulsion systems for marine vessels, and for the conversion of engines for gas or dual fuel operation. The majority of our activities in this industry have been based around failure analysis, investigations, specialist design and development.

Defence
Our newly acquired CPC business, now known as Ricardo Control Point, is performing well. In the UK, we have grown our marine defence business, both surface, and sub-surface and in Europe and Asia we have secured contracts to deliver new engine and transmission designs for land vehicles and we are pursuing other large opportunities.

PERFORMANCE PRODUCTS

We manufacture and assemble low-volume, high-quality prototypes and niche volumes of complex engine, transmission and vehicle products which have either been designed by the Technical Consulting side of the business, by our motorsport products design team within Performance Products, or by our clients. To service and support our customers, we utilise the same global network of engineering centres as the Technical Consulting business.

The Performance Products business also encompasses the activities of Ricardo Software, which develops leading-edge powertrain and vehicle computer-aided engineering (‘CAE’) software products licenced to over 2,000 users globally in the automotive, water and renewable energy industries. Global development teams are based throughout our network of technical centres and we have a diverse portfolio of opportunities covering the Automotive, High-Performance Vehicles & Motorsport and Defence sectors, together with industrial applications, and as a result, the Performance Products business is in a good position to deliver future growth.

High-Performance Vehicles & Motorsport
The production of engines for the McLaren 540C, 570GT, 570S and 720S continued during the period in line with expectations, having introduced the new engine variant for the class-leading 720S in the previous financial year. The production of Bugatti transmissions likewise continues to meet the terms of the supply agreement, while work is well underway on the transmission for the new Aston Martin Valkyrie.

Ricardo remains a key supplier to the Motorsport sector, continuing to manufacture for Formula 1 and the Porsche Cup, whilst providing design and development services, including manufactured products to GT3, Le Mans, World Rally Championships, R5 Rally and specification Formula Series, such as Japanese Super Formula 14, Indy Lights and the Formula V8 3.5.

Defence
Ricardo continues to supply spare parts to the UK Ministry of Defence (‘MOD’) to support the Cougar and Weapons Mount Installation Kit (‘WMIK’) vehicle fleets. Ricardo Defense Systems and Lightweight Innovations For Tomorrow (‘LIFT’), a Manufacturing USA institute, fitted our optimised anti-lock braking system (‘ABS’) and electronic stability control (‘ESC’) to 10 Michigan National Guard vehicles to reduce fatal rollovers in High Mobility Multipurpose Wheeled Vehicles (‘HMMWVs’). The system is now available for purchase by National Guard units nationwide.

OTHER FINANCIAL MATTERS

Acquisitions and acquisition-related intangible assets
As set out in more detail in Note 6, the Group acquired the entire issued share capital of Control Point Corporation (‘CPC’) on 8 September 2017 for initial cash consideration of £6.3m ($8.3m) and contingent cash consideration of £1.4m ($1.9m), based upon an initial probability-weighted assessment of CPC achieving certain financial performance targets. The maximum cash outflow that could be required to acquire CPC is £8.7m ($11.5m), including payments for the retention of specific individuals which are not included as consideration.

This investment added provisional goodwill of £1.6m ($2.1m) to a new Ricardo Defense Systems cash-generating unit. In addition, acquisition-related intangible assets of £2.9m ($3.8m) have been provisionally identified, which have a net book value at the period end of £2.6m ($3.6m).

A preliminary exercise to assess the fair value of the identifiable net assets as a result of this acquisition commenced during the period and will be finalised during the second half of the financial year. In accordance with IFRS 3 '*Business Combinations*', management has one year from the date of acquisition to finalise this assessment.

As a result of the CPC acquisition completed in the period, amortisation of acquisition-related intangible assets has increased to £2.2m (HY 2016/17: £1.9m). The Group also incurred acquisition-related expenditure of £0.5m (HY 2016/17: £1.1m) during the period, £0.3m of which was in respect of the CPC acquisition. The acquisition-related expenditure and amortisation of acquisition-related intangible assets have been charged to the Condensed Consolidated Income Statement as specific adjusting items. Further detail is disclosed in Note 3.

Also included within specific adjusting items is £1.1m of reorganisation costs (HY 2016/17: £Nil). These costs have been incurred as part of the Group's fundamental restructuring of its Automotive businesses across Europe, China and North America, to combine their operations into a single, global Automotive business. Further restructuring activities are planned in order to complete the reorganisation of the Group's Automotive businesses.

Research and Development

The Group continues to invest in Research and Development ('R&D'), and spent £4.0m (HY 2016/17: £4.0m) before government grant income of £0.9m (HY 2016/17: £0.9m). This includes costs capitalised in accordance with IFRS of £1.5m (HY 2016/17: £1.3m) in respect of ongoing development expenditure on a range of product developments around the Group and reflects our sustained focus on development activity within Europe and the US.

Net finance costs

Finance income was £0.2m (HY 2016/17: £0.1m) and finance costs were £1.3m (HY 2016/17: £1.3m) for the period, giving a net finance cost of £1.1m (HY 2016/17: £1.2m). The increase in finance income was due to higher levels of cash in the Group as a result of a drive to improve working capital during the period.

Taxation

The total tax charge for the period was £3.6m (HY 2016/17: £2.7m) and the total effective rate of tax was 28.8% (HY 2016/17: 22.3%). The increase in the reported rate includes the impact on existing deferred tax assets in the US arising from the substantively enacted reduction in the US federal tax rate. This gave rise to a £1.1m reduction in the carrying value of the asset and has been charged to the Condensed Consolidated Income Statement as a specific adjusting item, as disclosed in Note 3.

The underlying effective tax rate was 22.7% (HY 2016/17: 21.9%), which has increased on the prior period due to a change in the mix of profits across the territories in which the Group operates.

The Group had total deferred tax assets of £12.9m (30 June 2017: £14.3m), which includes deferred tax assets in Germany of £2.4m (30 June 2017: £2.4m) and the US of £4.6m (30 June 2017: £5.9m) which primarily relate to the availability of historic losses and R&D tax credits, respectively.

Earnings per share

Basic earnings per share decreased by 6% to 16.7p (HY 2016/17: 17.7p). The Directors consider that an underlying basic earnings per share provides a more useful indication of underlying performance and trends over time. Underlying basic earnings per share for the period increased by 6% to 23.6p (HY 2016/17: 22.3p).

Basic earnings per share, with a reconciliation to an underlying basic earnings per share, which excludes the net-of-tax impact of specific adjusting items, is disclosed in Note 4.

Dividend
As set out in more detail in Note 5, the Board has declared a 6% increase in the interim dividend to 5.75p per share (HY 2016/17: 5.42p), reflecting the Board's confidence in the prospects of the Group. The dividend will be paid on 6 April 2018 to shareholders on the register at the close of business on 9 March 2018.

Capital investment
Cash expenditure on property, plant and equipment was £3.2m (HY 2016/17: £3.5m) as we continue to invest in our business operations. This expenditure included new and upgraded test cell equipment and IT hardware, together with the fit out of new office locations in the UK.

We continue to review the management and usage of our other test facilities outside of the UK, in light of changes in the market and our desire to increase operational effectiveness.

Net debt
Closing net debt was £31.5m (30 June 2017: £37.9m; 31 December 2016: £47.0m). The Group had a reduction in net debt of £6.4m (FY 2016/17: £3.5m increase; HY 2016/17: £12.6m increase), after consideration paid in respect of acquisitions, net of cash acquired, of £5.7m (FY 2016/17: £1.9m; HY 2016/17: £2.1m) and acquisition and restructuring-related payments of £2.3m (FY 2016/17: £4.4m; HY 2016/17: £1.6m). The composition of net debt is defined in Note 8.

The reduction in net debt was due to a renewed focus on the management of working capital, which significantly improved during the period despite continued revenue growth. This has been achieved through targeted programmes across all our major businesses to enhance working capital processes and commercial terms with customers, including more frequent invoicing milestones and increased payments on account.

Going forward, we expect levels of working capital to fluctuate, driven by both the seasonality of our business and the variation in agreed commercial terms with an increasingly diverse customer base.

Banking facilities
At the end of the financial period, the Group held total facilities of £91.1m (30 June 2017: £91.1m), which included committed facilities of £75.0m (30 June 2017: £75.0m). Of the committed facilities, a £35.0m facility is available until September 2019 and £40.0m is available until April 2020. In addition, the Group has uncommitted facilities including overdrafts of £16.1m (30 June 2017: £16.1m), which mature throughout this and the next financial year and are renewable annually.

Committed facilities of £61.8m (30 June 2017: £59.7m), net of direct issue costs, were drawn primarily to fund previous acquisitions. These are denominated in Pounds Sterling and have variable rates of interest dependent upon the leverage of the Group, which range from 1.6% to 2.6% above LIBOR and are repayable in the year ending 30 June 2020.

Foreign exchange
On consolidation, income and expense items are translated at the average exchange rates for the period. 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. The average value of Pound Sterling was 3.7% lower against the Euro, 3.1% higher against the US Dollar and 1.5% higher against the Chinese Renminbi during the six months ended 31 December 2017 compared to the six months ended 31 December 2016.

Had the results for the six months ended 31 December 2017 been stated at constant exchange rates, revenue and profit before tax would have both been £0.3m higher than reported. Significant resulting exposures are managed through foreign currency contracts.

Pensions
The Group's defined benefit pension scheme operates within the UK. The accounting deficit measured in accordance with IAS 19 *'Employee Benefits'* was £12.3m before tax (30 June 2017: £22.2m; 31 December 2016: £30.1m), or £10.2m after tax (30 June 2017: £18.1m; 31 December 2016: £24.4m).

The £9.9m decrease in the pre-tax pension deficit since the year-end was primarily due to the return on plan assets of £6.3m and the effect of using updated census data of £6.7m, together with £2.2m of cash contributions paid to the scheme during the financial period. These favourable movements are offset by both the use of an updated set of mortality assumptions and a reduction in the discount rate assumption to 2.55% (30 June 2017: 2.60%).

Ricardo remains committed to paying £4.3m each year until January 2021 to fund the pension deficit. The next triennial actuarial valuation, which will assess the level of Ricardo's future annual contributions, is currently in progress.

OUTLOOK

Our growth strategy remains focused on the strategic diversification of our business through organic and acquisitive actions. We continue to develop the technology and innovative solutions that will help our clients meet the global challenges of urbanisation, energy security and efficiency, increasing environmental and emissions regulations and rising demand for natural resources.

We have traded in line with our expectations and I am pleased to see the strong order intake resulting in an increase of 31% compared to the first half of the prior year. We have also seen a good spread of orders across both our Technical Consulting and Performance Products businesses. This provides a good base as we head into our traditionally more profitable second half of the year. I am also particularly pleased with our cash performance in the period, driven by a strong working capital focus. We look forward to continued progress in the second half of the year.

Dave Shemmans
Chief Executive Officer
27 February 2018

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 report, 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.

Condensed consolidated income statement
for the six months ended 31 December 2017

	Note	**Six months ended 31 December 2017 (Unaudited) £m**	Six months ended 31 December 2016 (Unaudited) £m	Year ended 30 June 2017 (Audited) £m
Revenue	*2*	**182.6**	167.0	352.1
Cost of sales		**(115.8)**	(104.4)	(219.2)
Gross profit		**66.8**	62.6	132.9
Administrative expenses		**(49.7)**	(46.6)	(92.6)
Other income		**0.3**	0.3	0.5
Underlying operating profit	*2*	**17.4**	16.3	40.8
Specific adjusting items(1)	*3*	**(3.8)**	(3.0)	(6.1)
Operating profit	*2*	**13.6**	13.3	34.7
Finance income		**0.2**	0.1	0.2
Finance costs		**(1.3)**	(1.3)	(2.7)
Net finance costs		**(1.1)**	(1.2)	(2.5)
Profit before taxation		**12.5**	12.1	32.2
Comprising:				
Underlying profit before taxation		**16.3**	15.1	38.3
Specific adjusting items(1)	*3*	**(3.8)**	(3.0)	(6.1)
Taxation(2)		**(3.6)**	(2.7)	(7.4)
Profit for the period		**8.9**	9.4	24.8
Profit attributable to:				
- Owners of the parent		**8.9**	9.4	24.8
- Non-controlling interests		**-**	-	-
		8.9	9.4	24.8

Earnings per ordinary share attributable to owners of the parent during the period				
Basic	*4*	**16.7p**	17.7p	46.8p
Diluted	*4*	**16.6p**	17.5p	46.4p

(1) Specific adjusting items comprise amortisation of acquired intangible assets, acquisition-related expenditure and reorganisation costs.

(2) In the current period, a non-recurring tax charge arising from the reduction in the US federal tax rate was also classified as a specific adjusting item. Further details are given in Note 3.

Condensed consolidated statement of comprehensive income
for the six months ended 31 December 2017

	Six months ended 31 December 2017 (Unaudited) £m	Six months ended 31 December 2016 (Unaudited) £m	Year ended 30 June 2017 (Audited) £m
Profit for the period	**8.9**	9.4	24.8
Items that will not be reclassified to profit or loss:			
Remeasurements of the defined benefit scheme	**7.9**	(10.5)	(4.4)
Deferred tax on remeasurements of the defined benefit scheme	**(1.4)**	1.8	0.8
Total items that will not be reclassified to profit or loss	**6.5**	(8.7)	(3.6)
Items that may be subsequently reclassified to profit or loss:			
Currency translation on foreign currency net investments	**(0.5)**	3.9	3.0
Total items that may be subsequently reclassified to profit or loss	**(0.5)**	3.9	3.0
Total other comprehensive income/(loss) for the period (net of tax)	**6.0**	(4.8)	(0.6)
Total comprehensive income for the period	**14.9**	4.6	24.2
Attributable to:			
- Owners of the parent	**14.9**	4.6	24.2
- Non-controlling interests	**-**	-	-
	14.9	4.6	24.2

Condensed consolidated statement of financial position
as at 31 December 2017

	Note	**31 December 2017 (Unaudited) £m**	31 December 2016 (Unaudited) £m	30 June 2017 (Audited) £m
Assets				
Non-current assets				
Goodwill		**63.7**	60.5	62.0
Other intangible assets		**32.2**	35.4	32.4
Property, plant and equipment		**47.9**	54.1	48.0
Deferred tax assets		**12.9**	13.2	14.3
		156.7	163.2	156.7
Current assets				
Inventories		**13.9**	12.6	13.9
Trade and other receivables		**141.8**	138.6	137.6
Derivative financial assets		**0.6**	0.9	0.9
Current tax assets		**0.6**	0.7	0.6
Cash and cash equivalents	*8*	**34.5**	28.2	27.9
		191.4	181.0	180.9
Non-current assets held for sale		**2.7**	-	2.8
		194.1	181.0	183.7
Total assets		**350.8**	344.2	340.4
Liabilities				
Current liabilities				
Borrowings	*8*	**(4.2)**	(5.5)	(6.0)
Trade and other payables		**(94.3)**	(89.4)	(82.1)
Current tax liabilities		**(5.5)**	(5.5)	(6.3)
Derivative financial liabilities		**(0.1)**	(0.2)	(0.7)
Provisions		**(1.1)**	(1.2)	(1.3)
		(105.2)	(101.8)	(96.4)
Net current assets		**88.9**	79.2	87.3
Non-current liabilities				
Borrowings	*8*	**(61.8)**	(69.7)	(59.8)
Retirement benefit obligations		**(12.3)**	(30.1)	(22.2)
Deferred tax liabilities		**(5.2)**	(2.9)	(5.0)
Provisions		**(2.0)**	(1.6)	(1.3)
		(81.3)	(104.3)	(88.3)
Total liabilities		**(186.5)**	(206.1)	(184.7)
Net assets		**164.3**	138.1	155.7
Equity				
Share capital		**13.4**	13.3	13.3
Share premium		**14.3**	14.3	14.3
Other reserves		**15.1**	16.5	15.6
Retained earnings		**121.2**	93.7	112.2
Equity attributable to owners of the parent		**164.0**	137.8	155.4
Non-controlling interests		**0.3**	0.3	0.3
Total equity		**164.3**	138.1	155.7

Condensed consolidated statement of changes in equity
for the six months ended 31 December 2017

	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 2017	**13.3**	**14.3**	**15.6**	**112.2**	**155.4**	**0.3**	**155.7**
Profit for the period	**-**	**-**	**-**	**8.9**	**8.9**	**-**	**8.9**
Other comprehensive (loss)/income for the period	**-**	**-**	**(0.5)**	**6.5**	**6.0**	**-**	**6.0**
Total comprehensive (loss)/income for the period	**-**	**-**	**(0.5)**	**15.4**	**14.9**	**-**	**14.9**
Equity-settled transactions	**-**	**-**	**-**	**1.0**	**1.0**	**-**	**1.0**
Proceeds from shares issued	**0.1**	**-**	**-**	**-**	**0.1**	**-**	**0.1**
Ordinary share dividends	**-**	**-**	**-**	**(7.4)**	**(7.4)**	**-**	**(7.4)**
At 31 December 2017 (unaudited)	**13.4**	**14.3**	**15.1**	**121.2**	**164.0**	**0.3**	**164.3**
At 1 July 2016	13.2	14.3	12.6	99.4	139.5	-	139.5
Profit for the period	-	-	-	9.4	9.4	-	9.4
Other comprehensive income/(loss) for the period	-	-	3.9	(8.7)	(4.8)	-	(4.8)
Total comprehensive income for the period	-	-	3.9	0.7	4.6	-	4.6
Reclassification of non-controlling interests	-	-	-	(0.3)	(0.3)	0.3	-
Equity-settled transactions	-	-	-	0.8	0.8	-	0.8
Proceeds from shares issued	0.1	-	-	-	0.1	-	0.1
Ordinary share dividends	-	-	-	(6.9)	(6.9)	-	(6.9)
At 31 December 2016 (unaudited)	13.3	14.3	16.5	93.7	137.8	0.3	138.1
At 1 July 2016	13.2	14.3	12.6	99.4	139.5	-	139.5
Profit for the year	-	-	-	24.8	24.8	-	24.8
Other comprehensive income/(loss) for the year	-	-	3.0	(3.6)	(0.6)	-	(0.6)
Total comprehensive income for the year	-	-	3.0	21.2	24.2	-	24.2
Reclassification of non-controlling interests	-	-	-	(0.3)	(0.3)	0.3	-
Equity-settled transactions	-	-	-	1.6	1.6	-	1.6
Tax credit relating to share option schemes	-	-	-	0.1	0.1	-	0.1
Proceeds from shares issued	0.1	-	-	-	0.1	-	0.1
Ordinary share dividends	-	-	-	(9.8)	(9.8)	-	(9.8)
At 30 June 2017 (audited)	13.3	14.3	15.6	112.2	155.4	0.3	155.7

Condensed consolidated statement of cash flows
for the six months ended 31 December 2017

	Note	**Six months ended 31 December 2017 (Unaudited) £m**	Six months ended 31 December 2016 (Unaudited) £m	Year ended 30 June 2017 (Audited) £m
Cash flows from operating activities				
Cash generated from operations	*7*	**30.3**	8.8	24.3
Net interest paid		**(1.3)**	(0.9)	(1.4)
Tax paid		**(4.7)**	(4.0)	(7.6)
Net cash generated from operating activities		**24.3**	3.9	15.3
Cash flows from investing activities				
Acquisition of subsidiaries, net of cash acquired	*6*	**(5.7)**	(2.1)	(1.9)
Purchases of property, plant and equipment		**(3.2)**	(3.5)	(6.3)
Proceeds from sale of property, plant and equipment		**0.3**	0.1	4.0
Purchases of intangible assets		**(1.9)**	(2.9)	(5.6)
Net cash used in investing activities		**(10.5)**	(8.4)	(9.8)
Cash flows from financing activities				
Proceeds from issuance of ordinary shares		**0.1**	0.1	0.1
Net proceeds from borrowings		**2.0**	15.0	5.1
Dividends paid to shareholders	*5*	**(7.4)**	(6.9)	(9.8)
Net cash (used in)/generated from financing activities		**(5.3)**	8.2	(4.6)
Effect of exchange rate changes on cash and cash equivalents		**(0.1)**	(1.3)	0.7
Net increase in cash and cash equivalents	*8*	**8.4**	2.4	1.6
Cash and cash equivalents at beginning of period		**22.0**	20.4	20.4
Net cash and cash equivalents at end of period	*8*	**30.4**	22.8	22.0

Notes to the condensed interim financial statements

for the six months ended 31 December 2017 (unaudited)

1. General information

Ricardo plc (the 'Company') is a public limited company, which 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 interim report of Ricardo plc for the six months ended 31 December 2017, which was approved for issue by the Board of Directors on 27 February 2018. The interim report has not been audited but it has been subject to an independent review by PricewaterhouseCoopers LLP.

This preliminary announcement has been prepared in accordance with the Disclosure and Transparency Rules of the Financial Conduct Authority and IAS 34 '*Interim Financial Reporting*', as adopted by the European Union. The financial information herein does not comprise statutory accounts within the meaning of Section 434 of the Companies Act 2006.

The second half of the Group's financial year has historically seen a higher level of profit as it is normally subject to a greater number of working days and less annual leave being taken, both internally and by our customers.

2. Operating segments

Six months ended 31 December 2017

	Technical Consulting £m	Performance Products £m	Head Office £m	Total £m
Total segment revenue	**142.0**	**42.4**	**-**	**184.4**
Inter-segment revenue	**-**	**(1.8)**	**-**	**(1.8)**
Revenue from external customers	**142.0**	**40.6**	**-**	**182.6**
Underlying operating profit	**13.5**	**3.9**	**-**	**17.4**
Specific adjusting items	**(3.3)**	**-**	**(0.5)**	**(3.8)**
Operating profit/(loss)	**10.2**	**3.9**	**(0.5)**	**13.6**
Net finance costs	**-**	**-**	**(1.1)**	**(1.1)**
Profit/(loss) before taxation	**10.2**	**3.9**	**(1.6)**	**12.5**
Total assets	**293.3**	**39.9**	**17.6**	**350.8**

Six months ended 31 December 2016

	Technical Consulting £m	Performance Products £m	Head Office £m	Total £m
Total segment revenue	133.7	34.1	-	167.8
Inter-segment revenue	(0.1)	(0.7)	-	(0.8)
Revenue from external customers	133.6	33.4	-	167.0
Underlying operating profit	12.9	3.4	-	16.3
Specific adjusting items	(3.0)	-	-	(3.0)
Operating profit	9.9	3.4	-	13.3
Net finance costs	-	-	(1.2)	(1.2)
Profit/(loss) before taxation	9.9	3.4	(1.2)	12.1
Total assets	280.1	43.3	20.8	344.2

Year ended 30 June 2017

	Technical Consulting £m	Performance Products £m	Head Office £m	Total £m
Total segment revenue	280.6	73.3	-	353.9
Inter-segment revenue	(0.1)	(1.7)	-	(1.8)
Revenue from external customers	280.5	71.6	-	352.1
Underlying operating profit	32.8	8.0	-	40.8
Specific adjusting items	(5.0)	-	(1.1)	(6.1)
Operating profit/(loss)	27.8	8.0	(1.1)	34.7
Net finance costs	-	-	(2.5)	(2.5)
Profit/(loss) before taxation	27.8	8.0	(3.6)	32.2
Total assets	280.6	42.7	17.1	340.4

3. Specific adjusting items

	Six months ended 31 December 2017 £m	Six months ended 31 December 2016 £m	Year ended 30 June 2017 £m
Amortisation of acquisition-related intangible assets	**2.2**	1.9	4.0
Acquisition-related expenditure(1)	**0.5**	1.1	1.7
Reorganisation costs(2)	**1.1**	-	0.4
Total included in profit before tax	**3.8**	3.0	6.1
Non-recurring impact of change in US federal tax rate(3)	**1.1**	-	-
Total included in profit after tax	**4.9**	3.0	6.1

(1) Acquisition-related expenditure comprised costs incurred in the current period and prior year for services rendered to, and consumed by, the Group to effect the Control Point Corporation acquisition (see Note 6), together with a proportion of the cost incurred in the current period to retain specific individuals. Costs were also incurred throughout the prior year for services rendered to, and consumed by, the Group to effect the Motorcycle Engineering Italia (Exnovo) acquisition, together with the costs of the subsequent integration and associated earn-out arrangements of this business, as well as those of the Cascade acquisition completed previously. In addition, costs were incurred in the prior period associated with the completion of the integration of the LR Rail business subsequent to its acquisition, together with dual-running costs incurred during a transitional services period with Lloyd's Register. These costs were partially offset by the release in the prior year of previously recognised fair value provisions on acquisition as those risks had not crystallised during the integration of the business as originally anticipated.

(2) Reorganisation costs relate to non-recurring expenditure incurred as part of a fundamental restructuring of the Group's Automotive businesses across Europe, China and North America, to combine their operations into a single, global Automotive business. The incremental costs incurred in the period comprised restructuring activities carried out by either contractors or full-time employees who have had their roles back-filled by contractors, together with redundancy costs. In addition, further activities were also undertaken to prepare the test cell facilities and related equipment at the Group's technical centre in Chicago for disposal. Further restructuring activities are planned in order to complete the reorganisation of the Group's Automotive businesses.

(3) Tax reform legislation in the US was enacted on 22 December 2017, which became effective from 1 January 2018 and reduced the federal taxation rate to 21%. These changes are substantively enacted for accounting purposes at the reporting date and resulted in a £1.1m ($1.5m) non-recurring deferred tax charge which reduced the carrying value of net deferred tax assets held in the US. This non-recurring deferred tax charge is included within the taxation line of the Condensed Consolidated Income Statement.

4. Earnings per share

	Six months ended 31 December 2017 £m	Six months ended 31 December 2016 £m	Year ended 30 June 2017 £m
Earnings attributable to owners of the parent	**8.9**	9.4	24.8
Add back amortisation of acquisition-related intangible assets (net of tax)	**1.6**	1.5	3.1
Add back acquisition-related expenditure (net of tax)	**0.7**	0.9	1.3
Add back reorganisation costs (net of tax)	**0.3**	-	0.3
Add back non-recurring impact of change in US federal tax rate	**1.1**	-	-
Underlying earnings attributable to owners of the parent	**12.6**	11.8	29.5

	Number of shares millions	Number of shares millions	Number of shares millions
Basic weighted average number of shares in issue	**53.4**	52.9	53.0
Effect of dilutive potential shares	**0.2**	0.5	0.4
Diluted weighted average number of shares in issue	**53.6**	53.4	53.4

Earnings per share	**pence**	pence	pence
Basic	**16.7**	17.7	46.8
Diluted	**16.6**	17.5	46.4

Underlying earnings per share	**pence**	pence	pence
Basic	**23.6**	22.3	55.7
Diluted	**23.5**	22.1	55.2

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

5. Dividends

	Six months ended 31 December 2017 pence/share	Six months ended 31 December 2016 pence/share	**Six months ended 31 December 2017 £m**	Six months ended 31 December 2016 £m
Amounts distributed in the period	**13.88**	13.03	**7.4**	6.9
Interim dividend	**5.75**	5.42	**3.1**	2.9

The Directors have declared an interim dividend of 5.75p per share, which will be paid on 6 April 2018 to shareholders who are on the register of members at the close of business on 9 March 2018.

6. Acquisitions

Control Point Corporation acquisition

The Group acquired the entire issued share capital of Control Point Corporation ('CPC') on 8 September 2017 for initial cash consideration of £6.3m ($8.3m) and contingent cash consideration of £1.4m ($1.9m), based upon an initial probability-weighted assessment of CPC achieving certain financial performance targets. The acquisition of CPC expands upon the Group's vehicle engineering capabilities in the Defence sector and adds expertise in distributed software-based systems and fleet management technologies.

The following table sets out the cash consideration payable to acquire CPC, together with the provisional assessment of the net assets acquired:

	£m
Initial cash consideration	**6.3**
Contingent cash consideration	**1.4**
Total cash consideration	**7.7**
Provisional fair value of identifiable assets acquired and liabilities assumed	
Customer contracts and relationships	**2.2**
Developed software	**0.7**
Property, plant and equipment	**0.1**
Trade and other receivables	**3.1**
Cash and cash equivalents	**0.6**
Trade and other payables	**(0.6)**
Total provisional fair value of identifiable net assets	**6.1**
Goodwill	**1.6**
Total	**7.7**

All of the initial cash consideration of £6.3m ($8.3m) was paid in September 2017, net of cash acquired of £0.6m ($0.8m).

Adjustments have been made to identifiable assets and liabilities on acquisition to reflect their fair value. These include the recognition of customer-related intangible assets amounting to £2.2m ($2.9m) and developed software assets of £0.7m ($0.9m). The fair values of net assets acquired are provisional and represent estimates following a preliminary valuation exercise which will be finalised during the second half of the financial year. These estimates of fair value may be adjusted in future in accordance with the requirements of IFRS 3 '*Business Combinations'*.

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. The goodwill recognised is expected to be deductible for tax purposes.

The provisional fair value of trade and other receivables of £3.1m ($4.1m) includes net trade receivables of £3.0m ($4.0m) and amounts recoverable on contracts of £0.1m ($0.1m), all of which is expected to be collectible.

Acquisition-related expenditure of £0.3m has been charged to the Condensed Consolidated Income Statement for the six months ended 31 December 2017 and is included as a specific adjusting item in Note 3.

The revenue included in the Condensed Consolidated Income Statement in relation to the acquired business was £3.4m. The underlying operating profit over the same period was £0.3m. This is reported in the Technical Consulting segment in Note 2.

Had CPC been acquired and consolidated from 1 July 2017, revenue and underlying operating profit in the Condensed Consolidated Income Statement would be £2.2m and £0.2m higher respectively, based on available information for the period from 1 July 2017 to the acquisition date.

7. Cash generated from operations

	Six months ended 31 December 2017 £m	Six months ended 31 December 2016 £m	Year ended 30 June 2017 £m
Profit before tax	**12.5**	12.1	32.2
Adjustments for:			
Share-based payments	**1.0**	0.8	1.6
Fair value gains/(losses) on derivative financial instruments	**0.4**	(2.8)	(3.2)
Profit on disposal of property, plant and equipment	**(0.1)**	-	(0.7)
Net finance costs	**1.1**	1.2	2.5
Depreciation and amortisation	**8.2**	7.8	16.3
Operating cash flows before movements in working capital	**23.1**	19.1	48.7
Increase in inventories	**-**	(1.6)	(2.9)
Increase in trade and other receivables	**(3.4)**	(20.6)	(15.5)
Increase/(decrease) in payables	**12.3**	14.2	(1.1)
Increase/(decrease) in provisions	**0.5**	(0.1)	(0.5)
Defined benefit payments	**(2.2)**	(2.2)	(4.4)
Cash generated from operations	**30.3**	8.8	24.3

8. Net debt

Net debt is defined by the Group as net cash and cash equivalents less borrowings.

Analysis of net debt	**31 December 2017 £m**	31 December 2016 £m	30 June 2017 £m
Cash and cash equivalents (current assets)	**34.5**	28.2	27.9
Bank overdrafts (current liabilities)	**(4.1)**	(5.4)	(5.9)
Net cash and cash equivalents	**30.4**	22.8	22.0
Loans maturing within one year (current liabilities)	**(0.1)**	(0.1)	(0.1)
Loans maturing after one year (non-current liabilities)	**(61.8)**	(69.7)	(59.8)
At period end	**(31.5)**	(47.0)	(37.9)

Movement in net debt	**31 December 2017 £m**	31 December 2016 £m	30 June 2017 £m
At beginning of period	**(37.9)**	(34.4)	(34.4)
Net increase in cash and cash equivalents	**8.4**	2.4	1.6
Net proceeds from borrowings	**(2.0)**	(15.0)	(5.1)
At period end	**(31.5)**	(47.0)	(37.9)

The non-current bank loans are repayable in the year ending 30 June 2020 and are denominated in Pounds Sterling. The non-current bank loans have variable rates of interest which are dependent upon the leverage of the Group and range from 1.6% to 2.6% above LIBOR. Leverage is defined as being net debt as a proportion of EBITDA. EBITDA is defined as being operating profit before interest, tax, depreciation and amortisation. At the reporting date, the Group has a leverage which attracts the lowest rate of interest, being LIBOR + 1.6%.

At the period end, the Group held total facilities of £91.1m (30 June 2017: £91.1m; 31 December 2016: £91.6m). This included committed facilities of £75.0m (30 June 2017 and 31 December 2016: £75.0m). Committed facilities of £61.8m were drawn at 31 December 2017 (30 June 2017: £59.7m; 31 December 2016: £69.6m), net of direct issue costs. Committed facilities were primarily drawn to fund previous acquisitions. Of the committed facilities, a £35.0m facility is available for the period to September 2019 and a £40.0m facility is available until April 2020. In addition, the Group has uncommitted facilities including overdrafts of £16.1m at 31 December 2017 (30 June 2017: £16.1m; 31 December 2016: £16.6m), which mature throughout this and the next financial year and are renewable annually.