



6 March 2024

This announcement contains inside information for the purposes of Article 7 of the Market Abuse Regulation (EU) 596/2014 as it forms part of UK domestic law by virtue of the European Union (Withdrawal) Act 2018 ("MAR"), and is disclosed in accordance with the Company's obligations under Article 17 of MAR.

Ricardo plc

Interim Report for the six months ended 31 December 2023 (HY 2023/24)

Strong Sales Momentum Underpins Confidence for FY 23/24

HIGHLIGHTS

- Record order book of £477m (HY 2022/23: £404m), up 18% on a constant currency basis
- Strong growth and margin accretion in Energy and Environment (EE), Rail and Defense, driving Group revenue growth of 9% (HY2022/23: 12% on a constant-currency basis)
- Recent acquisitions, E3-Modelling and Aither Pty Ltd, performing well and accelerating growth
- Group operating profit impacted by delayed customer orders in Automotive and Industrial (A&I) in H1
- Operating profit margin to improve in H2 from accelerating our operating model transformation
- Excellent cash conversion of 130% (HY 2022/23: 97%)
- Interim dividend of 3.8p up 13%
- With a strong order book, good pipeline visibility and improving margins the Board remain confident in delivering FY 23/24 profit before tax market consensus⁽⁷⁾

		HY 2023/24	Reported HY 2022/23	Growth/ (decline)%	At constant currency HY 2022/23	Growth/ (decline)%
Continuing operations						
Order intake	£m	314.3	292.8	7.3	286.0	9.9
Order book	£m	477.2	414.4	15.2	404.3	18.0
Revenue	£m	224.2	212.7	5.4	206.1	8.8
Underlying⁽¹⁾						
- Operating profit	£m	12.0	12.5	(4.0)	12.0	-
- Operating profit margin	%	5.4	5.9	(0.5pp)	5.8	(0.4pp)
- Profit before tax	£m	7.9	9.9	(20.2)	9.3	(15.1)
Statutory						
- Operating profit/(loss)	£m	2.0	(9.9)	120.2	(10.1)	119.8
- Operating profit margin	%	0.9	(4.7)	5.6pp	(4.9)	5.8pp
- Loss before tax	£m	(2.1)	(12.5)	(83.2)	(12.8)	(83.6)
Total						
Underlying ⁽¹⁾ cash conversion ⁽³⁾	%	129.7	97.1	32.6pp	n/a	n/a
Cash conversion ⁽³⁾	%	181.2	59.7	121.5pp	n/a	n/a
Basic underlying earnings per share ^(1&2)	p	9.2	12.2	(24.6)	11.1	(17.1)
Basic reported loss per share	p	(5.5)	(13.2)	(58.3)	(13.8)	(60.1)
Closing						
Net debt ⁽⁴⁾	£m	63.3	31.4	101.6	n/a	n/a
Headcount ⁽⁵⁾	no.	2,978	2,873	3.7	n/a	n/a
Dividend proposed per share	p	3.80	3.35	13.43	n/a	n/a

References are defined in the glossary of terms below.

Commenting on the results, Graham Ritchie, Chief Executive Officer, said:

“ We delivered good revenue growth in H1, owing to strong sales momentum in our Energy and Environment, Rail, and Defense businesses. This is despite delays in contract orders within Automotive and Industrial, which impacted the Group’s H1 profitability.

We continue to make progress in line with our strategic ambition and have recently accelerated our transformation to create a sustainable business model that will support Ricardo’s future business mix. By centralising our enabling functions and streamlining our operations, we can drive improved performance across the business, with benefits realised both in the near and long term.

Looking ahead, we remain on track to deliver our full-year market consensus. Our record order book and the strong sales momentum across our growth solutions underpin our confidence in achieving this. In relation to our Automotive and Industrial business, with the actions we have taken on portfolio and market focus, and further refinement of our flexible resourcing model, we expect improved profitability in H2 and the business to return to sustainable growth.”

About Ricardo plc

Ricardo plc is a global strategic, environmental, and engineering consulting company, listed on the London Stock Exchange. With over 100 years of engineering excellence and close to 3,000 employees in more than 20 countries, we provide exceptional levels of expertise in delivering innovative cross-sector sustainable outcomes to support energy transition and scarce resources, environmental services together with safe and smart mobility. Our global team of consultants, environmental specialists, engineers and scientists support our customers to solve the most complex and dynamic challenges to help achieve a safe and sustainable world.

Visit www.ricardo.com

Analyst and investor presentation

There will be a presentation for analysts relating to the Group’s interim results for the six months ended 31 December 2023 at 9:30am on Wednesday 6 March 2024. A recording of the presentation will be available online to all investors from Wednesday 6 March 2024 at <https://ricardo.com/investors/financial-reporting/results-presentations>.

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Disclaimer statement

This press release contains certain statements that are forward-looking. They appear in a number of places throughout this press release and include statements regarding the intentions, beliefs and/or current expectations of Ricardo plc (the “Company”).

By their nature, these statements involve uncertainty since future events and circumstances can cause results and developments to differ materially from those anticipated. The forward-looking statements reflect knowledge and information available at the date of preparation of this presentation and, unless otherwise required by applicable law, the Company undertakes no obligation to update or revise these forward-looking statements. Nothing in this press release should be construed as a profit forecast.

The Company and its Directors accept no liability to third parties.

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 9. Underlying measures are considered to provide a more useful indication of underlying performance and trends over time.
- (2) Underlying earnings from continuing operations also exclude a tax credit to statutory earnings of £0.9m (HY 2022/23: £0.5m) for the specific adjusting items described in Note 9.
- (3) Cash conversion is a key measure of the Group's cash generation and measures 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 14, 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. Management believes this definition is the most appropriate 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 at the reporting date and includes subcontractors on a full-time equivalent basis.
- (6) Constant-currency growth/decline is calculated by translating the result for the prior period using foreign currency exchange rates applicable to the current period. This provides an indication of the growth/decline of the business, excluding the impact of foreign exchange. See also Note 4.
- (7) The Company believes Underlying profit before tax market consensus to be £30.5m.

Trading summary

Trading summary

Ricardo has continued to execute the delivery of its strategic ambition in the six months to 31 December 2023 (the period). The Group secured £314.3m of new orders from continuing operations, up 7% on the prior period and 37% on the six months to 30 June 2023 with growth of 10% and 39% respectively on a constant currency basis. The order book at 31 December 2023 was £477m, compared to £395m at 30 June 2023 and £414m at 31 December 2022.

Revenue from continuing operations was £224.2m, an increase of 5% (9% on a constant-currency basis) on the prior period (HY 2022/23 £212.7m, £206.1m at constant currency). Underlying operating profit from continuing operations was £12.0m (HY 2022/23: £12.5m, £12m at constant currency), flat on the prior period at constant currency. Underlying profit before tax from continuing operations was £7.9m (HY 2022/23: £9.9m, £9.3m at constant currency).

EE, Rail and Defense delivered good growth and margin accretion in the first half, while in A&I, performance was lower than expected, due to timing delays in customer orders. As expected, Performance Products (PP) was impacted by lower volumes on the McLaren programme.

Ricardo has accelerated its transformation to transition the business in line with its strategic ambition to deliver improved performance. Actions taken include ratifying our A&I services portfolio and building a more flexible resourcing model to increase our resilience to order fluctuations. Across the business, we are centralising our enabling functions and rightsizing our operations, so as to improve customer delivery and ease of doing business. The results of these actions ensure that we are able to underpin the Group's performance in the near to medium term.

Reported operating profit from continuing operations, after taking specific adjusting items into consideration, was £2.0m (HY 2022/23: loss £9.9m) and the reported loss before tax from continuing operations was £2.1m (HY 2022/23: loss £12.5m). HY 2023/24 reported operating profit and loss before tax included £6.5m of earn out costs arising from acquisitions in prior years due to achievement of acquisition performance targets, £2.5m non-cash amortisation of acquired intangible assets, £0.6m reorganisation costs and £0.3m ERP implementation costs. HY 2022/23 reported operating profit and profit before tax included £18.3m of largely non-cash charges for the impairment of goodwill and other assets, including decommissioning costs, in the Automotive and Industrial Established Mobility (A&I Established) operating segment, stemming from a downturn in performance in this segment. Restructuring charges totalling £0.7m were booked in A&I Established and Rail. In addition, £2.0m of amortisation on acquired intangibles and £1.4m of acquisition related expenditure were booked in the period. This was partially offset by a £7.5m gain on the disposal of Ricardo Software.

With increased focus on working capital our cash performance improved delivering underlying cash conversion of 130% compared with 97% in the six months to 31 December 2022. Reported cash conversion was 181%, after taking into account the cash impact of specific adjusting items.

At 31 December 2023, net debt was £63.3m compared to £62.1m at 30 June 2023 with additional payments relating to previous acquisitions and prior year restructuring being funded by improved cash conversion. As we look forward to H2, we expect net debt to remain broadly in line with the December 2023 level.

Headline trading performance

	Underlying ⁽¹⁾			Reported	
	External revenue £m	Operating profit £m	Profit before tax £m	Operating profit/loss £m	Loss before tax £m
HY 2023/24					
Continuing operations (a)	224.2	12.0	7.9	2.0	(2.1)
Less: performance of acquisitions	(6.4)	(1.7)	(1.7)	5.7	5.7
Continuing operations - organic (b)	217.8	10.3	6.2	7.7	3.6
HY 2022/23					
Total	213.5	13.0	10.4	(1.9)	(4.5)
Less: discontinued operation	(0.8)	(0.5)	(0.5)	(8.0)	(8.0)
Continuing operations (a)	212.7	12.5	9.9	(9.9)	(12.5)
Less: performance of acquisitions	(2.0)	(0.5)	(0.5)	(0.4)	(0.4)
Continuing operations - organic (b)	210.7	12.0	9.4	(10.3)	(12.9)
Continuing operations at current year exchange rates	206.1	12.0	9.3	(10.1)	(12.8)
<i>Growth (%) - Total</i>	5	(8)	(24)	205	53
<i>Growth (%) - Continuing operations</i>	5	(4)	(20)	120	83
<i>Growth (%) - Continuing organic</i>	3	(14)	(34)	175	128
<i>Constant currency growth⁽⁶⁾ (%) – Continuing operations</i>	9	-	(15)	120	84

References in superscript are defined in the glossary of terms.

(a) Growth from continuing operations excludes the results of the Software operating segment which was sold on 1 August 2022 (see Note 6).

(b) Organic growth excludes the current year performance of prior year acquisitions from results of HY 2023/24.

HY 2023/24 includes the results of E3 – Modelling S.A. (E3M) and Aither Pty Ltd (Aither), which were acquired on 24 January 2023 and 10 March 2023 respectively. E3M contributed £2.6m of revenue, £1.2m of underlying operating profit and £1.2m of underlying profit before tax. Aither contributed £3.8m of revenue, £0.5m of underlying operating profit and £0.5m of underlying profit before tax.

The reported operating profit and profit before tax from the discontinued operation of £8.0m in the prior period includes the £7.5m gain recognised on its sale.

Operating segments summary: Order intake and revenue

	HY 2023/24		HY 2022/23		HY 2022/23	
	Order intake	Revenue	Reported (*restated) Order intake	Revenue	At constant currency ⁽⁶⁾ Order intake	Revenue
	£m	£m	£m	£m	£m	£m
EE	63.0	50.9	57.4	38.2	56.7	37.7
Rail	53.2	38.1	44.8	36.1	43.1	34.6
Automotive and Industrial - Emerging	30.4	29.5	49.0	43.9	47.8	42.5
Environmental & Energy Transition	146.6	118.5	151.2	118.2	147.6	114.8
Defense	113.7	56.6	46.4	41.0	43.6	38.4
PP	41.9	38.2	77.0	38.5	77.0	38.5
Automotive and Industrial - Established	12.1	10.9	18.2	15.0	17.8	14.4
Established Mobility	167.7	105.7	141.6	94.5	138.4	91.3
Total - continuing operations	314.3	224.2	292.8	212.7	286.0	206.1
Discontinued operation	-	-	0.5	0.8	0.5	0.8
Total	314.3	224.2	293.3	213.5	286.5	206.9

* Subsequent to the 2022/23 interim reporting, a detailed review of project mapping between each of the business segments was performed resulting in reallocation of projects between A&I Emerging and A&I Established for the 2023/24 reporting. To be consistent with those mappings, the 2022/23 comparatives have been restated to reduce A&I Emerging Order intake by £1.7m and increase A&I Established Order intake by £1.7m.

Operating segments summary: Underlying operating profit

	HY 2023/24		HY 2022/23 Reported (*restated)		HY 2022/23 At constant currency ⁽⁶⁾	
	Underlying ⁽¹⁾ operating profit	Underlying ⁽¹⁾ operating profit	Underlying ⁽¹⁾ operating profit	Underlying ⁽¹⁾ operating profit	Underlying ⁽¹⁾ operating profit	Underlying ⁽¹⁾ operating profit
	£m	margin %	£m	margin %	£m	margin %
EE	8.8	17.3	6.4	16.8	6.3	16.7
Rail	4.1	10.8	3.6	10.0	3.5	10.1
Automotive and Industrial - Emerging	(1.5)	(5.1)	4.7	10.7	4.7	11.1
Environmental & Energy Transition	11.4	9.6	14.7	12.4	14.5	12.6
Defense	10.9	19.3	5.7	13.9	5.4	14.1
PP	2.0	5.2	3.6	9.4	3.6	9.4
Automotive and Industrial - Established	(3.5)	(32.1)	(2.9)	(19.3)	(2.9)	(20.1)
Established Mobility	9.4	8.9	6.4	6.8	6.1	6.7
Operating segments - continuing operations	20.8	9.3	21.1	9.9	20.6	10.0
Plc costs	(8.8)	-	(8.6)	-	(8.6)	-
Total - continuing operations	12.0	5.4	12.5	5.9	12.0	5.8
Discontinued operation	-	-	0.5	62.5	0.4	50.0
Total	12.0	5.4	13.0	6.1	12.4	6.0

* Subsequent to the 2022/23 interim reporting, a detailed review of project mapping between each of the business segments was performed resulting in reallocation of projects between A&I Emerging and A&I Established for the 2023/24 reporting. To be consistent with those mappings, the 2022/23 comparatives have been restated to reduce A&I Emerging Underlying operating profit by £1.9m and increase A&I Established Underlying operating profit by £1.9m.

Environmental and Energy Transition portfolio – strong performance in EE and Rail, but overall performance impacted by delayed orders in A&I

- Order intake: £146.6m (HY 2022/23: £151.2m) down 3.0% (constant-currency: £147.6m down 0.7%)
- Revenue: £118.5m (HY 2022/23: £118.2m) flat (constant currency: £114.8m up 3.2%)
- Underlying operating profit: £11.4m (HY 2022/23 £14.7m) down 22.4% (constant currency: £14.5m down 21.4%)
- Underlying operating profit margin: 9.6% (HY 2022/23: 12.6% at constant-currency)
- Energy & Environment (EE) delivered good overall order, revenue and profit growth and margin accretion. Growth was accelerated by strong performances in E3 Modelling (E3M) and Aither since they were acquired in the second half of FY 22/23. Organic revenue growth of 18% was driven by strong demand for our offerings in Policy, Strategy & Economics and Air Quality & Environment teams.
- Rail has delivered strong growth in order intake, revenue and profit, with particularly strong growth in Asia and Australia on the back of some significant project wins, combined with continuing expansion in North America.
- In A&I Emerging, order intake, revenue and profits fell during the period largely due to delayed customer orders. Following a change in leadership and a greater focus on key customers and focused portfolio, we are seeing improved sales activity and stronger growth in the second quarter of FY2023/24. This, coupled with accelerating our transition to increase our flexible resource pool, is providing confidence in an improved performance and return to profit in the second half.

Established Mobility portfolio – underpinned by significant growth in Defense

- Order intake: £167.7m (HY 2022/23: £141.6m) up 18.4% (constant currency: £138.4m up 21.1%)
- Revenue: £105.7m (HY 2022/23: £94.5m) up 11.9% (constant currency: £91.3m up 15.8%)
- Underlying operating profit: £9.4m (HY 2022/23: £6.4m) up 46.9% (constant currency: £6.1m up 54.1%)
- Underlying operating profit margin: 8.9% (HY 2022/23: 6.7% at constant-currency)

Defense performed very strongly in the period, with significant growth in order intake, revenue and underlying operating profit and improved margins. Defense received £80.5m (USD105.4m) of orders for the Anti-lock braking systems/electronic stability control (ABS/ESC) retrofit programme in the period. Together with new vehicle kits, Defense delivered 6,130 kits in HY 2023/24 (HY 2022/23: 3,956 kits). In addition, there was good growth (50%) in the Technical Solutions consultancy business, including Field Support Services (the sustainment of ABS/ESC kits in the field).

Performance Products (PP) won £41.9m of orders in HY 2023/24. As anticipated, Performance Products (PP) revenue declined due to lower volumes on the McLaren programme.

Due to timing delays, orders in Established A&I were lower than expected, driving a reduction in performance. There is continued demand for A&I Established services in marine, defense, heavy duty vehicles and passenger car markets globally to meet changing legislation and emissions compliance requirements. Performance is expected to improve in H2 on the back of this demand which delivered improved order intake in Q2 and a strengthening pipeline.

Cash performance – strong cash conversion

- Net debt: £63.3m (HY 2022/23: £31.4m), and increase of 1.9%, £1.2m compared to FY22/23.

The Group had a net cash outflow for the period of £1.2m. A cash inflow of £2.5m before acquisition and restructuring costs broadly financed payment of £1.8m Earn-out costs for businesses acquired in the prior year, £0.9m reorganisation costs, £0.2m ERP implementation costs and £0.8m other acquisition related expenditure. An increased focus on working capital in the period generated an underlying cash from operations of £24.9m (FY 2022/23: £19.9m). Underlying cash conversion was strong at 130% increased from 97%.

The composition of net debt is defined in Note 14.

Specific adjusting items

As set out in more detail in Note 9, the Group's total underlying profit before tax excludes £10.0m of costs incurred during the period that have been charged to the income statement as specific adjusting items (HY 2022/23: £22.4m). In line with the Group's policy, these items have been recognised as specific adjusting items, due to their nature or significance of their amount, to provide further clarity over the financial performance.

	HY 2023/24	HY 2022/23
	£m	£m
Underlying⁽¹⁾ profit before tax from continuing operations	7.9	9.9
Amortisation of acquired intangibles	(2.5)	(2.0)
Acquisition-related expenditure	(6.6)	(1.4)
Restructuring costs		
- A&I: asset impairment and decommissioning	-	(18.3)
- Other reorganisation costs	(0.6)	(0.7)
ERP implementation costs	(0.3)	-
Total specific adjusting items from continuing operations	(10.0)	(22.4)
Reported loss before tax from continuing operations	(2.1)	(12.5)
SAI recorded in discontinued operation		
Disposal of discontinued operation	-	7.5

References in superscript are defined in the glossary of terms.

Amortisation of acquired intangibles was £2.5m in the period, compared to £2.0m in HY 2022/23. The current period charge includes £0.9m in relation to the acquisition of Ricardo Rail Australia Pty Ltd, £0.6m in relation to the acquisition of E3-Modelling SA, £0.4m each in relation to the acquisition of Aither Pty Ltd and Ricardo Nederland BV respectively and £0.2m in relation to the amortisation of customer relationships acquired as part of the Inside Infrastructure acquisition.

Acquisition-related costs of £6.6m were incurred in the period (HY 2022/23: £1.4m). These costs include £0.1m strategic projects, £6.2m earn out and retention costs and £0.3m integration costs relating to the acquisitions of Inside Infrastructure, E3M and Aither. Costs in the prior period reflected an accrual of £0.2m for deferred consideration in relation to the acquisition of Inside Infrastructure (acquired in March 2022), together with £0.2m of post-deal integration costs, £0.1m of external fees paid in respect of the acquisition of E3 Modelling S.A. (E3M) and £0.9m of external fees in relation to other M&A and strategic projects.

Restructuring costs of £0.6m were incurred in the period (HY 2022/23: £19.0m). In the current period, £0.4m of costs have been recognised in relation to restructuring of the A&I Established business. Impairment costs of £17.7m were recognised in the prior period within the A&I Emerging operating segment. Further details are presented in note 9.

Research and Development (R&D) and capital investment

The Group continues to invest in R&D and spent £6.9m (HY 2022/23: £5.9m) before government grant income of £1.2m (HY 2022/23: £2.2m). Development costs capitalised in this period were £3.1m (HY 2022/23: £1.9m), reflecting continued investment in digital advancement across the business.

Capital expenditure on property, plant and equipment, excluding right-of-use assets, was £1.6m (HY 2022/23: £2.4m), reflecting targeted investment in our business operations, including hydrogen and electrical test capability in the A&I Emerging segment.

Net finance costs

Finance income was £0.7m (HY 2022/23: £0.5m) and finance costs were £4.8m (HY 2022/23: £3.1m) for the period, giving net finance costs of £4.1m (HY 2022/23: £2.6m). The increase in costs reflects an increase in the SONIA interest rate during the current period and increased borrowings in H2 FY 2022/23 following the acquisitions of E3M and Aither.

Taxation

The underlying effective tax rate is 26.7% for the period (HY 2022/23: 26.0%). The reported effective tax rate for the half year is negative 55.65% (HY 2022/23: negative 80%). The reported tax rate at H1 is impacted by the profile and composition of specific adjusting items and underlying profits which results in a negative effective tax rate, similar to the impact of the impairment charge in the previous period. The FY2023/24 full year forecasted reported effective tax rate is 44.5% (HY 2022/23: 27.5%).

Earnings per share

Basic loss per share was 5.5p (HY 2022/23: loss 13.2p). The Directors consider that underlying earnings per share provides a more useful indication of underlying performance and trends over time. Underlying basic earnings per share for the period was 9.2p (HY 2022/23: 12.2p), the reduction being mainly due to increased net finance costs. The calculation of basic earnings per share, with a reconciliation to an underlying basic earnings per share, which excludes the impact (net of tax) of specific adjusting items, is disclosed in Note 10.

Dividend

As set out in more detail in Note 11, the Board has declared an interim dividend of 3.8p per share (HY 2022/23: 3.35p). The dividend will be paid gross on 11 April 2024 to holders of ordinary shares on the Company's register of members on 15 March 2024.

Banking facilities

Net debt at 31 December 2023 comprised cash and cash equivalents of £46.7m, and borrowing and overdrafts, including hire purchase liabilities and net of capitalised debt issuance costs, of £110.0m.

The Group funds its operations via a Revolving Credit Facility (RCF) of £150m, which provides committed funding through to August 2026, alongside the Group's uncommitted overdraft facilities of £16m and with a £50m uncommitted accordion on the RCF. At 31 December 2023, the amount undrawn on the RCF was £46.0m. This, together with the cash held of £46.7m, and £5.6m of unutilised overdraft facilities, provided the Group with total cash and liquidity of £102.7m.

The Group's Adjusted Leverage ratio (defined as net debt over EBITDA for the last twelve months, excluding the impact of specific adjusting items and IFRS 16 Leases) was 1.5x as at 31 December 2023. The Adjusted Leverage covenant is a maximum of 3.0x.

The Interest Cover ratio (defined as EBITDA for the last twelve months, excluding the impact of specific adjusting items and IFRS 16, over net finance costs), was 6.1x at 31 December 2023. The Interest Cover covenant limit is a minimum of 4.0x.

Further details are provided in Note 14.

Foreign exchange

On consolidation, revenue and costs 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, Australian Dollars and Chinese Renminbi. Compared to the prior period, the average value of the Pound Sterling strengthened by 6% against the US Dollar, 2% against the Euro, 5% against the Australian Dollar and weakened by 3% against the Chinese Renminbi. Had the prior period results been translated at current period exchange rates, revenue from continuing operations would have been £6.6m (3%) lower, underlying operating profit would have been £0.5m (4%) lower and underlying profit before tax would have been £0.6m (7%) lower.

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 period was £111.4m (FY 2022/23: £104.6m) and the present value of the scheme's obligations was £96.8m (FY 2022/23: £92.0m). The value of the scheme's assets increased over the period as a result of stock market performance. However, this was partially offset by an increase in the scheme's liabilities, due to a decrease in the discount rate. The pre-tax surplus, measured in accordance with IAS 19, at 31 December 2023 was £14.7m (FY 2022/23: £12.6m). Ricardo paid £0.8m of cash contributions into the scheme during the period (HY 2022/23: £0.9m).

Group Outlook

The Board remains confident of delivering full year market consensus, underpinned by our strong order intake in the second quarter of H1, increased pipeline visibility for the second half of the year and improved profitability from accelerating our operating model transformation.

Our EE and Rail businesses continue to see strong growth in operating performance with an expected stronger second half, driven by an increasing order book with sustained demand across all segments.

We expect to see a recovery in Performance Products driven by improving volumes in engine orders from McLaren and in Defense, we expect the strong growth to continue with the advancement of the ABS program.

Following a change in leadership and a greater focus on key customers we are seeing improved sales activity and stronger growth in the last quarter in A&I. This, coupled with streamlining our organisation to support the future business mix in A&I, is providing confidence in a recovery in the second half.

With growth weighted across all our key end markets in the second half, accelerated by the transformation actions in right sizing our enabling functions and implementing our operating model, we expect to deliver improved operating margins in H2 FY2023/24.

By order of the Board:



Graham Ritchie
Chief Executive Officer



Judith Cottrell
Chief Financial Officer

5 March 2024

Environmental and Energy Transition Portfolio

ENERGY & ENVIRONMENT (EE)

Energy and Environment (EE) works with clients across a wide variety of sectors and geographies to provide solutions for their major energy and environmental challenges. EE has a broad range of environmental skills, plus a strong energy and carbon capability to support the energy transition.

Financial and operational highlights

	HY 2023/24 £m	Historical rates		Constant currency ⁽⁶⁾	
		HY 2022/23	Change	HY 2022/23	Change
		£m	%	£m	%
Order intake (£m)	63.0	57.4	9.8	56.7	11.1
Order book (£m)	99.3	74.6	33.1	74.4	33.5
Revenue (£m)	50.9	38.2	33.2	37.7	35.0
Underlying ⁽¹⁾ operating profit (£m)	8.8	6.4	37.5	6.3	39.7
Underlying ⁽¹⁾ operating profit margin (%)	17.3	16.8	0.5pp	16.7	0.6pp
Headcount ⁽⁵⁾ (no.)	1,017	800	27.1	800	27.1

References in superscript are defined in the glossary of terms above.

Performance

Headline order intake in EE in HY 2023/24 was £63.0m, 11.1% up on the prior period on a constant currency basis. HY 2023/24 order intake includes £5.4m from Aither and E3 Modelling (E3M), which were both acquired in the second half of FY 2022/23. Organic order intake, excluding the acquisitions, was £57.6m, 2.0% up on the prior period on a constant currency basis. The organic order intake included securing renewals and new large-scale policy contracts with the European Commission and other international governments, delivering substantial growth in our Policy, Strategy & Economics practice. We also secured significant long-term contracts in Air Quality and Environment in the Middle East in the period. At 31 December 2023, the order book was £99.3m, up 33.5% on the prior period on a constant currency basis.

Alongside the strong order intake, we delivered good revenue growth in the period, driven by the Policy, Strategy & Economics and Air Quality & Environment practices. This is combined with strong performances in Aither and E3M, which have both performed in line with our growth expectations since acquisition. Headline revenue growth was 35.0% on a constant currency basis. Organic revenue increased by 18.0% on a constant currency basis. Aither and E3M generated £6.4m of combined revenue in the period.

Underlying operating profit increased by £2.5m on a constant currency basis compared to the prior period. Organic underlying operating profit increased by £0.8m (13.0%), with organic underlying operating profit margin reducing from 16.7% to 16.0%. Growth in organic underlying operating profit did not match the growth in revenue as targeted investments were made in headcount to drive growth in key markets, particularly in the high-demand areas noted above. In Policy, Strategy & Economics, we are investing in Europe and expanding in our key emerging markets across the Middle East and North America. We are also making investments in our digital offerings where we see opportunities for transformational growth, complemented by the E3M acquisition. Aither and E3M contributed £1.7m of underlying operating profit in the period at an underlying operating profit margin of 27%, enhanced by high margins in E3M.

Since the acquisition of Aither and E3M, we have been able to utilise the additional expertise to support engagement of existing customers and identification of new opportunities. Our global water capabilities (which includes Aither) have been combined into a new practice area and seen new secured orders with customers in the Middle East and Asia Pacific regions. In addition, our expanded energy modelling capabilities, through E3M, have enabled us to offer new services to both our energy decarbonisation and sustainable transport customers, which includes integrating these services into supporting governments with national energy decarbonisation plans.

RAIL

Built on a unique foundation of strategic consultancy, complex engineering and safety assurance, we address critical challenges across every aspect of the rail industry.

Financial and operational highlights

	Historical rates			Constant currency ⁽⁶⁾	
	HY	HY	Change	HY	Change
	2023/24	2022/23		2022/23	
£m	£m	%	£m	%	
Order intake (£m)	53.2	44.8	18.8	43.1	23.4
Order book (£m)	122.2	114.0	7.2	109.0	12.1
Revenue (£m)	38.1	36.1	5.5	34.6	10.1
Underlying ⁽¹⁾ operating profit (£m)	4.1	3.6	13.9	3.5	17.1
Underlying ⁽¹⁾ operating profit margin (%)	10.8	10.0	0.8pp	10.1	0.7pp
Headcount ⁽⁵⁾ (no.)	539	533	1.1	533	1.1

References in superscript are defined in the glossary of terms above.

Performance

The Rail results reflect a positive half for the business in HY 2023/24 and are a continuation of the positive growth delivered in the second half of FY 2022/23. Order intake was strong at £53.2m, up 23.4% on the prior period on a constant currency basis. As at 31 December 2023, the order book was £122.2m, an increase of 12.1% over the prior period, on a constant-currency basis.

Growth was delivered across all key geographies. There were significant wins in Asia as a result of continuing partnership with contractors and suppliers to the global rail industry. There was also strong growth in Australia, on the back of Ricardo's work on the Cross River Rail project, a capacity expanding project in Brisbane in anticipation of the 2032 Olympics. This reflects positive returns on the investment in business development capability made in the previous year.

There was continued growth in North America, leveraging key strategic customer relationships that have been built over the past twelve months, particularly in Canada, providing credible experience from which to develop new customer relationships in across the North America region.

In the Middle East, some large long-term contracts were successfully completed, and we are continuing with investment in regional business development to build and deliver on our strong sales pipeline.

In the UK and Europe, we successfully grew our partnership with Irish Rail and we continue to work closely with our long-term national-level rail infrastructure partner, NS, in the Netherlands.

Revenue was £38.1m, up 10% on the prior period, on a constant-currency basis, which was as a result of the strong order book secured at the end of the last financial year. Revenue increased across all our established regions.

With increased revenue driving operational leverage, underlying operating profit increased by £0.6m or 17.1% on a constant currency basis, with underlying operating profit margins increasing to 10.8%.

AUTOMOTIVE AND INDUSTRIAL - EMERGING MOBILITY (A&I EMERGING)

Automotive and Industrial Emerging is a trusted engineering partner for the next generation of mobility. A&I Emerging leverages its expertise in power electronics and future propulsion systems, software and digital technologies for connected vehicles and sustainable mobility solutions.

Financial and operational highlights

	Historical rates *restated			Constant currency ⁽⁶⁾	
	HY	HY	Change	HY	Change
	2023/24	2022/23		2022/23	
	£m	£m	%	£m	%
Order intake (£m)	30.4	49.0	(38.0)	47.8	(36.4)
Order book (£m)	52.8	62.1	(15.0)	60.5	(12.7)
Revenue (£m)	29.5	43.9	(32.8)	42.5	(30.6)
Underlying ⁽¹⁾ operating profit (£m)	(1.5)	4.7	(131.9)	4.7	(131.9)
Underlying ⁽¹⁾ operating profit margin (%)	(5.1)	10.7	(15.8pp)	11.1	(16.2pp)
Headcount ⁽⁵⁾ (no.)	525	543	(3.3)	543	(3.3)

References in superscript are defined in the glossary of terms above.

* Subsequent to the 2022/23 interim reporting, a detailed review of project mapping between each of the business segments was performed resulting in reallocation of projects between A&I Emerging and A&I Established for the 2023/24 reporting. To be consistent with those mappings, the 2022/23 comparatives have been restated with order intake reduced in A&I Emerging by £1.7m and increased for A&I Established by £1.7m; Underlying operating profit has been restated to reduce A&I Emerging by £1.9m and increase A&I Established by £1.9m.

Performance

In HY 2023/24, A&I Emerging order intake was £30.4m, a decline of 36.4% on a constant-currency basis due to delays in customer orders. The prior period order intake included large wins in hydrogen. As indicated at the year end, our Emerging A&I business is operating across diversified markets of marine, aviation, heavy duty vehicles, industrial and passenger cars with new entrants and evolving customer needs resulting in short-term fluctuations in order intake but we remain confident in the long-term growth potential.

Revenue dropped by £13.0m (30.6%) on a constant-currency basis, as a result of lower order intake.

Consequently, HY 2023/24 saw a £6.2m decline in underlying operating profit, on a constant-currency basis (from a £4.7m profit in the previous period). The underlying operating profit margin was negative 5.1% in HY 2023/24, compared to a positive 11.1% in the prior period, on a constant-currency basis.

The business has refocused on core markets, aligned with defined growth solutions to meet market demand in electrification, fuel cells, sustainable fuels and hybrid technologies. Organisation changes started at the end of the second quarter with its refreshed leadership and will continue in the third quarter. Key measures were taken to control the direct cost base, accelerating our transition to a flexible resource model and a rationalisation of key sites, enabling the business to better manage order fluctuations. As a result, A&I Emerging should deliver improved order intake and profitability in H2 2023/24.

Established Mobility Portfolio

DEFENSE

Defense has gained significant insights into the needs of armed forces and provides solutions to meet the challenges our clients face in the integration of logistics and field support for complex and diverse systems.

Financial and operational highlights

	Historical rates			Constant currency ⁽⁶⁾	
	HY	HY	Change	HY	Change
	2023/24	2022/23		2022/23	
	£m	£m	%	£m	%
Order intake (£m)	113.7	46.4	145.0	43.6	160.8
Order book (£m)	91.3	46.7	95.5	44.1	107.0
Revenue (£m)	56.6	41.0	38.0	38.4	47.4
Underlying ⁽¹⁾ operating profit (£m)	10.9	5.7	91.2	5.4	101.9
Underlying ⁽¹⁾ operating profit margin (%)	19.3	13.9	5.4pp	14.1	5.2pp
Headcount ⁽⁵⁾ (no.)	233	208	12.0	208	12.0

References in superscript are defined in the glossary of terms above.

Performance

Defense's order intake grew significantly by £70.1m (160.8%) on a constant-currency basis in HY 2023/24, driven by £80.5m (USD105.4m) of orders for the Antilock Brake System/Electronic Stability Control (ABS/ESC) kits, which improve the safety of operation of the US Army's High Mobility Multi-purpose Wheeled Vehicle (HMMWV) fleet.

Revenue increased by 47.4% on a constant-currency basis. Revenue growth was driven by increased ABS/ESC volumes – in total, we delivered 6,130 ABS/ESC kits in HY 2023/24, a record six-months for this programme, compared to 3,956 in the previous period, which included both retrofit kits and kits for new production vehicles. In addition, revenue from our Services businesses continues to be strong. Field Support Solutions, anchored by the ABS installation programme, grew 50.0% from the prior period and has expanded into support of test and fielding of the Infantry Squad Vehicle (ISV).

Underlying operating profit was £10.9m, an increase of 101.9% on a constant-currency basis. Underlying operating-profit margin increased 5.2ppt, to 19.3%, due to achieving economies of scale in ABS/ESC volume and control of indirect spend.

Defense continues to produce its ABS/ESC system, which integrates a complete set of solutions to the architecture of the vehicles, thereby ensuring the safety of both soldiers and operators during critical missions. Additionally, we are focusing on the development of software that improves energy usage and fuel management in near real time for the US Department of Defense's decarbonisation strategy. Furthermore, Defense has applied its existing software IP to impact climate strategy and strategy integration across the digital engineering ecosystem.

PERFORMANCE PRODUCTS (PP)

Performance Products (PP) is responsible for the manufacture and assembly of niche high-quality products, including engines, transmissions, electric reduction drives and other performance-critical driveline and powertrain products.

Financial and operational highlights

	Historical rates			Constant currency ⁽⁶⁾	
	HY	HY	Change	HY	Change
	2023/24	2022/23		2022/23	
£m	£m	%	£m	%	
Order intake (£m)	41.9	77.0	(45.6)	77.0	(45.6)
Order book (£m)	84.3	89.4	(5.7)	89.4	(5.7)
Revenue (£m)	38.2	38.5	(0.8)	38.5	(0.8)
Underlying ⁽¹⁾ operating profit (£m)	2.0	3.6	(44.4)	3.6	(44.4)
Underlying ⁽¹⁾ operating profit margin (%)	5.2	9.4	(4.2pp)	9.4	(4.2pp)
Headcount ⁽⁵⁾ (no.)	347	341	1.8	341	1.8

References in superscript are defined in the glossary of terms above.

Performance

Order intake in HY2023/24 was £41.9m, a reduction of 45.6%. The HY2022/23 order intake included a multi-year contract extension from Bugatti as well as a new multi-year transmission supply programme to Singer, the California-based luxury specialist. Excluding these orders, underlying orders are up around 13.0%.

Completing the development, testing and validation activities for this new programme with Singer has been the key focus of the transmission operation in the first half of FY2023/24, with series production ramp up planned for the second half.

Revenue from continuing operations in HY2023/24 was £38.2m, broadly flat on the prior period. As expected, McLaren engine volumes were lower compared to the prior period due to quality issues at McLaren, but with a greater proportion of the new hybrid V6 Artura. Transmission volumes and revenue were below the prior period due to the timing of customer demand, which is more heavily weighted towards the second half, and the impact of production preparations for the Singer programme.

Underlying operating profit was £2.0m, a reduction of 44.4% compared to the prior period, due to the lower McLaren engine volumes, mix of transmissions sold and inflationary pressures on input and operating costs. Underlying operating profit margin was 5.2%, compared to 9.4% in the prior period.

We are continuing to develop our portfolio of existing powertrain (engine) and drivetrain (transmission) products during the year as well as new projects in zero-emission propulsion, including electric drive units, industrial engineering services focussed around niche volume production and concept work around battery systems and electric machines.

AUTOMOTIVE AND INDUSTRIAL – ESTABLISHED MOBILITY (A&I ESTABLISHED)

With over a century of propulsion design and development, A&I Established deploys innovative simulation, model and test-based approaches to increase product efficiency and robustness, whilst reducing development cost and time for our global clients.

Financial and operational highlights

	Historical rates				
	HY 2023/24	*restated		Constant currency ⁽⁶⁾	
		2022/23	Change	2022/23	Change
	£m	£m	%	£m	%
Order intake (£m)	12.1	18.2	(33.5)	17.8	(32.0)
Order book (£m)	27.3	27.6	(1.1)	26.9	1.5
Revenue (£m)	10.9	15.0	(27.3)	14.4	(24.3)
Underlying ⁽¹⁾ operating loss (£m)	(3.5)	(2.9)	20.7	(2.9)	20.7
Underlying ⁽¹⁾ operating profit margin (%)	(32.1)	(19.3)	(12.8pp)	(20.1)	(12.0pp)
Headcount ⁽⁵⁾ (no.)	242	378	(36.0)	378	(36.0)

References in superscript are defined in the glossary of terms above.

* Subsequent to the 2022/23 interim reporting, a detailed review of project mapping between each of the business segments was performed resulting in reallocation of projects between A&I Emerging and A&I Established for the 2023/24 reporting. To be consistent with those mappings, the 2022/23 comparatives have been restated with order intake reduced in A&I Emerging by £1.7m and increased for A&I Established by £1.7m; Underlying operating profit has been restated to reduce A&I Emerging by £1.9m and increase A&I Established by £1.9m.

Performance

A&I Established has faced customer delays in orders, with order intake at £12.1m, a contraction of 32% on a constant currency basis. Order intake and revenue improved in Q2 with strong successes in high-efficiency internal combustion engine (ICE) and tests solutions. This trend is expected to continue in H2.

Revenue declined by 24% in HY 2023/24, on a constant-currency basis. The decline in revenue reflected lower demand in the period for traditional ICE and calibration work as market demand shifts towards decarbonised propulsion technologies.

Order intake and revenue improved in Q2 with strong successes in high-efficiency internal combustion engine (ICE) and tests solutions. This trend is expected to continue in H2.

Despite revenue reducing by £3.5m, underlying operating loss only increased by £0.6m from £2.9m in HY 2022/23 to £3.5m in HY 2023/24 due to cost actions taken in H2 2022/23. The underlying operating margin was negative 32.1% in HY 2023/24, compared to negative 20.1% in the prior period, on a constant-currency basis. The reduction in profitability reflected the decline in revenue and overcapacity in the engineering workforce.

Key actions taken in H1 include headcount reductions from organisation changes in the leadership team and focus on building a stronger flexible resource model, which is planned to continue into H2. There is continued demand for A&I Established services in marine, defence, heavy duty vehicles and passenger car markets globally to meet changing legislation and emissions compliance requirements as mobility transitions to electrified and alternative fuels. This will deliver improved performance in H2.

Condensed interim financial statements

Condensed consolidated income statement

for the six months ended 31 December (unaudited)

		2023			2022		
	Note	Underlying £m	Specific adjusting items(*) £m	Total £m	Underlying £m	Specific adjusting items(*) £m	Total £m
Continuing operations							
Revenue	8	224.2	-	224.2	212.7	-	212.7
Cost of sales		(163.7)	-	(163.7)	(152.6)	-	(152.6)
Gross profit		60.5	-	60.5	60.1	-	60.1
Administrative expenses		(48.9)	(10.0)	(58.9)	(47.9)	(22.4)	(70.3)
Other income		0.4	-	0.4	0.3	-	0.3
Operating profit/(loss)		12.0	(10.0)	2.0	12.5	(22.4)	(9.9)
Finance income		0.7	-	0.7	0.5	-	0.5
Finance costs		(4.8)	-	(4.8)	(3.1)	-	(3.1)
Net finance costs		(4.1)	-	(4.1)	(2.6)	-	(2.6)
Profit/(loss) before taxation		7.9	(10.0)	(2.1)	9.9	(22.4)	(12.5)
Income tax (expense)/credit		(2.1)	0.9	(1.2)	(2.6)	0.5	(2.1)
Profit/(loss) from continuing operations		5.8	(9.1)	(3.3)	7.3	(21.9)	(14.6)
Discontinued operation							
Profit from discontinued operation, net of tax		-	-	-	0.4	6.1	6.5
Profit/(loss) for the period		5.8	(9.1)	(3.3)	7.7	(15.8)	(8.1)
Profit/(loss) attributable to:							
Continuing operations							
- Owners of the parent		5.7	(9.1)	(3.4)	7.2	(21.9)	(14.7)
- Non-controlling interests		0.1	-	0.1	0.1	-	0.1
		5.8	(9.1)	(3.3)	7.3	(21.9)	(14.6)
Discontinued operation							
- Owners of the parent		-	-	-	0.4	6.1	6.5
Total							
- Owners of the parent		5.7	(9.1)	(3.4)	7.6	(15.8)	(8.2)
- Non-controlling interests		0.1	-	0.1	0.1	-	0.1
		5.8	(9.1)	(3.3)	7.7	(15.8)	(8.1)

The accompanying notes are an integral part of these condensed interim financial statements.

Condensed interim financial statements

Condensed consolidated income statement (continued)

for the six months ended 31 December (unaudited)

	2023	2022
Earnings per share - basic and diluted (Note 10)	pence	pence
Loss per share	(5.5)	(13.2)
Underlying earnings per share	9.2	12.2
Loss per share from continuing operations	(5.3)	(23.6)
Earnings per share from discontinued operation	-	10.5

* *Specific adjusting items are disclosed separately in the condensed interim financial statements where it is necessary to do so to provide further understanding of the financial performance of the Group. Further details are given in Note 4 and Note 9.*

Condensed consolidated statement of comprehensive income for the six months ended 31 December (unaudited)

	Note	2023 £m	2022 £m
Loss for the year		(3.3)	(8.1)
Other comprehensive income/(expense)			
Items that will not be reclassified to profit or loss:			
Remeasurements of the defined benefit pension scheme		1.0	(3.5)
Deferred tax on remeasurements of the defined benefit pension scheme		(0.2)	0.9
Total items that will not be reclassified to profit or loss		0.8	(2.6)
Items that are, or may be, subsequently reclassified to profit or loss:			
Currency translation on foreign currency net investments		0.9	0.9
Reclassification of foreign currency differences on disposal of foreign operation		-	(0.9)
Movement in fair value of cash flow hedge		(0.5)	-
Total items that may be subsequently reclassified to profit or loss		0.4	-
Total other comprehensive income/(expense) for the period (net of tax)		1.2	(2.6)
Total comprehensive expense for the period		(2.1)	(10.7)
Comprehensive expense attributable to:			
- Owners of the parent		(2.2)	(10.8)
- Non-controlling interests		0.1	0.1
		(2.1)	(10.7)

The accompanying notes are an integral part of these condensed interim financial statements.

Condensed consolidated statement of financial position

		31 December 2023	30 June 2023
	Note	£m	£m
Assets			
Non-current assets			
Goodwill	13	97.1	96.1
Other intangible assets	13	34.4	35.4
Property, plant and equipment	13	34.6	35.3
Right-of-use assets		19.0	20.7
Retirement benefit surplus		14.7	12.6
Other receivables		2.4	2.4
Deferred tax assets		3.3	8.5
		205.5	211.0
Current assets			
Inventories		32.9	29.5
Trade, contract and other receivables		140.0	153.5
Derivative financial assets		1.4	2.3
Current tax assets		2.6	2.7
Cash and cash equivalents	14	46.7	49.8
		223.6	237.8
Total assets		429.1	448.8
Liabilities			
Current liabilities			
Borrowings	14	5.6	12.7
Lease liabilities		5.8	5.7
Trade, contract and other payables		99.9	105.0
Current tax liabilities		1.3	2.6
Derivative financial liabilities		1.3	1.0
Provisions		2.3	2.6
		116.2	129.6
Net current assets		107.4	108.2
Non-current liabilities			
Borrowings	14	104.4	99.2
Lease liabilities		17.5	19.4
Trade, contract and other payables		9.7	4.8
Deferred tax liabilities		8.1	15.5
Provisions		3.9	3.7
		143.6	142.6
Total liabilities		259.8	272.2
Net assets		169.3	176.6
Equity			
Share capital		15.6	15.6
Share premium		16.8	16.8
Other reserves		37.6	37.2
Retained earnings		98.8	106.6
Equity attributable to owners of the parent		168.8	176.2
Non-controlling interests		0.5	0.4
Total equity		169.3	176.6

The accompanying notes form an integral part of these condensed interim financial statements.

Condensed consolidated statement of changes in equity

for the six months ended 31 December (unaudited)

	Attributable to owners of the parent							
	Share capital	Share premium	Other reserves	Retained earnings	Total	Non-controlling interests	Total equity	
Note	£m	£m	£m	£m	£m	£m	£m	
At 1 July 2022	15.6	16.8	44.5	120.5	197.4	0.2	197.6	
Loss for the period	-	-	-	(8.2)	(8.2)	0.1	(8.1)	
Other comprehensive expense for the period	-	-	-	(2.6)	(2.6)	-	(2.6)	
Total comprehensive (expense)/income for the period	-	-	-	(10.8)	(10.8)	0.1	(10.7)	
Equity-settled transactions	-	-	-	1.1	1.1	-	1.1	
Purchases of own shares to settle awards	-	-	-	(0.2)	(0.2)	-	(0.2)	
Ordinary share dividends	-	-	-	(4.7)	(4.7)	-	(4.7)	
At 31 December 2022	15.6	16.8	44.5	105.9	182.8	0.3	183.1	
At 1 July 2023	15.6	16.8	37.2	106.6	176.2	0.4	176.6	
Loss for the period	-	-	-	(3.4)	(3.4)	0.1	(3.3)	
Other comprehensive income for the period	-	-	0.4	0.8	1.2	-	1.2	
Total comprehensive income/(expense) for the period	-	-	0.4	(2.6)	(2.2)	0.1	(2.1)	
Equity-settled transactions	-	-	-	0.7	0.7	-	0.7	
Purchases of own shares to settle awards	-	-	-	(0.5)	(0.5)	-	(0.5)	
Ordinary share dividends	-	-	-	(5.4)	(5.4)	-	(5.4)	
At 31 December 2023	15.6	16.8	37.6	98.8	168.8	0.5	169.3	

The accompanying notes form an integral part of these condensed interim financial statements.

Condensed consolidated statement of cash flows for the six months ended 31 December (unaudited)

<i>Note</i>	2023	2022
	£m	£m
Cash flows from operating activities		
Loss before taxation	(2.1)	(4.5)
Adjustments for:		
- Share-based payments	0.8	1.0
- Fair value (Gains)/losses on derivative financial instruments	(0.2)	0.2
- Gains on disposal of discontinued operation	-	(7.5)
- Losses on disposal of property, plant and equipment	-	0.6
- Net finance costs	4.1	2.6
- Depreciation, amortisation and impairment	9.7	27.2
Defined benefit pension scheme payments in excess of past service costs	(0.7)	(0.9)
Operating cash flows before movements in working capital	11.6	18.7
Changes in:		
- Inventories	(3.5)	(3.4)
- Trade, contract and other receivables	14.7	(14.4)
- Trade, contract and other payables	(1.4)	15.3
- Provisions	(0.2)	(1.1)
Cash generated from operations	21.2	15.1
Net interest paid	(3.9)	(3.8)
Income tax paid	(5.4)	(3.7)
Net cash generated from operating activities	11.9	7.6
Cash flows from investing activities		
Purchases of property, plant and equipment	(1.7)	(2.7)
Proceeds from sale of discontinued operation, net of cash disposed	-	13.1
Fees in relation to sale of discontinued operation	-	(0.8)
Purchases of intangible assets and capitalised development costs	(3.6)	(2.2)
Net cash (used in)/generated from investing activities	(5.3)	7.4
Cash flows from financing activities		
Purchases of own shares to settle awards	(0.6)	(0.2)
Cash inflow/(outflow) from settlement of derivatives	0.7	(4.3)
Principal element of lease payments	(2.6)	(2.4)
Proceeds from borrowings	57.0	85.0
Repayment of borrowings	(52.0)	(85.0)
Dividends paid to shareholders	(5.4)	(4.7)
Net cash used in financing activities	(2.9)	(11.6)
Effect of exchange rate changes on cash and cash equivalents	0.3	0.1
Net increase in cash and cash equivalents	4.0	3.5
Net cash and cash equivalents at 1 July	37.2	39.4
Net cash and cash equivalents at 31 December	41.2	42.9
At 1 July		
Cash and cash equivalents	49.8	49.4
Cash included in disposal group held-for-sale	-	1.1
Bank overdrafts	(12.6)	(11.1)
Net cash and cash equivalents at 1 July	37.2	39.4
At 31 December		
Cash and cash equivalents	46.7	52.1
Bank overdrafts	(5.5)	(9.2)
Net cash and cash equivalents at 31 December	41.2	42.9

The accompanying notes form an integral part of these condensed interim financial statements.

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.

The condensed interim financial statements were approved for issue by the Board of Directors on 5 March 2024. These condensed interim financial statements have not been audited, but they have been subject to an independent review by KPMG LLP (KPMG), whose independent review report is included at the end of this report.

2. Basis of preparation

These condensed interim financial statements of the Company and its subsidiaries (together, the Group) for the six months ended 31 December 2023 do not comprise statutory accounts within the meaning of Section 434 of the Companies Act 2006. They have been prepared in accordance with the *Disclosure Guidance and Transparency Rules* of the United Kingdom's Financial Conduct Authority and IAS 34 *Interim Financial Reporting*, as adopted for use in the UK.

These condensed interim financial statements should be read in conjunction with the financial statements for the year ended 30 June 2023 within the *Annual Report & Accounts 2022/23*, which were prepared in accordance with International Financial Reporting Standards (IFRS), IFRS Interpretations Committee (IFRS IC) interpretations adopted by the UK and the Companies Act 2006 applicable to companies reporting under IFRS. The *Annual Report & Accounts 2022/23*, which was approved by the Board of Directors on 12 September 2023 and delivered to the Registrar of Companies. The report of the auditors on those statutory accounts was unqualified, did not contain an emphasis of matter paragraph and did not contain any statement under Section 498 of the Companies Act 2006.

The accounting policies adopted within this Interim Report are consistent with the *Annual Report & Accounts 2022/23* except for the requirements of IAS 34 *Interim Financial Reporting* in respect of income tax. Taxes on income in the interim period are accrued using the tax rate that would be applicable to expected total annual profit or loss.

The Board of Ricardo plc has undertaken an assessment of the ability of the Group and Company to continue in operation and meet its liabilities as they fall due over the period of its assessment. In doing so, the Board considered events throughout the period of their assessment, including the availability and maturity profile of the Group's financing facilities and covenant compliance. These condensed interim financial statements have been prepared on the going concern basis which the directors consider appropriate for the reasons set out below. The Group funds its operations through cash generated and has access to a £150.0m Committed Revolving Credit Facility (RCF) with an additional uncommitted £50.0m accordion. The facility expires in August 2026 and there are two financial covenants, Interest Cover (defined as EBITDA for the last twelve months, excluding the impact of specific adjusting items and IFRS 16 Leases, over net finance costs, excluding IFRS 16 interest), and Adjusted Leverage Ratio (defined as net debt over EBITDA for the last twelve months, excluding the impact of specific adjusting items and IFRS 16) both of which are tested at 30 June and 31 December each year. The threshold for the Adjusted Leverage Ratio is a maximum of 3.0x for each test date. The threshold for the Interest Cover is a minimum of 4.0x for each test date.

At the reporting date, the Group had an adjusted leverage of 1.5x and interest cover was 6.1x. As at the date of approval of these condensed interim financial statements, the amount of the RCF undrawn and available to the Group was £46m, with total borrowing, including overdrafts and hire purchase liabilities, of £110m and cash and cash equivalents of £46.7m.

The Directors have prepared a cash flow forecast which covers at least 12 months from the date of approval of these condensed interim financial statements. In this forecast, the directors have considered the impact of known risks on the Group's results, operations and financial position, including pace of technological change in the mobility and industrial sectors, driven by climate change, which continues to rapidly shift away from the traditional internal combustion engine towards more renewable propulsion methods. A severe but plausible downside scenario has been prepared, which models the impact of lower gross margins and higher costs across the operating segments to account for global inflationary pressures, ongoing order volatility in the A&I operating segment, lower growth rates in higher performing segments, delays in starting new projects and the removal of new, as yet unproven, revenue streams. This scenario models the Group's underlying EBITDA in FY 2023/24 to be broadly flat on FY 2022/23, increasing by 4% in FY 2024/25 and 10% in FY 2025/26. The downside scenario also includes higher net working capital days over the period. The modelled downside scenario incorporates some mitigating actions which are within the control of the Group, such as the appropriate reversal of discretionary bonus payments and setting appropriate levels of dividends based on the sensitised results of the operating segments. Although headroom under the Group's banking covenants is reduced under this downside scenario, the Group (and Company) is expected to operate within its committed facilities and covenant requirements during the forecast period.

Consequently, the directors are confident that the Group and Company will have sufficient funds to continue to meet its liabilities as they fall due for at least 12 months from the date of approval of the condensed interim financial statements and therefore have prepared the condensed interim financial statements on a going concern basis.

3. Seasonality

Based upon management's experience, higher levels of revenue and profit are expected in the second half of each financial year. This is typically due to lower levels of annual leave and a greater number of chargeable hours, which equates to higher revenues on a predominantly fixed cost base, and therefore higher profits.

4. 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 intangible assets, acquisition-related expenditure, costs related to implementation and configuration of purchased software services, restructuring 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.

Costs related to implementation and configuration of purchased software services are excluded from underlying PBT and operating profit as they are not considered to be reflective of the Group's trading performance in the year. The costs relate to software which is expected to be utilised over multiple years.

Restructuring costs arising from major reorganisation activities, profits or losses on the disposal of businesses, and significant impairments of intangible assets and 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. These adjustments are 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 9.

Reconciliation of underlying profit before tax to reported profit before tax

	2023			2022		
	Underlying £m	Specific adjusting items £m	Total £m	Underlying £m	Specific adjusting items £m	Total £m
Revenue	224.2	-	224.2	212.7	-	212.7
Cost of sales	(163.7)	-	(163.7)	(152.6)	-	(152.6)
Gross profit	60.5	-	60.5	60.1	-	60.1
Administrative expenses, impairment losses on trade receivables and contract assets, and other income	(48.5)	-	(48.5)	(47.6)	-	(47.6)
Amortisation of acquired intangibles	-	(2.5)	(2.5)	-	(2.0)	(2.0)
Acquisition-related expenditure	-	(0.4)	(0.4)	-	(1.4)	(1.4)
Earn-out and employee retention costs	-	(6.2)	(6.2)	-	-	-
Reorganisation costs	-	(0.6)	(0.6)	-	(19.0)	(19.0)
ERP implementation costs	-	(0.3)	(0.3)	-	-	-
Operating profit/(loss) from continuing operations	12.0	(10.0)	2.0	12.5	(22.4)	(9.9)
Net finance costs	(4.1)	-	(4.1)	(2.6)	-	(2.6)
Profit/(loss) before taxation from continuing operations	7.9	(10.0)	(2.1)	9.9	(22.4)	(12.5)
Income tax (expense)/credit	(2.1)	0.9	(1.2)	(2.6)	0.5	(2.1)
Profit/(loss) for the period from continuing operations	5.8	(9.1)	(3.3)	7.3	(21.9)	(14.6)
Profit for the year from discontinued operation, net of tax	-	-	-	0.4	6.1	6.5
Profit/(loss) for the period	5.8	(9.1)	(3.3)	7.7	(15.8)	(8.1)

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, restructuring 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 than reported EPS. 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 10.

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

Headline trading performance

	Underlying			Reported	
	External revenue £m	Operating profit £m	Profit before tax £m	Operating profit £m	Profit before tax £m
HY 2023/24					
Continuing operations	224.2	12.0	7.9	2.0	(2.1)
Less: performance of acquisitions	(6.4)	(1.7)	(1.7)	5.7	5.7
Continuing operations - organic	217.8	10.3	6.2	7.7	3.6
HY 2022/23					
Total	213.5	13.0	10.4	(1.9)	(4.5)
Less: discontinued operation	(0.8)	(0.5)	(0.5)	(8.0)	(8.0)
Continuing operations	212.7	12.5	9.9	(9.9)	(12.5)
Less: performance of acquisitions	(2.0)	(0.5)	(0.5)	(0.4)	(0.4)
Continuing operations - organic	210.7	12.0	9.4	(10.3)	(12.9)
Continuing operations at current year exchange rates	206.1	12.0	9.3	(10.1)	(12.8)
Growth (%) - Total	5	(8)	(24)	205	53
Growth (%) - Continuing operations	5	(4)	(20)	120	83
Growth (%) - Continuing organic	3	(14)	(34)	175	128
Constant currency growth (%) – Continuing operations	9	-	(15)	120	84

Segmental underlying operating profit: This is presented in the Group's 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 restructuring 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 7.

(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

	2023			2022		
	Underlying £m	Specific adjusting items £m	Total £m	Underlying £m	Specific adjusting items £m	Total £m
Operating profit/(loss) from continuing operations	12.0	(10.0)	2.0	12.5	(22.4)	(9.9)
Operating profit from discontinued operation	-	-	-	0.5	7.5	8.0
Operating profit/(loss)	12.0	(10.0)	2.0	13.0	(14.9)	(1.9)
Depreciation, amortisation and impairment	7.2	-	7.2	7.5	17.7	25.2
Amortisation of acquired intangibles	-	2.5	2.5	-	2.0	2.0
EBITDA	19.2	(7.5)	11.7	20.5	4.8	25.3
Movement in working capital	5.8	3.8	9.6	(0.9)	(2.7)	(3.6)
Pension deficit payments	(0.7)	-	(0.7)	(0.9)	-	(0.9)
Gain on disposal of discontinued operation	-	-	-	-	(7.5)	(7.5)
Losses on disposal of assets	-	-	-	-	0.6	0.6
Share based payments	0.8	-	0.8	1.0	-	1.0
Unrealised exchange (gains)/losses	(0.2)	-	(0.2)	0.2	-	0.2
Cash generated from operations	24.9	(3.7)	21.2	19.9	(4.8)	15.1
Cash conversion	129.7%		181.2%	97.1%		59.7%

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. Management believes this definition is the most appropriate for monitoring the indebtedness of the Group and is consistent with the treatment in the Group's banking agreements.

(c) Tax measures

Reported effective tax rate (ETR): which is the tax rate on reported profit before tax. This is the tax charge applicable to reported profit before tax expressed as a percentage of reported before tax.

Underlying effective tax rate (UETR): 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.

5. Critical judgements and key sources of estimation uncertainty

Critical judgements: allocation of assets to cash-generating units (CGUs)

Certain property, plant and equipment and right-of-use assets are shared by the A&I Established and A&I Emerging businesses. These include the Shoreham, Detroit and Prague offices. The shared assets are allocated, and tested for impairment, at the level of the A&I Established and A&I Emerging group of CGUs. This judgement impacts the result of the impairment review, and if assets were allocated directly to the A&I Established segment, it is likely that additional impairment would be recognised. These assets have a carrying value of £9.0m.

See Note 13 for further discussion.

Key sources of estimation uncertainty: Revenue recognition on fixed price contracts

As set out in Note 1d to the Group annual financial statements 2022/23, management undertakes a process to assess the risks on inception of all fixed price contracts, then monitors and reviews the risks and performance of contracts as they progress to completion. The highest value, highest risk, most technically complex and financially challenging contracts to deliver, as measured against a number of quantitative and qualitative factors, are categorised as 'Red Category 4' contracts, which are subject to more frequent and senior levels of management review.

As at 31 December 2023, four contracts (30 June 2023: eight) were risk-categorised as Red Category 4. At 31 December 2023, £4.7m (30 June 2022: £2.8m) of revenue had been recognised in respect of work performed on these contracts where outcomes were subject to negotiation with customers. An additional contract was also included due to risk of recoverability with a debt value of £1.1m. Management has made a specific judgement over the ability to recover each of the amounts under negotiation and has recognised provisions of £0.8m (30 June 2022: £0.7m) against the at risk amounts of £1.1m, resulting in a net exposure of £0.3m (30 June 2022: £0.6m).

The possible financial outcomes from these negotiations range from an upside of £5.8m, if management recovers the full £5.8m of revenue and potential negotiation upside, to a downside of £0.3m, if management is unsuccessful in recovering any of the £1.1m.

6. Discontinued operation

On 23 May 2022, the Group classified its Software segment held for sale following agreement of terms with a potential buyer, as a result of a strategic decision to focus on core lines of business. The results of the Software business have been presented as a discontinued operation in the prior period and it was sold on 1 August 2022, the business was sold to a third party.

Total consideration for the sale was £14.9m, of which £14.8m was satisfied in cash in the previous period. The remaining £0.1m is reflected in other receivables. Additional consideration of up to £2.4m has not been recognised as performance conditions are not expected to be met. £7.5m of net assets were disposed of, and £0.9m of cumulative currency gains were reclassified to the income statement. £0.8m of costs directly attributable to the disposal were incurred in the prior period.

Effect of disposal on the financial position of the group at 31 December 2022

	£m
Other intangible assets	(7.2)
Property, plant and equipment	(0.1)
Trade, other and contract receivables	(1.6)
Cash and cash equivalents	(1.7)
Trade, other and contract payables	3.2
Net assets and liabilities	(7.4)
Consideration received, satisfied in cash	14.8
Cash and cash equivalents disposed of	(1.7)
Directly attributable fees	(0.8)
Net cash inflows	12.3

Result from discontinued operation

	2023	2022
	£m	£m
External revenue	-	0.8
External expenses	-	(0.3)
Underlying profit from operating activities	-	0.5
Income tax on underlying result	-	(0.1)
Underlying profit from operating activities, net of tax	-	0.4
Specific adjusting items	-	7.5
Income tax on specific adjusting items	-	(1.4)
Profit from discontinued operation, net of tax	-	6.5

	2023	2022
	£m	£m
Cash from discontinued operation		
Net cash from operating activities	-	0.5
Net cash from investing activities	-	12.2

* Subsequent to the disposal, the Group has continued to purchase software licenses from the disposed entity and recharged the business for space in its Prague office.

Cash from discontinued operation

	2023	2022
	£m	£m
Cash from discontinued operation		
Net cash from operating activities	-	0.5
Net cash from investing activities	-	12.2
	-	12.7

7. Financial performance by segment

The Group's operating segments are being reported based on the financial information provided to the Chief Operating Decision Maker (the Chief Executive Officer). The information reported includes financial performance but does not include the financial position of assets and liabilities. The operating segments were identified by evaluating the Group's products and services, processes, types of customers and delivery methods.

The Group reports the following segments: Energy & Environment (EE); Rail; Automotive and Industrial Emerging (A&I Emerging); Automotive and Industrial Established (A&I Established); Defense; and Performance Products (PP).

Measurement of performance

Management monitors the financial results of its operating segments separately for the purpose of making decisions about allocating resources and assessing performance. Segmental performance is measured based on underlying operating profit, as this measure provides management with an overall view of how the different operating segments are managing their total cost base against the revenue generated from their portfolio of contracts.

There are varying levels of integration between the segments. The segments use EE for their specialist environmental knowledge. A&I and PP have various shared projects. There are also shared service costs between the segments. Inter-segment transactions are eliminated on consolidation. Inter-segment pricing is determined on an arm's length basis in a manner similar to transactions with third parties. Included within Plc costs are costs arising from a central Group function, including the costs of running the public limited company, which are not recharged to the other operating segments.

Revenue

	HY 2023/24			HY 2022/23		
	Total segment revenue	Inter-segment revenue	Revenue from external customers	Total segment revenue	Inter-segment revenue	Revenue from external customers
	£m	£m	£m	£m	£m	£m
Energy & Environment	51.0	(0.1)	50.9	38.7	(0.5)	38.2
Rail	38.3	(0.2)	38.1	36.5	(0.4)	36.1
A&I - Emerging	29.5	-	29.5	43.9	-	43.9
Defense	56.6	-	56.6	41.0	-	41.0
Performance Products	38.3	(0.1)	38.2	38.8	(0.3)	38.5
A&I - Established	10.9	-	10.9	15.3	(0.3)	15.0
Total continuing operations	224.6	(0.4)	224.2	214.2	(1.5)	212.7
Discontinued operation	-	-	-	0.8	-	0.8
Total	224.6	(0.4)	224.2	215.0	(1.5)	213.5

Underlying operating profit/(loss)

	HY 2023/24			HY 2022/23 *restated		
	Underlying operating profit/(loss)	Specific adjusting items (*)	Operating profit/(loss)	Underlying operating profit/(loss)	Specific adjusting items (*)	Operating profit/(loss)
	£m	£m	£m	£m	£m	£m
Energy & Environment	8.8	(1.6)	7.2	6.4	(0.4)	6.0
Rail	4.1	(1.4)	2.7	3.6	(2.0)	1.6
A&I - Emerging	(1.5)	(0.4)	(1.9)	4.7	-	4.7
Defense	10.9	-	10.9	5.7	(0.1)	5.6
Performance Products	2.0	-	2.0	3.6	-	3.6
A&I - Established	(3.5)	-	(3.5)	(2.9)	(18.7)	(21.6)
Plc	(8.8)	(6.6)	(15.4)	(8.6)	(1.2)	(9.8)
Total continuing operations	12.0	(10.0)	2.0	12.5	(22.4)	(9.9)
Discontinued operation	-	-	-	0.5	7.5	8.0
Total operating profit	12.0	(10.0)	2.0	13.0	(14.9)	(1.9)
Net finance costs			(4.1)			(2.6)
Total loss before tax			(2.1)			(4.5)

* Subsequent to the 2022/23 interim reporting, a detailed review of project mapping between each of the business segments was performed resulting in reallocation of projects between A&I Emerging and A&I Established for the 2023/24 reporting. To be consistent with those mappings, the 2022/23 comparatives have been restated to reduce A&I Emerging Underlying operating profit by £1.9m and increase A&I Established Underlying operating profit by £1.9m.

8. Revenue

	Continuing operations		Discontinued operations		Total	
	2023	2022	2023	2022	2023	2022
	£m	£m	£m	£m	£m	£m
Revenue stream						
Service provided under:						
- fixed price contracts	102.8	99.7	-	-	102.8	99.7
- time and materials contracts	37.8	45.5	-	-	37.8	45.5
- subscription and software support contracts	3.0	2.7	-	0.1	3.0	2.8
Goods supplied:						
- manufactured and assembled products	79.9	64.2	-	-	79.9	64.2
- software products	0.7	0.5	-	0.7	0.7	1.2
Intellectual property	-	0.1	-	-	-	0.1
Total	224.2	212.7	-	0.8	224.2	213.5
Customer location						
United Kingdom	65.6	64.0	-	0.3	65.6	64.3
Europe	37.3	35.2	-	0.1	37.3	35.3
North America	78.7	68.8	-	0.2	78.7	69.0
Rest of Asia	18.0	15.4	-	0.2	18.0	15.6
Australia	10.4	11.2	-	-	10.4	11.2
China	4.4	10.0	-	-	4.4	10.0
Rest of the World	9.8	8.1	-	-	9.8	8.1
Total	224.2	212.7	-	0.8	224.2	213.5
Timing of recognition						
Over time	144.1	148.0	-	0.8	144.1	148.8
At a point in time	80.1	64.7	-	-	80.1	64.7
Total	224.2	212.7	-	0.8	224.2	213.5

9. Specific adjusting items

Specific adjusting items are disclosed separately in the financial statements where it is necessary to do so in order to provide further understanding of the financial performance of the Group. These items comprise the amortisation and impairment of acquired intangible assets and goodwill, acquisition-related expenditure, costs related to implementation and configuration of purchased software services, restructuring 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. Costs related to implementation and configuration of purchased software services are excluded as they relate to software which is expected to be utilised over multiple years. Restructuring costs relate to non-recurring expenditure incurred as part of fundamental restructuring activities, significant impairments of intangible assets and property, plant and equipment, and other items deemed to be one-off in nature.

	2023	2022
	£m	£m
Continuing operations		
Amortisation of acquired intangibles	2.5	2.0
Acquisition-related expenditure	0.4	1.4
Earn-out and employee retention costs	6.2	-
Reorganisation costs		
- Other reorganisation costs	0.6	19.0
ERP implementation costs	0.3	-
Total specific adjusting items from continuing operations before tax	10.0	22.4
Tax credit on specific adjusting items	(0.9)	(0.5)
Total specific adjusting items from continuing operations after tax	9.1	21.9
Specific adjusting items from discontinued operations		
Disposal of discontinued operation	-	(7.5)
Tax on specific adjusting items from discontinued operation	-	1.4
Total specific adjusting items after tax	9.1	15.8

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 the asset's useful economic life, which is between two to nine years. During the prior period, certain intangible assets were acquired as part of the acquisitions of E3M and Aither, resulting in an overall increase in amortisation charges during the current period when compared to the prior period.

Acquisition-related expenditure

The current period acquisition-related expenditure comprises £6.6m incurred in the period (HY 2022/23: £1.4m). These costs include £0.1m strategic projects, £6.2m earn out and retention costs and £0.3m integration costs relating to the acquisitions of Inside Infrastructure, E3M and Aither. Costs in the prior period reflected an accrual of £0.2m for deferred consideration in relation to the acquisition of Inside Infrastructure (acquired in March 2022), together with £0.2m of post-deal integration costs, £0.1m of external fees paid in respect of the acquisition of E3 Modelling S.A. (E3M) and £0.9m of external fees in relation to other M&A and strategic projects.

Restructuring costs

Other restructuring costs

In the current period, £0.4m of costs have been recognised in relation to restructuring of the A&I Established business. In the prior period, £1.2m of costs were recognised in relation to the restructuring of the A&I Established business, including £0.7m loss on disposal of non-current assets, £0.4m relating to redundancy costs and related decommissioning costs and £0.2m of external consultancy fees. A further £0.2m of costs in relation to restructuring of the Group, EE and Rail businesses have been recognised in the period. These major restructuring activities will continue into the second half of FY 2023/24 with further costs expected.

Impairment costs of £17.7m were recognised in the prior period within the A&I Established operating segment – see Note 13. No further impairment costs were recognised in the current period.

These costs have been included within specific adjusting items as they are significant in quantum and would otherwise distort the underlying trading performance of the Group.

ERP implementation costs

In the current period, £0.3m of external costs in relation to the planning activities to implement a new ERP system were classified as a specific adjusting item as they are not reflective of the underlying performance of the business in the period. The ERP system is expected to be utilised by the Group for at least five years.

Disposal of discontinued operation

In the prior period, a gain on the disposal of the discontinued Software business of £7.5m was recognised (see Note 6).

10. Earnings per share

	2023	2022
	£m	£m
Loss attributable to owners of the parent	(3.4)	(8.2)
Add back the net-of-tax impact of:		
- Amortisation of acquired intangibles	1.8	1.7
- Acquisition-related expenditure	6.6	1.3
- Other reorganisation costs and impairment	0.4	18.9
- ERP implementation costs	0.3	-
- Discontinued operations	-	(6.1)
Underlying earnings attributable to owners of the parent	5.7	7.6

	2023	2022
	Number of shares millions	Number of shares millions
Basic weighted average number of shares in issue	62.2	62.2
Effect of dilutive potential shares	-	-
Diluted weighted average number of shares in issue	62.2	62.2

	2023	2022
	pence	pence
Earnings per share - basic and diluted (Note 10)		
Loss per share	(5.5)	(13.2)
Underlying earnings per share	9.2	12.2
Loss per share from continuing operations	(5.3)	(23.6)
Earnings per share from discontinued operation	-	10.5

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

There are no potentially dilutive shares (HY 2023/24: Nil).

11. Dividends

	2023	2022
	£m	£m
Final dividend for prior period: 8.61p per share (2022: 7.49p) per share	5.4	4.7

On 27 February 2024 the Directors declared an interim dividend of 3.8p per share, which will be paid gross on 11 April 2024 to holders of ordinary shares on the Company's register of members on 15 March 2024.

12. Fair value of financial assets and liabilities

There are no differences between the fair value of financial assets and liabilities included within the following categories in the Condensed Consolidated Statement of Financial Position and their carrying value:

- Trade, contract and other receivables;
- Investments;
- Derivative financial assets;
- Cash and cash equivalents;
- Trade, contract and other payables; and
- Derivative financial liabilities

Derivative financial assets of £1.4m (30 June 2023: £2.3m) and derivative financial liabilities of £1.3m (30 June 2023: £1.0m) relate to foreign exchange forward and swap contracts, which are Level 2 of the fair value hierarchy within IFRS 13 *Fair Value Measurement*. The Group use derivative financial instruments primarily to manage currency risk on its US Dollar, Euro, Chinese Renminbi, Japanese Yen, Hong Kong Dollar and Australian Dollar denominated receivables and payables from its subsidiaries, in addition to managing transactional exposures relating to customer contracts denominated in foreign currencies. It is the Group's policy not to undertake any speculative currency transactions.

13. Impairment of non-financial assets

At 31 December 2023, as required by IAS 36, an assessment was carried out to identify whether any indicators existed that the goodwill, finite life intangibles, and property plant and equipment balances held by the Group may be impaired. An indicator of impairment was considered to exist in the A&I Emerging business. No other indicators of impairment existed, nor an indicator that the previous impairment to the A&I Established segment should be reversed.

As explained in the segmental review, due to the nature of the new technology it is the expectation that orders will be volatile. However, in addition we have experienced delays in receiving customer orders in this half resulting in performance below our expectation.

The recoverable amount of the CGU was based on its value in use, determined by discounting the future cash flows expected to be generated from the continuing use of the CGU. Expected cash flows for the A&I Emerging business decreased compared to those expected at 30 June 2023. However, these discounted cashflows are still significantly above the carrying amount of the CGU and therefore it was determined that no impairment would be required. The short-term challenges are not expected to impact the long-term performance.

In addition, an estimate of recoverable value for the combined A&I Established and A&I Emerging businesses was calculated in order to assess the carrying value of the assets shared between these CGUs. The carrying value of the shared assets, and the A&I Emerging assets were supported by this calculation with significant headroom.

During HY2022/23, an impairment charge of £17.7m was recognised to administrative expenses within specific adjusting items for the A&I Established operating segment following an impairment review. The £17.7m of assets written off include £5.2m of goodwill, £1.8m of intangible assets (primarily development costs, including calibration tools), and £10.7m of property, plant and equipment (including £2.8m of buildings and £5.2m of test assets). After recognising the impairment, the carrying value of non-current assets allocated to this CGU was £nil.

	HY2022/23
	£m
Goodwill	5.2
Other intangible assets	1.8
Property, plant and equipment	10.7
Total impairment	17.7

Value in use

Cash flow assumptions

The cashflow forecasts used to calculate the value in use are based on the forecast for the remainder of the current year (year one) and the business plan for years two to five. The business plan was prepared by management and reviewed and approved by the Board. The business plan reflects past experience, management's assessment of the current contract portfolio, contract wins, contract retention, price increases, gross margin, as well as future expected market trends (including the impact of climate change, where relevant), adjusted to meet the requirements of *IAS 36 Impairment of Assets*.

Other key assumptions

Cash flows beyond year five are projected into perpetuity using a long-term growth rate, which is determined as being the lower of the planned compound annual growth rate in each CGUs, or group of CGUs, five-year plan and external third-party forecasts of the prevailing inflation and economic growth rates for each of the territories in which each CGU, or group of CGUs, primarily operates. Due to regulatory and other changes in the market relating to ICE, a long-term decrease of 10% p.a. has been applied to A&I Established business.

The cash flows are discounted at a pre-tax discount rate, which is derived from externally sourced data and reflects the current market assessment of the Group's time value of money and risks specific to each CGU.

	Pre-tax discount rate		Long-term growth rate	
	31 December 2023 £m	30 June 2023 £m	31 December 2023 £m	30 June 2023 £m
Automotive and Industrial - Emerging	14.6%	14.9%	3.9%	3.9%
Automotive and Industrial - Established	n/a	14.9%	n/a	(10.0%)

14. Net debt

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. Management believes this definition is the most appropriate for monitoring the indebtedness of the Group and is consistent with the treatment in the Group's banking agreements.

	31 December 2023	30 June 2023
	£m	£m
Analysis of net debt		
Current assets - cash and cash equivalents		
Cash and cash equivalents	46.7	49.8
Total cash and cash equivalents	46.7	49.8
Current liabilities - borrowings		
Bank overdrafts repayable on demand	(5.5)	(12.6)
Hire purchase liabilities maturing within one year	(0.1)	(0.1)
Total current borrowings	(5.6)	(12.7)
Non-current liabilities - borrowings		
Bank loans maturing after one year	(104.4)	(99.2)
Total non-current borrowings	(104.4)	(99.2)
At 31 December	(63.3)	(62.1)
Total cash and cash equivalents at 31 December	46.7	49.8
Total borrowings at 31 December	(110.0)	(111.9)
At 31 December	(63.3)	(62.1)

	31 December 2023	30 June 2023
	£m	£m
Movement in net debt		
At 1 July	(62.1)	(35.4)
Net increase/(decrease) in cash and cash equivalents and bank overdrafts	4.0	(2.2)
Repayments of hire purchase	-	0.2
Proceeds from bank loans	(57.0)	(128.0)
Repayments of bank loans	52.0	103.0
Amortisation of bank loan fees	(0.2)	0.3
At 31 December	(63.3)	(62.1)

Net debt at 31 December 2023 was £63.3m (FY 2022/23: £62.1m). As reported to the Board on a monthly basis, there is sufficient headroom in our banking facilities. At 31 December 2023 the Group held total facilities of £166.0m (FY 2021/22: £166.1m). The committed facility consists of a £150.0m multi-currency Revolving Credit Facility (RCF) with an additional uncommitted £50.0m accordion which provides the Group with committed funding through to August 2026. In addition, the Group has uncommitted facilities including overdrafts of £16.0m (FY 2021/22: £16.1m), which mature throughout this and the next financial year, and are renewable annually.

Non-current bank loans comprise committed facilities of £104.4m (FY 2022/23: 99.2m), net of direct issue costs, which were drawn primarily to fund acquisitions and general corporate purposes. These are denominated in Pounds Sterling and have variable rates of interest dependent upon the Group's adjusted leverage, which range from 1.65% to 2.45% above SONIA (FY 2022/23: 1.65% to 2.45% above SONIA).

Adjusted Leverage is defined in the Group's banking documents as being the ratio of total net debt to adjusted EBITDA for the last twelve months, excluding IFRS 16 Leases. Adjusted EBITDA is further defined as being operating profit before interest, tax, depreciation and amortisation, adjusted for any one-off, non-recurring, exceptional costs and acquisitions or disposals during the relevant period. The Adjusted Leverage covenant is 3.0x for each test date. At the reporting date, the Group has an Adjusted Leverage of 1.5x (FY 2022/23: 0.8x) which gives rise to an applicable interest rate of SONIA plus 2.05% (FY 2022/23: SONIA plus 1.85%). The only other financial covenant is Interest Cover (defined as adjusted EBITDA over net finance costs, excluding pension and IFRS 16 interest, for the last twelve months over), which is set at 4.0x for each test date. At the reporting date, the Group has Interest Cover of 6.1x.

The Group has banking facilities for its UK companies which together have a net overdraft limit, but the balances are presented on a gross basis in the condensed interim financial statements.

15. Contingent liabilities

In the ordinary course of business, the Group has £14.4m (FY 2022/23: £13.1m) of possible obligations for bonds, guarantees and counter-indemnities placed with our banking and other financial institutions, primarily relating to performance under contracts with customers. These possible obligations are contingent on the outcome of uncertain future events which are considered unlikely to occur. The Group is also involved in commercial disputes and litigation with some customers, which is also in the normal course of business. Whilst the result of such disputes cannot be predicted with certainty, the ultimate resolution of these disputes is not expected to have a material effect on the Group's financial position or results.

In July 2013, a guarantee was provided to the Ricardo Group Pension Fund (RGPF) of £2.8m in respect of certain contingent liabilities that may arise, which have been secured on specific land and buildings. The outcome of this matter is not expected to give rise to any material cost to the Group. In October 2018, a further guarantee was provided to the RGPF for an amount that shall not exceed the employer's liability were a debt to arise under Section 75 of the Pensions Act 1995. The guarantee will terminate on 5 April 2026. The outcome of this matter is not expected to give rise to any material cost to the Group on the basis that the Group continues as a going concern.

16. Principal risks and uncertainties

The Board regularly reviews its principal risks and uncertainties. To ensure our risk process drives continuous improvement across the business, we monitor the ongoing status and progress of key action plans against each risk on a half-yearly basis. Risk is a key consideration of the Board in all strategic decisions. In the most recent risk review cycle, risks were reviewed which relate to customers and markets; contracts; people; cyber and information security; technology; compliance with laws and regulations; and financing. The approach to mitigation of these principal risks is discussed on pages 104 to 108 of the Group's *Annual Report & Accounts 2022/23*, and the Directors have concluded that the disclosure remains appropriate. These principal risks and uncertainties should be read in conjunction with the Trading Summary and Operating Segments Review for the six months ended 31 December 2023 included within this Interim Report.

17. Events after the reporting date

There were no events to report after the reporting date.

Statement of Directors' responsibilities

The Directors confirm that to the best of their knowledge:

- the condensed interim financial statements, which have been prepared in accordance with International Accounting Standard (IAS) 34 *Interim Financial Reporting* as adopted for use in the UK, give a true and fair view of the assets, liabilities, financial position and profit or loss of the Group.
- the highlights, trading summary and operating segments review within this Interim Report includes a fair review of the information required by:
 - (a) DTR 4.2.7R of the *Disclosure Guidance and Transparency Rules*, being an indication of important events that have occurred during the first six months of the financial year and their impact on the condensed interim financial statements; and a description of the principal risks and uncertainties for the remaining six months of the financial year; and
 - (b) DTR 4.2.8R of the *Disclosure Guidance and Transparency Rules*, being related party transactions that have taken place in the first six months of the financial year and that have materially affected the financial position or performance of the Group during that period and any changes in the related party transactions described in the last annual report that could do so.

By order of the Board:



Graham Ritchie
Chief Executive Officer



Judith Cottrell
Chief Financial Officer

5 March 2024

Independent review report to Ricardo plc

Conclusion

We have been engaged by the company to review the condensed set of financial statements in the Interim Report for the six months ended 31 December 2023, which comprise the condensed consolidated income statement, the condensed consolidated statement of comprehensive income, the condensed consolidated statement of financial position, the condensed consolidated statement of changes in equity, the condensed consolidated statement of cash flows and the related explanatory notes.

Based on our review, nothing has come to our attention that causes us to believe that the condensed set of financial statements in the Interim Report for the six months ended 31 December 2023 is not prepared, in all material respects, in accordance with IAS 34 *Interim Financial Reporting* as adopted for use in the UK and the Disclosure Guidance and Transparency Rules (“the DTR”) of the UK’s Financial Conduct Authority (“the UK FCA”).

Basis for conclusion

We conducted our review in accordance with International Standard on Review Engagements (UK) 2410 *Review of Interim Financial Information Performed by the Independent Auditor of the Entity* (“ISRE (UK) 2410”) issued for use in the UK. A review of interim financial information consists of making enquiries, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures. We read the other information contained in the Interim Report and consider whether it contains any apparent misstatements or material inconsistencies with the information in the condensed set of financial statements.

A review is substantially less in scope than an audit conducted in accordance with International Standards on Auditing (UK) and consequently does not enable us to obtain assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, we do not express an audit opinion.

Conclusions relating to going concern

Based on our review procedures, which are less extensive than those performed in an audit as described in the ‘Basis of conclusion’ section of this report, nothing has come to our attention that causes us to believe that the directors have inappropriately adopted the going concern basis of accounting, or that the directors have identified material uncertainties relating to going concern that have not been appropriately disclosed.

This conclusion is based on the review procedures performed in accordance with ISRE (UK) 2410. However, future events or conditions may cause the group to cease to continue as a going concern, and the above conclusions are not a guarantee that the group will continue in operation.

Directors’ responsibilities

The Interim Report is the responsibility of, and has been approved by, the directors. The directors are responsible for preparing the Interim Report in accordance with the DTR of the UK FCA.

As disclosed in note 2, the annual financial statements of the group are prepared in accordance with UK-adopted international accounting standards.

The directors are responsible for preparing the condensed set of financial statements included in the Interim Report in accordance with IAS 34 as adopted for use in the UK.

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

Our responsibility

Our responsibility is to express to the company a conclusion on the condensed set of financial statements in the Interim Report based on our review. Our conclusion, including our conclusions relating to going concern, are based on procedures that are less extensive than audit procedures, as described in the ‘Basis for conclusion’ section of this report.

The purpose of our review work and to whom we owe our responsibilities

This report is made solely to the company in accordance with the terms of our engagement to assist the company in meeting the requirements of the DTR of the UK FCA. Our review has been undertaken so that we might state to the company those matters we are required to state to it in this report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the company for our review work, for this report, or for the conclusions we have reached.

A handwritten signature in black ink, appearing to read 'Jeremy Hall', with a stylized, cursive script.

Jeremy Hall
for and on behalf of KPMG LLP

Chartered Accountants
15 Canada Square
London
E14 5GL

5 March 2024