13 September 2023

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

Report for the year ended 30 June 2023 ("FY 2022/23")

Well positioned to deliver continued strong growth in the near and long-term

HIGHLIGHTS

- A year of continued strong growth and transformation, delivering in line with the Board's expectations.
- Record order intake up 23% to £522m delivering a record year end order book of £395m.
- Revenue from continuing operations increased by 17%, delivering four consecutive halves of continued growth.
- Underlying operating profit from continuing operations increased by £6m and is on track to double in the five years from FY22 to FY27.
- Environmental and Energy Transition portfolio performed well delivering double digit revenue growth and margin accretion.
- Established Mobility portfolio continued to deliver good order and revenue growth providing resilience and increased visibility.
- Structural changes implemented in the Established A&I business are focused on supporting operating profit performance improvements in FY 2023/24.
- Two high growth high margin acquisitions completed.

		2023	2022	Growth/ (decline)%
Continuing operations				
Order intake	£m	**521.5**	425.3	**22.6**
Order book	£m	**395.3**	340.0	**16.3**
Revenue	£m	**445.2**	380.2	**17.1**
Underlying(1)				
- Operating profit	£m	**34.0**	28.0	**21.4**
- Operating profit margin	%	**7.6**	7.4	**0.2pp**
- Profit before tax	£m	**27.9**	24.2	**15.3**
Statutory				
- Operating (loss)/profit	£m	**(1.9)**	16.2	**(111.7)**
- Operating (loss)/profit margin	%	**(0.4)**	4.3	**(4.7pp)**
- (Loss)/profit before tax	£m	**(8.0)**	12.4	**(164.5)**
Total				
Underlying(1) cash conversion(2)	%	**75.3**	112.1	**(36.8pp)**
Cash conversion(2)	%	**60.4**	118.5	**(58.1pp)**
Basic underlying earnings per share(3)	p	**33.4**	31.2	**7.1**
Basic reported (loss)/earnings per share	p	**(8.7)**	13.8	**(163.0)**
Closing				
Net debt(4)	£m	**62.1**	35.4	**75.4**
Headcount(5)	no.	**2,919**	3,017	**(3.2)**
Dividend per share (paid and proposed)	p	**11.96**	10.40	**15.00**

Continuing operations exclude the results of Ricardo Software, which was sold on 1 August 2022.

References are defined in the glossary of terms below.

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

"FY22/23 has been a good year for Ricardo as we continue to deliver revenue growth, while accelerating our transformation in line with our five-year strategic ambition.

During the year, we have made significant progress in shaping our solution portfolios, with our Environmental and Energy Transition portfolio achieving double-digit growth and margin accretion, and where we continue to see strong demand across our service offerings. Our Established Mobility portfolio has continued to deliver good order and revenue growth and creates true value for the Group given its long-term contracts and further profitability, particularly within our Performance Products and Defense operating segments. The actions that were taken in the Automotive and Industrial operating segment in the second half will underpin near-term performance improvements and position it for growth once again.

We have also continued to enhance the Group's strategic positioning by bringing the Group ever closer together as 'One Ricardo'. Through our shared operating model, our aligned functions enable the Group to scale the business while executing at pace, thereby achieving Ricardo's full potential.

We enter the new financial year with good momentum on account of our order intake in FY23 of £522m and our record year end order book. Overall, although we remain prudent in navigating macro uncertainties, we are confident in the Group's continuing strength to deliver sustainable profitable 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 circa 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 environmental services, together with safe and smart mobility. Our global team of consultants, environmental specialists, engineers, and scientists support our clients 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 results for the year ended 30 June 2023 at 9:30am on Wednesday 13 September. A recording of the presentation will be available online to all investors from Thursday 14 September at https://ricardo.com/investors/financial-reporting/results-presentations.

Further enquiries:

Ricardo plc		
Judith Cottrell	Tel:	01273 455611
Natasha Perfect	Website:	www.ricardo.com
SEC Newgate		
Elisabeth Cowell	Tel:	020 7680 6882
Ian Silvera	E-mail:	ricardo@secnewgate.co.uk

Cautionary Statement

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 5. Underlying measures are considered to provide a more useful indication of underlying performance and trends over time.

(2) 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.

(3) Underlying earnings also exclude a tax credit to statutory earnings of £2.3m (FY 2021/22: £2.3m) for the specific adjusting items in Note 5.

(4) Net debt, as set out in Note 10, 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 on the payroll 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 1.

Trading summary

Overall, Ricardo has performed in line with the Board's expectations in 2022/23. Revenue from continuing operations, excluding Ricardo Software, which was sold in August 2022, was £445.2m, an increase of 17% on the prior period (14% on a constant currency basis). Underlying operating profit from continuing operations was £34.0m and underlying profit before tax from continuing operations was £27.9m, representing growth of 21% and 15% on the prior period respectively (16% and 10% on a constant-currency basis). The underlying results are reflective of strong order intake in the year. The Group won £521.5m of new orders from continuing operations, up 23% on the prior period (19% on a constant-currency basis).

Reported operating loss from continuing operations, after taking specific adjusting items into consideration, was £1.9m (FY 2021/22: profit £16.2m) and reported loss before tax from continuing operations was £8.0m (FY 2021/22: profit £12.4m). 2022/23 reported operating profit and profit before tax included £23.4m 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 £25.1m were booked in A&I Established, Group, Rail and Energy and Environment (EE). In addition, £4.6m of amortisation on acquired intangibles and £6.2m of acquisition related expenditure were booked in the period. This was partially offset by a £7.4m gain on the disposal of Ricardo Software.

Net debt at 30 June 2023 was £62.1m, an increase of £26.7m on the 30 June 2022 position of £35.4m. The Group received £13.1m of proceeds (net of cash disposed) for the sale of Ricardo Software and paid £0.8m of fees in relation to the completion of the transaction in the period. Underlying working capital increased by £12.8m with underlying cash conversion of 75.3%. Reported cash conversion was 60.4%, after taking into account the cash impact of specific adjusting items.

Headline trading performance

		Underlying[1]		Reported	
	External revenue	Operating profit	Profit before tax	Operating profit/(loss)	(Loss)/profit before tax
	£m	£m	£m	£m	£m
2023					
Total	**446.0**	**34.5**	**28.4**	**6.0**	**(0.1)**
Less: discontinued operation	**(0.8)**	**(0.5)**	**(0.5)**	**(7.9)**	**(7.9)**
Continuing operations (a)	**445.2**	**34.0**	**27.9**	**(1.9)**	**(8.0)**
Less: performance of acquisitions	**(4.8)**	**(1.1)**	**(1.1)**	**4.4**	**4.4**
Continuing operations - organic (b)	**440.4**	**32.9**	**26.8**	**2.5**	**(3.6)**
2022					
Total	387.3	30.1	26.3	17.0	13.2
Less: discontinued operation	(7.1)	(2.1)	(2.1)	(0.8)	(0.8)
Continuing operations (a)	380.2	28.0	24.2	16.2	12.4
Continuing operations at current year exchange rates	392.2	29.2	25.4	17.0	13.2
Growth (%) - Total	15	15	8	(65)	(101)
Growth (%) - Continuing operations	17	21	15	(112)	(165)
Growth (%) - Continuing organic	16	18	11	(85)	(129)
Constant currency growth[6] (%) – Continuing operations	14	16	10	(111)	(161)

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 2)

(b) Organic growth excludes the performance of current year acquisitions from the results of 2023 (see Note 8).

During the year Ricardo divested its Software business unit, Ricardo Software, which contributed £0.8m of revenue and £0.5m of underlying operating profit and profit before tax in FY 2022/23.

FY 2022/23 also includes the results of E3-Modelling S.A. (E3M) and Aither Pty Ltd (Aither) which were acquired in January 2023 and March 2023 respectively. In the current year E3M contributed £2.0m of revenue and £0.7m of operating profit. During FY 2022/23 Aither contributed £2.7m of revenue and £0.4m of operating profit.

Operating segment summary

	2023		2022 Restated(*)		2022 At constant currency(6)	
	Order intake	**Revenue**	Order intake	Revenue	Order intake	Revenue
	£m	**£m**	£m	£m	£m	£m
EE	**111.5**	**88.5**	74.1	67.2	74.4	67.4
Rail	**89.2**	**73.5**	85.0	74.3	87.9	76.7
Automotive and Industrial - Emerging	**84.3**	**82.3**	101.3	69.1	104.6	71.1
Environmental & Energy Transition	**285.0**	**244.3**	260.4	210.6	266.9	215.2
Defense	**85.0**	**88.6**	55.1	45.0	60.9	49.8
PP	**115.3**	**84.7**	75.1	73.7	75.1	73.7
Automotive and Industrial - Established	**36.2**	**27.6**	34.7	50.9	37.0	53.5
Established Mobility	**236.5**	**200.9**	164.9	169.6	173.0	177.0
Total - continuing operations	**521.5**	**445.2**	425.3	380.2	439.9	392.2
Discontinued operation	**0.5**	**0.8**	6.9	7.1	7.6	7.7
Total	**522.0**	**446.0**	432.2	387.3	447.5	399.9

* The A&I Established and A&I Emerging operating segments were previously reported as the A&I operating segment. Comparative numbers have been restated. See also Note 3.

	2023		2022 Restated(*)		2022 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	**16.0**	**18.1**	11.0	16.4	11.0	16.3
Rail	**8.0**	**10.9**	9.4	12.7	9.7	12.6
Automotive and Industrial - Emerging	**10.6**	**12.9**	2.7	3.9	2.8	3.9
Environmental & Energy Transition	**34.6**	**14.2**	23.1	11.0	23.5	10.9
Defense	**13.4**	**15.1**	6.6	14.7	7.2	14.5
PP	**9.0**	**10.6**	8.8	11.9	8.8	11.9
Automotive and Industrial - Established	**(5.8)**	**(21.0)**	4.9	9.6	5.1	9.5
Established Mobility	**16.6**	**8.3**	20.3	12.0	21.1	11.9
Operating segments - continuing operations	**51.2**	**11.5**	43.4	11.4	44.6	11.4
Plc costs	**(17.2)**		(15.4)		(15.4)	
Total - continuing operations	**34.0**	**7.6**	28.0	7.4	29.2	7.4
Discontinued operation	**0.5**	**62.5**	2.1	29.6	2.1	27.3
Total	**34.5**	**7.7**	30.1	7.8	31.3	7.8

* Prior period results have been restated to reflect the fact that a share of central plc costs are no longer included in the operating profit measure for operating segments. This has increased the operating segment underlying operating profit shown above by £9.8m for FY 2021/22. There is no impact on the Group's operating profit.

Environmental and Energy Transition portfolio

- Order intake: up 9% (constant currency: up 7%)
- Revenue: up 16% (constant currency: up 14%)

- Underlying operating profit: up 50% (constant currency: up 47%)
- Underlying operating profit margin: 14.2% (FY 2021/22: 10.9% at constant currency)

Energy and Environment (EE) performed strongly, with order intake, revenue and underlying operating profit all increasing compared to the prior period. Growth has been driven by energy and carbon regulation, climate action planning and transparency, clean water and air quality services.

There was good growth in the Automotive and Industrial Emerging Mobility (A&I Emerging) business. Whilst order intake was 17% down on the prior period, revenue and underlying operating profit both increased, driven by demand for hydrogen and electrification applications.

Rail revenue and underlying operating profit both declined period-on-period, as expected, due to the timing of large projects ending and new project wins and extensions commencing. Order intake was 5% up on the prior year. £1.5m of restructuring costs were recognised in Rail and EE in the period relation to the ongoing restructuring of its operating structure, aimed at creating a more streamlined and client-focused business. These costs were recognised as specific adjusting items.

Established Mobility portfolio

- Order intake: up 43% (constant currency: up 37%)
- Revenue: up 18% (constant currency: up 14%)
- Underlying operating profit: down 18% (constant currency: down 21%)
- Underlying operating profit margin: 8.3% (FY 2021/22: 11.9% at constant currency)

Defense performed very strongly in the period, with significant growth in order intake (up 54%), revenue (up 97%) and underlying operating profit (up 103%). Revenues of £56.5m (USD72.4m) for anti-lock braking systems/electronic stability control (ABS/ESC) programme were delivered in the year. Defense delivered 8,707 kits in 2022/23 (FY 2021/22: 3,602 kits). In addition, there was good growth in the Technical Solutions consultancy business, including Field Support Services (the sustainment of ABS/ESC kits in the field).

Performance Products (PP), excluding the results of Ricardo Software, won £115.3m of orders in FY 2022/23, (up 54% on the prior period). This reflects a number of new long-term contract wins in the period. Revenue increased by 15% on the prior period and underlying operating profit increased by 2% driven by a combination of supply chain challenges, which led to some inefficiency, and higher energy and operating costs.

Whilst orders increased by 4%, revenue significantly declined in the A&I Established business, driven by increased economic uncertainty and the continuing shift in the technological landscape in the automotive sector. The business made an underlying operating loss of £5.8m in the period, compared to a £4.9m profit in FY 2021/22. Given the performance of the business and the accelerating technological changes facing the segment, a non-cash impairment charge of £18.7m was recognised in the period in respect of goodwill, intangible assets, and property, plant and equipment (see discussion of Specific Adjusting Items below). In addition, £4.7m of costs relating to restructuring were recognised during the period. A restructuring programme, including headcount reductions was completed during the year. These actions are focused on returning the business to profitability. On a reported basis, after including the impairment charge and restructuring costs, the operating loss in A&I Established was £29.2m.

Cash performance

Net debt: increased £26.7m to £62.1m (FY 2021/22: £35.4m). The Group had a net cash inflow for the disposal of Ricardo Software (after current and prior year fees) of £11.9m. In addition, £1.1m was paid to external advisors on other M&A and strategic projects. £5.1m was paid out in relation to the ongoing restructuring actions in A&I Established and £1.9m was paid in relation to the ongoing management restructuring in Rail & EE. Excluding these specific adjusting items, the Group had a cash outflow of £4.1m. In January 2023 the Group acquired 93% of the issued share capital of E3M for an initial cash consideration of £19.2m (EUR 21.9m). In March 2023 the Group acquired 90% of the share capital of Aither for an initial consideration of £9.4m (AUD 17.2m) which included an adjustment for the cash and normalised net working capital of £0.1m (AUD 0.1m). The composition of net debt is defined in Note 10.

Basis of preparation

These consolidated financial statements of the Ricardo plc Group (Group) have been prepared in accordance with UK adopted international accounting standards. The Group's principal accounting policies are detailed in Note 1 to the Group financial statements. Those accounting policies that have been identified as being particularly sensitive to complex or subjective judgements or estimates are disclosed in Note 1(d) to the Group financial statements.

Reported results represent the Group's overall performance in accordance with IFRS. The Group also uses a number of alternative performance measures (APMs) in addition to those reported under IFRS. Ricardo provides guidance to the investor community based on underlying results.

The underlying results and other APMs may be considered in addition to, but not as a substitute for or superior to, information presented in accordance with IFRS. Explanations of how they are calculated and how they are reconciled to an IFRS statutory measure are provided in Note 1.

Underlying results include the benefits of the results of acquisitions and major restructuring programmes but exclude significant costs (such as the amortisation of acquired intangibles, acquisition-related expenditure, reorganisation costs and other specific adjusting items). Ricardo believes that the underlying results, when considered together with the reported results, provide investors, analysts and other stakeholders with helpful complementary information to better understand the financial performance and position of the Group.

Specific adjusting items

As set out in more detail in Note 5, the Group's total underlying profit before tax excludes £35.9m of costs incurred during the period that have been charged to the income statement as specific adjusting items (FY 2021/22: £11.8m). 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, so as to provide further clarity over the financial performance.

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

	2023	2022
	£m	£m
Underlying(1) profit before tax from continuing operations	**27.9**	24.2
Amortisation of acquired intangibles	**(4.6)**	(4.5)
Acquisition-related expenditure	**(6.2)**	(0.8)
Restructuring costs		
- A&I US – Test business change in fair value of contingent consideration	**-**	(0.3)
- A&I - impairment of non-financial assets	**(18.7)**	(2.0)
- A&I - reorganisation costs	**(4.7)**	(2.9)
- Rail & EE - reorganisation costs	**(1.5)**	(1.0)
- Group - reorganisation costs	**(0.2)**	-
ERP implementation costs	**-**	(0.6)
Revaluation gain	**-**	0.3
Total specific adjusting items from continuing operations	**(35.9)**	(11.8)
Reported (loss)/profit before tax from continuing operations	**(8.0)**	12.4
SAI recorded in discontinued operation		
Disposal of discontinued operation	**7.4**	(1.3)

Amortisation of acquired intangibles was £4.6m in the year, compared to £4.5m in FY 2021/22.

Acquisition-related costs of £6.2m were incurred in the year (FY 2021/22: £0.8m). These included £3.2m for deferred consideration and £0.4m of external fees and integration costs in relation to the acquisition of Aither pty (Aither), acquired in March 2023, and £0.9m for deferred consideration and £0.2m of external fees and integration costs in respect of the acquisition of E3-Modelling S.A. (E3M, acquired in January 2023), as well as £0.4m of deferred consideration and £0.4m of integration costs in relation to the acquisition of Inside Infrastructure pty (Inside Infrastructure), acquired in March 2022 and £0.7m of external fees in relation to other M&A and strategic projects. Costs in the prior period reflected £0.4m of fees and integration costs for Inside Infrastructure and £0.3m of fees in relation to other strategic projects.

Restructuring costs

A&I: Change in fair value of contingent consideration: In the prior period a charge of £0.3m was recognised in relation to a reduction in the fair value of deferred consideration in respect of the sale of Ricardo's Detroit engine test business in June 2020. The reduction in the fair value reflects lower levels of traditional engine testing work than originally forecast at the time the business was sold.

A&I: Impairment of non-financial assets: Non-cash goodwill and asset impairment charges of £18.7m were recognised in the year within the A&I Established operating segment (FY 2021/22: £2.0m). As a result of the performance of this segment in the year to 30 June 2023, the impact of economic uncertainty and the continuing technological change in the automotive sector, the future projections and discounted cash flows for the operating segment were reassessed. The resulting value in use did not support the carrying value of the associated assets, resulting in an impairment of all of the goodwill associated with A&I Established segment (£5.2m), together with £1.8m of intangible assets and £11.7m of property, plant and equipment.

A&I: Restructuring costs: £4.7m of restructuring costs were booked in A&I Established in the period (FY 2021/22 £2.9m). Of this amount, £0.7m of loss on disposal was recognised during the period for under-utilised engine testing assets in the UK associated with the restructuring actions above. In addition to the loss on disposal, redundancy costs of £2.5m were incurred to further right-size the business.

Rail and EE: Restructuring costs: A charge of £1.5m was recognised in Rail and EE in respect of the restructuring of the senior management structure, which commenced in the second half of FY 2021/22.

Gain on sale of Ricardo Software (recognised within the discontinued operation): A net gain of £7.4m was recognised in the current year in relation to the disposal of Ricardo Software, completed on 1 August 2022. Total consideration for the sale was £14.9m (USD 17.5m), of which £14.8m was satisfied in cash in the current period. £7.5m of net assets were disposed of, and £0.9m of cumulative currency gains were reclassified to the income statement. £0.9m of costs directly attributable to the disposal were incurred in the current period. Per the terms of the sale, up to a further £2.4m (USD 3.0m) is receivable based on Ricardo Software achieving certain revenue targets in the 12-month period post-sale. The fair value of this contingent consideration has been assessed to be nil as it is unlikely that these revenue targets will be achieved.

Research and Development (R&D) and capital investment

The Group continues to invest in R&D and spent £14.6m (FY 2021/22: £13.3m) before government grant income of £6.8m (FY 2021/22: £2.2m). Development costs capitalised in this year were £5.4m (FY 2021/22: £7.3m, including development costs capitalised in Ricardo Software of £1.5m), reflecting continued investment in electrification and hydrogen solutions within the A&I Emerging segment, together with technology, tools and processes in the EE segment.

Capital expenditure on property, plant and equipment, excluding right-of-use assets, was £6.2m (FY 2021/22: £4.7m), 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 £1.0m (FY 2021/22: £0.6m) and finance costs were £7.1m (FY 2021/22: £4.4m) for the year, giving net finance costs of £6.1m (FY 2021/22: £3.8m). The increase in costs reflects an increase in the SONIA interest rate during the current year.

Taxation

The underlying effective tax rate for the year was 26.1% for the year (FY 2021/22: 26.0%). The reported effective tax rate was 5,100% (FY 2021/22: 35.3%). This unusually high reported effective rate reflects a number of non-deductible or non-taxable specific adjusting items, including impairments and the disposal of the Software business, resulting in a tax expense of £5.1m against a loss before tax of £0.1m.

Earnings per share

Basic loss per share was 8.7p (FY 2021/22: earnings 13.8p). The Directors consider that underlying earnings per share provides a useful indication of underlying performance and trends over time. Underlying basic earnings per share for the year was 33.4p (FY 2021/22: 31.2p). 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 6.

Dividend

As set out in more detail in Note 7, the Board has declared a final dividend of 8.61p per share (FY 2021/22: 5.11p). The dividend will be paid gross on 24 November 2023 to holders of ordinary shares on the Company's register of members on 3 November 2023.

Goodwill

At 30 June 2023, the Group had total goodwill of £96.1m (FY 2021/22: £90.6m). The acquisition of Aither and E3M added goodwill of £5.1m and £8.5m respectively to the Ricardo Energy and Environment cash generating unit (CGU) as synergies from the acquisition are expected to benefit EE operating segment. The carrying value of goodwill is fully supported by the value-in-use calculations for all other operating segments.

Net debt and banking facilities

Net debt at 30 June 2023 comprised cash and cash equivalents of £49.8m (FY 2021/22: £50.5m), and borrowing and overdrafts, including hire purchase liabilities and net of capitalised debt issuance costs, of £111.9m (FY 2021/22: £85.9m).

The Group funds its operations via a Revolving Credit Facility (RCF) of £150m, with a £50m uncommitted accordion, which provides funding through to August 2026, alongside the Group's uncommitted overdraft facilities of £16.1m. At 30 June 2023, the amount undrawn on the RCF was £50.0m. This, together with the net cash held of £37.2m, and £16.1m of unutilised overdraft facilities, provided the Group with total cash and liquidity of £103.3m.

The Group's Adjusted Leverage ratio (defined as net debt over EBITDA for the last 12 months, excluding the impact of specific adjusting items and IFRS 16 Leases) was 1.4x as at 30 June 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 8.3x at 30 June 2023. The Interest Cover covenant limit is a minimum of 4.0x.

Further details are provided in Note 10.

Foreign exchange

On consolidation, revenue and costs are translated at the average exchange rates for the year. The Group is exposed to movements in the Pound Sterling exchange rate, principally from work carried out with clients that transact in Euros, US Dollars, Australian Dollars and Chinese Renminbi.

Had the prior year results been translated at current year exchange rates, revenue from continuing operations would have been £12.0m (3.2%) higher, underlying operating profit would have been £1.2m (4.9%) higher and underlying profit before tax would have been £0.8m (6.5%) higher.

Pensions

The Group's defined benefit pension scheme operates within the UK. The fair value of the scheme's assets at the end of the year was £104.6m (FY 2021/22: £127.1m) and the present value of the scheme's obligations was £92.0m (FY 2021/22: £111.9m). The value of the scheme's assets reduced over the year due to movements in the stock market. However, this was partially offset by a reduction in the scheme's liabilities, due to increases in the discount rate. The pre-tax surplus, measured in accordance with IAS 19, at 30 June 2023 was £12.6m (FY 2021/22: £15.2m). Ricardo paid £1.8m of cash contributions into the scheme during the year (FY 2021/22: £3.0m).

Acquisition of E3-Modelling

On 24 January 2023, the Group acquired a 93% shareholding in E3-Modelling S.A. (E3M), a consulting company, based in Greece, that provides advanced empirical modelling services. The maximum cash consideration is £24m, of which £19m was paid on completion. The deferred consideration of £5m is based on the business achieving certain performance targets for the twelve months ending 31 December 2023 and the retention of key management. There is a commitment to acquire the remaining 7% stake in January 2025. The minimum cash consideration for the remaining 7% stake is £2m, and is reduced by 50% if the owners are not retained in the business. Ricardo has acquired full control and voting rights in E3M.

E3M provides digital modelling capabilities right across the markets that Ricardo serves, making the acquisition highly complementary to Ricardo's unique position at the intersection of the energy, environment and mobility agendas.

Acquisition of Aither

On 13 March 2023, Ricardo acquired a 90% shareholding in Aither Pty Ltd (Aither) from the founders and co-directors Chris Olszak and Will Fargher, for a cash consideration of up to £17m of which £9.6m was paid on completion. The deferred consideration is based upon the achievement of certain performance targets for the 10 months ended 31 December 2023 and the retention of the former owners of the business. The deferred consideration can range from nil to a maximum of £7.4m at an annualised EBITDA multiple of under 11 times. The remaining 10% shareholding will be acquired on the second or third anniversary of the Acquisition Closure Date, using the same EBITDA multiple as the deferred consideration, subject to a maximum. Ricardo retains full control and voting rights in Aither.

Board Changes

Ian Gibson is retiring from the Board on 13 September 2023. The Board thank Ian for his significant contribution as Chief Financial Officer over the last ten years and wish him the very best in his future endeavours. We are pleased to welcome Judith Cottrell to the Board as Chief Financial Officer on 13 September 2023.

Looking forward

As we accelerate our transformation, I appreciate the level of change across the business and I am profoundly grateful to our teams across the globe for their commitment in continually delivering amazing work for our clients. Their hard work and dedication are delivering both short-term performance and creating our future growth potential.

With the continued transformation of our portfolio, the global market drivers of energy transition and climate change, and our clear focus on execution, Ricardo is confident of delivering significant value for all our stakeholders.

By order of the Board:

Graham Ritchie Chief Executive Officer	Ian Gibson Chief Financial Officer

12 September 2023

Environmental and Energy Transition portfolio

ENERGY AND ENVIRONMENT

Energy and Environment (EE) works with clients across a wide variety of sectors and geographies to deliver robust data-driven solutions to solve complex energy-transition and environmental challenges. Ricardo's depth of environmental and energy expertise provides support across the value chain, from policy and strategy to implementing solutions.

Financial and operational highlights

		Historical rates		Constant currency[6]	
	2023	2022	Change	2022	Change
	£m	£m	%	£m	%
Order intake (£m)	**111.5**	74.1	50.5	74.4	49.9
Order book (£m)	**87.6**	57.0	53.7	56.7	54.5
Revenue (£m)	**88.5**	67.2	31.7	67.4	31.3
Underlying[1] operating profit (£m)	**16.0**	11.0	45.5	11.0	45.5
Underlying[1] operating profit margin (%)	**18.1**	16.4	1.7pp	16.3	1.8pp
Headcount[5] (no.)	**971**	795	22.1	795	22.1

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

**Prior period results have been restated to reflect the fact that a share of central plc costs are no longer included in the operating profit measure for operating segments. See Note 3.*

Performance

The continued demand for EE solutions has underpinned a very strong performance in FY 2022/23, with total revenue, including the results of businesses acquired in the year, up by 31%. Activity levels remained high throughout the year with a record order intake, resulting in an order book at 30 June 2023 of £88m, an increase of 54% on a constant currency basis, providing good visibility into the new financial year, which helps to underpin our growth strategy execution. On an organic basis, excluding the results of acquisitions, revenue and underlying operating profit grew by 20% and 30% (constant currency). The organic growth was driven by strong demand across multiple services, segments and geographies. In FY 2022/23 we secured multiple new contracts across our market-facing growth solutions, including the EU Mission Implementation Platform for Adaptation to Climate Change (MIP4Adapt), a significant contract for the European Commission. Through this contract, Ricardo's climate change experts are helping to accelerate Europe's transformation to a climate-resilient future. EE has continued to see substantial growth in the Middle East, with substantial demand for the environmentally focused development of digital solutions. This demand is driving high-value work for nationally critical environmental projects. Our reputation for managing air quality monitoring networks and modelling complex data sets also continues to be recognised by clients, with further substantive contracts.

EE's growth has also included E3-Modelling (E3M) and Aither Pty Ltd, having acquired the businesses in January and March 2023 respectively. E3M, which provides advanced empirical modelling services, focuses on the energy-environment nexus and is highly complementary to Ricardo's unique position at the intersection of the energy, environment and mobility agendas, providing digital modelling capabilities right across the Group. Aither Pty Ltd, an Australia-based natural-resources policy consultancy, strengthens our regional capabilities and significantly builds EE's global environmental portfolio in water and advisory services.

Building on the acquisition of Inside Infrastructure Pty Ltd in March 2022, these latest acquisitions demonstrate Ricardo's continued commitment to growing its global reach and extending its portfolio in Clean Energy and Environmental Solutions. Ricardo's existing water capabilities combined with Aither and Inside Infrastructure, have already started bidding together with a strong pipeline of opportunities domestically in Australia, as well as in the Middle East. E3M and Aither have contributed £4.8m of revenue and £1.1m of underlying operating profit in the period since their acquisitions. Inside Infrastructure contributed £3.9m of revenue (FY 2021/22: £0.9m on a constant currency basis) and £0.9m of underlying operating profit (FY 2021/22: £0.1m on a constant currency basis).

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)	
	2023	2022	Change	2022	Change
	£m	£m	%	£m	%
Order intake (£m)	**89.2**	85.0	4.9	87.9	1.5
Order book (£m)	**108.7**	109.1	(0.4)	103.7	4.8
Revenue (£m)	**73.5**	74.3	(1.1)	76.7	(4.2)
Underlying(1) operating profit (£m)	**8.0**	9.4	(14.9)	9.7	(17.5)
Underlying(1) operating profit margin (%)	**10.9**	12.7	(1.8pp)	12.6	(1.7pp)
Headcount(5) (no.)	**514**	563	(8.7)	563	(8.7)

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

**Prior period results have been restated to reflect the fact that a share of central plc costs are no longer included in the operating profit measure for operating segments. See Note 3.*

Performance

An order intake of £89.2m represents a 1% increase on FY 2021/22 on a constant currency basis, reflecting sustained demand for Rail and Mass Transit. The closing order book remains high at £108.7m, in line with the prior year.

During the year, we were successful in winning significant long-term project extensions across the Middle East and Australia and in building our business in North America. Nevertheless, revenue reduced to £73.5m and represented a 4% reduction on the prior year on a constant currency basis - this is in line with expectations, as some large projects completed in the year and new projects won have not yet started.

The strong order book, which includes wins in new territories, provides growth opportunities for FY 2023/24 and beyond. For example, in Ireland we were awarded Designated Body (DeBo) status in November 2022, which enables us to offer clients in that market a broader range of accredited assurance services and access approximately three times the serviceable market (compared to non-DeBo status). This aligns with the full portfolio offered in established markets such as the UK, the Netherlands, Belgium, Denmark and Spain. In North America, we are helping regional governments and rail sector organisations to enhance industry safety standards. This includes securing key strategic and safety roles with new transit systems in Ottawa, Canada.

Underlying operating profit reduced by £1.7m (18%) on a constant currency basis. Underlying operating margin was 10.9% (FY 2021/22: 12.6% – constant currency). This was driven by the reduction in revenue, combined with investment in business development capability to drive order intake in Australia and new territories.

Following a review of subsidies provided during the pandemic, we have taken the decision to provide for the return of a £0.5m COVID-related subsidy to the Dutch government.

In addition, £0.7m of restructuring costs were recognised in the year within specific adjusting items (FY 2021/22: £1.0m). This was driven by the simplification of the management structure, aligned with our focus on core growth opportunities. The cash cost of the actions, which includes the cash cost of the actions accrued for at the end of FY 2021/22, was £1.1m (FY 2021/22: £0.3m).

EMERGING AUTOMOTIVE AND INDUSTRIAL

Emerging Automotive and Industrial is a trusted partner for the next generation of sustainable mobility. Leveraging expertise in power electronic systems and propulsion systems, software and digital technologies for connected, autonomous vehicles, we deliver clean, efficient and integrated propulsion and energy solutions to support our clients in their energy transitions.

Financial and operational highlights

		Historical rates		Constant currency[6]	
	2023	2022 Restated*	Change	2022 Restated*	Change
	£m	£m	%	£m	%
Order intake (£m)	**84.3**	101.3	(16.8)	104.6	(19.4)
Order book (£m)	**55.0**	55.4	(0.7)	53.3	3.2
Revenue (£m)	**82.3**	69.1	19.1	71.1	15.8
Underlying[1] operating profit (£m)	**10.6**	2.7	292.6	2.8	278.6
Underlying[1] operating profit margin (%)	**12.9**	3.9	9.0pp	3.9	9.0pp
Headcount[5] (no.)	**435**	542	(19.7)	542	(19.7)

References in superscript are defined in the glossary of terms above

**Prior period results have been restated to reflect the fact that a share of central plc costs are no longer included in the operating profit measure for operating segments. See Note 3.*

Performance

Emerging Automotive and Industrial built on its return to growth and delivered a good performance in both revenue and underlying operating profit in FY 2022/23. Revenue was up 16% and operating profit increased by 279% on an underlying basis. Headline operating profit margin was 12.9% up by 9.0pp, with the positive impact of volumes and the restructuring which was executed in H2.Throughout the year, we secured a number of significant contracts in both the US and Europe including Cranfield Aerospace Solutions, Toyota Hilux and Kalmar.

Order intake declined by 19% year on year, on a constant currency basis, reflecting the market challenges in the automotive industry resulting in timing uncertainties in new electrification and integrated mobility projects. Our order intake was geographically diverse with c.30% coming from North America, c.60% from EMEA and c.10% from Asia.

We expect a level of market uncertainty to continue as we move into Q1 FY 2023/24 but to grow thereafter as new projects become active and we win new contracts.

Established Mobility portfolio

PERFORMANCE PRODUCTS

Performance Products (PP) is responsible for the manufacture and assembly of niche high-quality products, including engines, transmissions and other performance-critical driveline and powertrain products. We also provide industrial engineering services for clients around the globe to enable designs to successfully move from concept to series production.

Financial and operational highlights

		Historical rates		Constant currency[6]	
	2023	2022 Restated*	Change	2022 Restated*	Change
	£m	£m	%	£m	%
Order intake (£m)	**115.3**	75.1	53.5	75.1	53.5
Order book (£m)	**81.3**	51.3	58.5	51.3	58.5
Revenue (£m)	**84.7**	73.7	14.9	73.7	14.9
Underlying[1] operating profit (£m)	**9.0**	8.8	2.3	8.8	2.3
Underlying[1] operating profit margin (%)	**10.6**	11.9	(1.3pp)	11.9	(1.3pp)
Headcount[5] (no.)	**355**	330	7.6	330	7.6

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

**Prior period results have been restated to reflect the fact that a share of central plc costs are no longer included in the operating profit measure for operating segments. See Note 3.*

Performance

PP has had a record year for order intake. This reflects a number of significant contract extensions as well as new clients attracted to the business. The most significant of these contract awards was the extension of engine supply to McLaren until 2030, the extension of transmission supply to the Porsche Cup programme until 2028, the continuation of transmission supply to Bugatti and a new multi year transmission supply programme to Singer Vehicles, based in California.

Revenue from continuing operations in FY 2022/23 was £84.7m. McLaren engine volumes continued to increase in the year with the launch of the new hybrid V6 Artura. Transmission volumes and revenue also remained strong, with continuing deliveries to Bugatti, Porsche, Aston Martin and several top tier motorsport programmes. In addition, the expected recovery of the aerospace sector was evident over the year, along with continued success in supplying industrial engineering consultancy services.

Underlying operating profit from continuing operations was £9.0m, improving marginally on last year's result despite a number of significant cost increases that impacted the business during the year, including materials, energy and purchased parts. Underlying operating profit margin was 10.6% compared to 11.9% in the prior period.

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

The after-effects of COVID-19, and subsequently the conflict in Ukraine, remained a source of some disruption in the supply chain. However, our rigorous process management and tools ensured that client deliveries were protected.

DEFENSE

Defense continues to provide solutions to meet the challenges our clients face in the integration of logistics and field support for complex and diverse systems. The demand for our services has increased as a result of escalating world conflict and the challenges arising in a contested logistic environment. Our wide range of engineering and software solutions provides system-integration engineering for the US Army's ground inventory, and we are the data replication agent for the US Navy. We also specialise in niche manufacturing, adapting commercial industry products to deliver innovative sector applications that protect people and infrastructure.

Financial and operational highlights

		Historical rates		Constant currency[6]	
	2023	2022	Change	2022	Change
	£m	£m	%	£m	%
Order intake (£m)	**85.0**	55.1	54.3	60.9	39.6
Order book (£m)	**35.2**	40.5	(13.1)	38.7	(9.0)
Revenue (£m)	**88.6**	45.0	96.9	49.8	77.9
Underlying[1] operating profit (£m)	**13.4**	6.6	103.0	7.2	86.1
Underlying[1] operating profit margin (%)	**15.1**	14.7	0.4pp	14.5	0.6pp
Headcount[5] (no.)	**223**	190	17.4	190	17.4

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

**Prior period results have been restated to reflect the fact that a share of central plc costs are no longer included in the operating profit measure for operating segments. See Note 3.*

Performance

Defense's order intake grew by £24.1m on a constant currency basis in FY 2022/23. Over the year, we received $50m of orders from the US Army to provide antilock brake system/electronic stability control (ABS/ESC) retrofit kits to improve the safety of operation of the US Army's high mobility multi-purpose wheeled vehicle (HMMWV). Two contracts were extended beyond the original end date to ensure the continuance of Ricardo Defense in maintaining and updating Army mobility systems. Significant programmes included transitioning a commercial vehicle to the Army's inventory and providing an extended data-management enabler across the Navy's primary communications fleet.

Revenue increased by 78% year-on-year on a constant currency basis. Revenue growth was driven by increased ABS/ESC volumes – in total, we delivered 8,707 ABS/ESC kits in FY 2022/23 compared to 3,602 the previous year, including both retrofit kits and kits for new production vehicles – and a rise in orders for our technical and field support solutions.

Underlying operating profit of £13.4m was an increase of 86% compared to FY 2021/22 on a constant currency basis. Underlying operating profit margin increased by 0.6 basis points to 15.1%.

With the establishment of our digital acquisition framework – which enables an integrated management of US Army technical procurement initiatives – we can provide integrated solutions to our clients that cover the entire procurement life cycle for their vehicle platforms, from concept design and development through to production and sustainment through-life support.

Ricardo Defense continues to work with the US Marine Corps to develop and demonstrate capabilities to improve the management of energy supplies and better secure energy resources to reduce the US DoD's overall carbon footprint. Ricardo has expanded the work scope to develop an energy utilising dashboard to augment and deploy a metering and monitoring system. This enables the US Marine Corps to analyse changing electrical demand and logistical fuel constraints so that operators can make better informed command-and-control decisions on fuel and energy resiliency.

ESTABLISHED AUTOMOTIVE AND INDUSTRIAL

Established Automotive and Industrial is a trusted partner for OEMs and tier one suppliers across the transportation industry. With over 100 years of engineering experience in the design, building and testing of conventional powertrains, it is helping global clients with bridging technologies to support the shift to decarbonised transport solutions. Demand for Established A&I services is driven by global decarbonisation targets and compliance with emissions standards, especially in heavy duty and defence markets.

Financial and operational highlights

		Historical rates		Constant currency[6]	
	2023	2022	Change	2022	Change
	£m	£m	%	£m	%
Order intake (£m)	**36.2**	34.7	4.3	37.0	(2.2)
Order book (£m)	**27.5**	26.8	2.6	25.7	7.0
Revenue (£m)	**27.6**	50.9	(45.8)	53.5	(48.4)
Underlying[1] operating (loss)/profit (£m)	**(5.8)**	4.9	(218.4)	5.1	(213.7)
Underlying[1] operating profit margin (%)	**(21.0)**	9.6	(30.6pp)	9.5	(30.5pp)
Headcount[5] (no.)	**339**	449	(24.5)	449	(24.5)

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

**Prior period results have been restated to reflect the fact that a share of central plc costs are no longer included in the operating profit measure for operating segments. See Note 3.*

Performance

Established Automotive and Industrial order intake was £36.2m, a decrease of 2% on a constant currency basis in FY 2022/23. Significant programmes included a highly customised fleet of vehicles for London's Metropolitan Police, driveline systems development for defence vehicle applications in Asia Pacific as well as engine calibration work for off-highway machines and passenger car vehicles to ensure compliance with future emissions legislation.

Revenue decreased by 48% year-on-year on a constant currency basis. Revenue decline was driven by the reduced demand for services in this area which led to management implementing the structural changes announced in the first half and carried out in the second half.

Underlying operating loss was £5.8m, a decrease of 214% compared to FY 2021/22 on a constant currency basis. Underlying operating profit margin decreased by 31pp. Operating profit performance is expected to improve in FY 2023/24, due to the significant restructuring actions taken in order to rebase the business appropriately.

Condensed financial statements

Condensed consolidated income statement
for the year ended 30 June

		2023			2022 - Restated*		
		Underlying	Specific adjusting items(**)	Total	Underlying	Specific adjusting items(**)	Total
	Note	£m	£m	£m	£m	£m	£m
Continuing operations							
Revenue	*4*	**445.2**	**-**	**445.2**	380.2	-	380.2
Cost of sales		**(318.9)**	**-**	**(318.9)**	(260.7)	-	(260.7)
Gross profit		**126.3**	**-**	**126.3**	119.5	-	119.5
Administrative expenses		**(91.7)**	**(35.9)**	**(127.6)**	(90.8)	(11.8)	(102.6)
Impairment losses on trade receivables and contract assets		**(1.8)**	**-**	**(1.8)**	(1.2)	-	(1.2)
Other income		**1.2**	**-**	**1.2**	0.5	-	0.5
Operating profit/(loss)		**34.0**	**(35.9)**	**(1.9)**	28.0	(11.8)	16.2
Finance income		**1.0**	**-**	**1.0**	0.6	-	0.6
Finance costs		**(7.1)**	**-**	**(7.1)**	(4.4)	-	(4.4)
Net finance costs		**(6.1)**	**-**	**(6.1)**	(3.8)	-	(3.8)
Profit/(loss) before taxation		**27.9**	**(35.9)**	**(8.0)**	24.2	(11.8)	12.4
Income tax (expense)/credit		**(7.3)**	**3.3**	**(4.0)**	(6.5)	2.3	(4.2)
Profit/(loss) from continuing operations		**20.6**	**(32.6)**	**(12.0)**	17.7	(9.5)	8.2
Discontinued operation							
Profit from discontinued operation, net of tax		**0.4**	**6.4**	**6.8**	1.7	(1.3)	0.4
Profit/(loss) for the year		**21.0**	**(26.2)**	**(5.2)**	19.4	(10.8)	8.6
Profit/(loss) attributable to:							
Continuing operations							
- Owners of the parent		**20.4**	**(32.6)**	**(12.2)**	17.7	(9.5)	8.2
- Non-controlling interests		**0.2**	**-**	**0.2**	-	-	-
		20.6	**(32.6)**	**(12.0)**	17.7	(9.5)	8.2
Discontinued operation							
- Owners of the parent		**0.4**	**6.4**	**6.8**	1.7	(1.3)	0.4
Total							
- Owners of the parent		**20.8**	**(26.2)**	**(5.4)**	19.4	(10.8)	8.6
- Non-controlling interests		**0.2**	**-**	**0.2**	-	-	-
		21.0	**(26.2)**	**(5.2)**	19.4	(10.8)	8.6

	2023	2022
Earnings per share - basic and diluted (Note 6)	**pence**	pence
(Loss)/earnings per share	**(8.7)**	13.8
Underlying earnings per share	**33.4**	31.2
(Loss)/earnings per share from continuing operations	**(19.3)**	13.2
Earnings per share from discontinued operation	**10.9**	0.6

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

* Previously certain costs, such as engineering software licenses and subscriptions and running costs related to testing and manufacturing facilities, have been allocated to administrative costs. These costs have been allocated to cost of sales in the current year as they are considered to directly relate to the delivery of revenue. Comparative amounts have been restated to allocate the costs on a consistent basis. As a result, cost of sales have increased by £10.0m, impairment losses on trade

receivables and contract assets have increased by £1.2m, and administrative expenses have reduced by £11.2m. There is no impact on profit for the year or EPS.

** 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 1 and Note 5.

Condensed consolidated statement of comprehensive income

for the year ended 30 June

	2023	2022
	£m	£m
(Loss)/profit for the year	**(5.2)**	8.6
Other comprehensive (expense)/income		
Items that will not be reclassified to profit or loss:		
Remeasurements of the defined benefit pension scheme	**(5.0)**	5.2
Deferred tax on remeasurements of the defined benefit pension scheme	**1.2**	(1.6)
Total items that will not be reclassified to profit or loss	**(3.8)**	3.6
Items that are, or may be, subsequently reclassified to profit or loss:		
Currency translation on foreign currency net investments	**(6.4)**	6.5
Reclassification of foreign currency differences on disposal of foreign operation	**(0.9)**	-
Total items that may be subsequently reclassified to profit or loss	**(7.3)**	6.5
Total other comprehensive (expense)/income for the year (net of tax)	**(11.1)**	10.1
Total comprehensive (expense)/income for the year	**(16.3)**	18.7
Comprehensive (expense)/income attributable to:		
- Owners of the parent	**(16.5)**	18.7
- Non-controlling interests	**0.2**	-
	(16.3)	18.7

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

Condensed consolidated statement of financial position
As at 30 June

	Note	**2023**	2022
		£m	£m
Assets			
Non-current assets			
Goodwill	*9*	**96.1**	90.6
Other intangible assets		**35.4**	23.1
Property, plant and equipment		**35.3**	47.0
Right-of-use assets		**20.7**	18.3
Retirement benefit surplus		**12.6**	15.2
Other receivables		**2.4**	2.5
Deferred tax assets		**8.5**	9.0
		211.0	205.7
Current assets			
Inventories		**29.5**	21.0
Trade, contract and other receivables		**153.5**	128.7
Derivative financial assets		**2.3**	0.8
Current tax assets		**2.7**	3.6
Cash and cash equivalents	*10*	**49.8**	49.4
Assets held for sale		**-**	9.6
		237.8	213.1
Total assets		**448.8**	418.8
Liabilities			
Current liabilities			
Borrowings	*10*	**12.7**	11.2
Lease liabilities		**5.7**	5.0
Trade, contract and other payables		**105.0**	78.2
Current tax liabilities		**2.6**	4.2
Derivative financial liabilities		**1.0**	5.1
Provisions		**2.6**	5.1
Liabilities directly associated with the assets held for sale		**-**	3.4
		129.6	112.2
Net current assets		**108.2**	100.9
Non-current liabilities			
Borrowings	*10*	**99.2**	74.7
Lease liabilities		**19.4**	18.3
Trade, contract and other payables		**4.8**	-
Deferred tax liabilities		**15.5**	12.7
Provisions		**3.7**	3.3
		142.6	109.0
Total liabilities		**272.2**	221.2
Net assets		**176.6**	197.6
Equity			
Share capital		**15.6**	15.6
Share premium		**16.8**	16.8
Other reserves		**37.2**	44.5
Retained earnings		**106.6**	120.5
Equity attributable to owners of the parent		**176.2**	197.4
Non-controlling interests		**0.4**	0.2
Total equity		**176.6**	197.6

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

Condensed consolidated statement of changes in equity
for the year ended 30 June

		Attributable to owners of the parent						
	Note	Share capital £m	Share premium £m	Other reserves £m	Retained earnings £m	Total £m	Non-controlling interests £m	Total equity £m
At 1 July 2021		15.6	16.8	38.0	112.2	182.6	0.2	182.8
Profit for the year		-	-	-	8.6	8.6	-	8.6
Other comprehensive income for the year		-	-	6.5	3.6	10.1	-	10.1
Total comprehensive income for the year		-	-	6.5	12.2	18.7	-	18.7
Equity-settled transactions		-	-	-	1.6	1.6	-	1.6
Purchases of own shares to settle awards		-	-	-	(0.2)	(0.2)	-	(0.2)
Tax relating to share option schemes		-	-	-	(0.3)	(0.3)	-	(0.3)
Ordinary share dividends	*7*	-	-	-	(5.0)	(5.0)	-	(5.0)
At 30 June 2022		15.6	16.8	44.5	120.5	197.4	0.2	197.6
At 1 July 2022		**15.6**	**16.8**	**44.5**	**120.5**	**197.4**	**0.2**	**197.6**
Loss for the year		**-**	**-**	**-**	**(5.4)**	**(5.4)**	**0.2**	**(5.2)**
Other comprehensive expense for the year		**-**	**-**	**(7.3)**	**(3.8)**	**(11.1)**	**-**	**(11.1)**
Total comprehensive (expense)/income for the year		**-**	**-**	**(7.3)**	**(9.2)**	**(16.5)**	**0.2**	**(16.3)**
Equity-settled transactions		**-**	**-**	**-**	**1.4**	**1.4**	**-**	**1.4**
Tax relating to share option schemes		**-**	**-**	**-**	**0.7**	**0.7**	**-**	**0.7**
Purchases of own shares to settle awards		**-**	**-**	**-**	**(0.1)**	**(0.1)**	**-**	**(0.1)**
Ordinary share dividends	*7*	**-**	**-**	**-**	**(6.7)**	**(6.7)**	**-**	**(6.7)**
At 30 June 2023		**15.6**	**16.8**	**37.2**	**106.6**	**176.2**	**0.4**	**176.6**

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

Condensed consolidated statement of cash flows
for the year ended 30 June

	Note	2023 £m	2022 £m
Cash flows from operating activities			
(Loss)/profit before taxation		**(0.1)**	13.2
Adjustments for:			
- Share-based payments		**1.3**	1.3
- Unrealised foreign exchange losses/(gains)		**1.2**	(1.0)
- Gains on disposal of discontinued operation	*2*	**(7.4)**	-
- Losses on disposal of property, plant and equipment		**0.7**	0.1
- Net finance costs		**6.1**	3.8
- Depreciation, amortisation and impairment		**37.4**	25.1
Defined benefit pension scheme payments in excess of past service costs		**(1.8)**	(3.0)
Operating cash flows before movements in working capital		**37.4**	39.5
Changes in:			
- Inventories		**(9.0)**	(3.6)
- Trade, contract and other receivables		**(27.9)**	4.6
- Trade, contract and other payables		**27.7**	8.5
- Provisions		**(2.0)**	0.9
Cash generated from operations		**26.2**	49.9
Net interest paid		**(7.5)**	(3.5)
Income tax paid		**(4.6)**	(2.8)
Net cash generated from operating activities		**14.1**	43.6
Cash flows from investing activities			
Acquisitions of subsidiaries, net of cash acquired		**(24.5)**	(9.9)
Purchases of property, plant and equipment		**(4.9)**	(6.1)
Proceeds from disposal of property, plant and equipment		**-**	0.1
Proceeds from sale of discontinued operation, net of cash disposed	*3*	**13.1**	0.1
Fees in relation to sale of discontinued operation	*3*	**(0.8)**	-
Purchases of intangible assets and capitalised development costs		**(5.7)**	(8.0)
Net cash used in investing activities		**(22.8)**	(23.8)
Cash flows from financing activities			
Purchases of own shares to settle awards		**(0.2)**	(0.2)
Payments to settle derivatives		**(4.2)**	-
Principal element of lease payments		**(5.1)**	(4.6)
Proceeds from borrowings	*10*	**128.0**	13.0
Repayment of borrowings	*10*	**(103.0)**	(15.0)
Dividends paid to shareholders	*7*	**(6.7)**	(5.0)
Net cash generated from/(used in) financing activities		**8.8**	(11.8)
Effect of exchange rate changes on cash and cash equivalents		**(2.3)**	1.9
Net (decrease)/increase in cash and cash equivalents		**(2.2)**	10.1
Net cash and cash equivalents at 1 July		**39.4**	29.3
Net cash and cash equivalents at 30 June		**37.2**	39.4
At 1 July			
Cash and cash equivalents		**49.4**	42.0
Cash included in disposal group held-for-sale		**1.1**	-
Bank overdrafts		**(11.1)**	(12.7)
Net cash and cash equivalents at 1 July		**39.4**	29.3
At 30 June			
Cash and cash equivalents	*10*	**49.8**	49.4
Cash included in disposal group held-for-sale	*10*	**-**	1.1
Bank overdrafts	*10*	**(12.6)**	(11.1)
Net cash and cash equivalents at 30 June		**37.2**	39.4

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

General information

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

This preliminary announcement is based on the audited Annual Report & Accounts 2023, which was approved for issue on 12 September 2023, and which has been prepared in accordance with UK-adopted international accounting standards and applicable law. The financial information herein does not amount to full statutory accounts within the meaning of Section 434 of the Companies Act 2006.

1. 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. Ricardo provides guidance to the investor community based on underlying results. Explanations of how they are calculated and how they are reconciled to an IFRS statutory measure are set out below.

The underlying results and other APMs may be considered in addition to, but not as a substitute for or superior to, information presented in accordance with IFRS.

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. Underlying results include the benefits of the results of acquisitions and major restructuring programmes but exclude significant costs (such as the amortisation of acquired intangibles, acquisition-related expenditure, reorganisation costs and other specific adjusting items). Ricardo believes that the underlying results, when considered together with the reported results, provide investors, analysts and other stakeholders with helpful complementary information to better understand the financial performance and position of the Group.

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

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

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

The related tax effects on the above and other tax items which do not form part of the underlying tax rate are also taken into account. Items are treated consistently year-on-year, and these adjustments are also consistent with the way that performance is measured under the Group’s incentive plans and its banking covenants. A reconciliation is shown below. Further details of the nature of the specific adjusting items are given in Note 5.

Reconciliation of underlying profit to reported (loss)/profit

	2023			2022 - Restated*		
	Underlying	**Specific adjusting items**	**Total**	Underlying	Specific adjusting items	Total
	£m	**£m**	**£m**	£m	£m	£m
Revenue	**445.2**	**-**	**445.2**	380.2	-	380.2
Cost of sales	**(318.9)**	**-**	**(318.9)**	(260.7)	-	(260.7)
Gross profit	**126.3**	**-**	**126.3**	119.5	-	119.5
Administrative expenses, impairment losses on trade receivables and contract assets, and other income	**(92.3)**	**-**	**(92.3)**	(91.5)	-	(91.5)
Amortisation of acquired intangibles	**-**	**(4.6)**	**(4.6)**	-	(4.5)	(4.5)
Acquisition-related expenditure	**-**	**(6.2)**	**(6.2)**	-	(0.8)	(0.8)
Impairment of non-financial assets	**-**	**(18.7)**	**(18.7)**	-	(2.0)	(2.0)
Reorganisation costs	**-**	**(6.4)**	**(6.4)**	-	(4.2)	(4.2)
ERP implementation costs	**-**	**-**	**-**	-	(0.6)	(0.6)
Other	**-**	**-**	**-**	-	0.3	0.3
Operating profit/(loss) from continuing operations	**34.0**	**(35.9)**	**(1.9)**	28.0	(11.8)	16.2
Net finance costs	**(6.1)**	**-**	**(6.1)**	(3.8)	-	(3.8)
Profit/(loss) before taxation from continuing operations	**27.9**	**(35.9)**	**(8.0)**	24.2	(11.8)	12.4
Income tax (expense)/credit	**(7.3)**	**3.3**	**(4.0)**	(6.5)	2.3	(4.2)
Profit/(loss) for the year from continuing operations	**20.6**	**(32.6)**	**(12.0)**	17.7	(9.5)	8.2
Profit for the year from discontinued operation, net of tax	**0.4**	**6.4**	**6.8**	1.7	(1.3)	0.4
Profit/(loss) for the year	**21.0**	**(26.2)**	**(5.2)**	19.4	(10.8)	8.6

** Costs of £10m have been reallocated from administrative expenses to cost of sales in the comparative period. See the Income Statement for further details.*

Underlying earnings attributable to the owners of the parent/earnings per share: The Group uses underlying earnings attributable to the owners of the parent as the input to its adjusted EPS measure. This profit measure excludes the amortisation of acquired intangibles, acquisition-related expenditure, reorganisation costs and other specific adjusting items, but is an after-tax measure. The Board considers underlying EPS to be more reflective of the Group's trading performance in the year. A reconciliation between earnings attributable to the owners of the parent and underlying earnings attributable to the owners of the parent is shown in Note 6.

Organic growth/decline: Organic growth/decline is calculated as the growth/decline in the result for the current year compared to the prior year, after adjusting for the impact of acquisitions or disposals, to include the results of those acquisitions or disposals for an equivalent period in each financial year. See Note 8 for details of acquisitions during the year.

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 year using foreign currency exchange rates applicable to the current year. This provides an indication of the growth/decline of the business, excluding the impact of foreign exchange. In the prior year, constant currency results were calculated by translating the result for the current year using foreign currency exchange rates applicable to the prior year. Using current year rates to restate prior year results is considered to provide a more useful comparison, since current year performance remains stated at actual rates.

Headline trading performance

	Underlying			Reported	
	External revenue £m	Operating profit £m	Profit before tax £m	Operating profit/(loss) £m	(Loss)/profit before tax £m
2023					
Total	**446.0**	**34.5**	**28.4**	**6.0**	**(0.1)**
Less: discontinued operation	**(0.8)**	**(0.5)**	**(0.5)**	**(7.9)**	**(7.9)**
Continuing operations	**445.2**	**34.0**	**27.9**	**(1.9)**	**(8.0)**
Less: performance of acquisitions	**(4.8)**	**(1.1)**	**(1.1)**	**4.4**	**4.4**
Continuing operations - organic	**440.4**	**32.9**	**26.8**	**2.5**	**(3.6)**
2022					
Total	387.3	30.1	26.3	17.0	13.2
Less: discontinued operation	(7.1)	(2.1)	(2.1)	(0.8)	(0.8)
Continuing operations	380.2	28.0	24.2	16.2	12.4
Continuing operations at current year exchange rates	392.2	29.2	25.4	17.0	13.2
Growth (%) - Total	15%	15%	8%	(65%)	(101%)
Growth (%) - Continuing operations	17%	21%	15%	(112%)	(165%)
Growth (%) - Continuing organic	16%	18%	11%	(85%)	(129%)
Constant currency growth (%) – Continuing operations	14%	16%	10%	(111%)	(161%)

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 reorganisation costs. It also excludes unallocated Plc costs, which represent the costs of running the public limited company and specific adjusting items which are outside of the control of segment management. A reconciliation between segment underlying operating profit, the Group's underlying operating profit and operating profit is presented in Note 3.

b) Cash flow measures

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

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

Cash conversion

	2023			2022		
	Underlying	**Specific adjusting items**	**Total**	Underlying	Specific adjusting items	Total
	£m	**£m**	**£m**	£m	£m	£m
Operating profit/(loss) from continuing operations	**34.0**	**(35.9)**	**(1.9)**	28.0	(11.8)	16.2
Operating profit from discontinued operation	**0.5**	**7.4**	**7.9**	2.1	(1.3)	0.8
Operating profit	**34.5**	**(28.5)**	**6.0**	30.1	(13.1)	17.0
Depreciation, amortisation and impairment	**14.1**	**18.7**	**32.8**	18.6	2.0	20.6
Amortisation of acquired intangibles	**-**	**4.6**	**4.6**	-	4.5	4.5
EBITDA	**48.6**	**(5.2)**	**43.4**	48.7	(6.6)	42.1
Movement in working capital	**(12.8)**	**1.6**	**(11.2)**	8.2	2.2	10.4
Pension deficit payments	**(1.8)**	**-**	**(1.8)**	(3.0)	-	(3.0)
Gain on disposal of discontinued operation	**-**	**(7.4)**	**(7.4)**	-	-	-
Losses on disposal of assets	**0.1**	**0.6**	**0.7**	0.1	-	0.1
Share based payments	**1.3**	**-**	**1.3**	1.3	-	1.3
Unrealised exchange losses/(gains)	**1.2**	**-**	**1.2**	(0.7)	(0.3)	(1.0)
Cash generated from operations	**36.6**	**(10.4)**	**26.2**	54.6	(4.7)	49.9
Cash conversion	**75.3%**		**60.4%**	112.1%		118.5%

The movement in working capital in relation to specific adjusting items for the current year includes trade and other payables of £5.3m and provisions of £0.1m in relation to specific adjusting items recognised as an expense during the current year which had not been paid at 30 June 2023, compared to £3.8m at the prior year end (see Note 5).

Net debt: is defined as current and non-current borrowings less cash and cash equivalents, including hire purchase agreements, but excluding any impact of other 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. Further details are provided in Note 10.

c) Tax measures

Underlying effective tax rate (ETR): The Group reports 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.

d) Other measures

Order book: The value of all unworked purchase orders and contracts received from customers at the reporting date, providing an indication of revenue that has been secured and will be recognised in future accounting periods. Management do not consider there to be a closely equivalent GAAP measure.

Order intake: The value of purchase orders and contracts received from customers during the period. The order intake for the current year was £522.0m (2022: £432.2m), including results of the discontinued operation. Management do not consider there to be a closely equivalent GAAP measure.

Headcount: Headcount is calculated as the number of colleagues on the payroll at the reporting date and includes subcontractors on a full-time equivalent basis. The number of employees disclosed in Note 33 to the Group Financial Statements is the average for the year.

2. Discontinued operation

On 1 August 2022, the Group sold its Software business to a third party. At 30 June 2022, the Group had classified this business as 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.

Total consideration for the sale was £14.9m, of which £14.8m was satisfied in cash during the current year. 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. £0.9m of costs directly attributable to the disposal were incurred during the current year.

Effect of disposal on the financial position of the Group

	£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 **£m**	2022 £m
Revenue	**0.8**	9.4
Inter-segment revenue*	**-**	(2.3)
External revenue	**0.8**	7.1
Expenses	**(0.3)**	(4.1)
Elimination of inter-segment revenue net of recoverable expenses	**-**	2.0
Amortisation of intangible assets	**-**	(2.9)
External expenses	**(0.3)**	(5.0)
Underlying profit from operating activities	**0.5**	2.1
Income tax on underlying result	**(0.1)**	(0.4)
Underlying profit from operating activities, net of tax	**0.4**	1.7
Specific adjusting items	**7.4**	(1.3)
Income tax on specific adjusting items	**(1.0)**	-
Profit from discontinued operation, net of tax	**6.8**	0.4

** Subsequent to the disposal, the Group has continued to purchase software licenses from the discontinued operation and recharge the business for space in its Prague office. Although intra-group transactions have been fully eliminated in the consolidated financial results, management has elected to attribute the elimination of transactions between the continuing operations and the discontinued operation before the disposal in a way that reflects the continuance of these transactions subsequent to the disposal. Management believes this information to be useful to the users of the financial statements.*

Cash from discontinued operation

Cash from discontinued operation	**2023** **£m**	2022 £m
Net cash from operating activities	**0.5**	4.5
Net cash from/(used in) investing activities	**12.2**	(3.2)
	12.7	1.3

The earnings per share related to the discontinued operation is shown in Note 6.

3. Financial performance by segment

The segmental analysis helps explain the business in the way that it is monitored by management.

The Group's operating segments are being reported based on the financial information provided to the Chief Operating Decision Maker who is 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.

During the current year, the Automotive and Industrial segment (A&I) has been disaggregated into Automotive and Industrial - Emerging Mobility and Automotive and Industrial – Established Mobility. This split is reported to the CODM and reflects the revised organisational structure and operating model of the business unit.

The following summarises the operations in each of the Group’s reportable segments:

- Energy and Environment (EE) – EE generates revenue from the provision of environmental consultancy services to customers across the world. Customers include governments, public agencies and private businesses;
- Rail – Rail generates revenue from through two separate operations: a consultancy unit that provides technical advice and engineering services; and a separate, independent entity, Ricardo Certification, that performs accredited assurance services;
- Automotive and Industrial – Emerging – A&I Emerging generates revenue through the provision of engineering, strategic consulting, and design, development and testing services, focused on in the design, building and testing of conventional powertrains. Customers include businesses in the automotive, aerospace, defence, off-highway and commercial, marine, and rail markets;
- Automotive and Industrial – Established – A&I Established generates revenue through the provision of engineering, strategic consulting, and design, development and testing services, focused on in power electronic systems and propulsion systems, software and digital technologies. Customers include businesses in the automotive, aerospace, defence, energy, off-highway and commercial, marine, motorcycle and light-personal transport, and rail markets;
- Defense – Defense provides engineering services, software and products to customers in the US defence market, aimed and protecting life and improving the operation, maintenance and support of complex systems; and
- Performance Products (PP) – PP manufactures, assembles and develops niche high-quality components, prototypes and complex products, including engines, transmissions and other precision and performance-critical products. Its customers manufacture low-volume, high-performance products in markets such as motorsport, automotive, aerospace, defence and rail.

The operations of the Group have been categorised into these segments due to the nature of their services, market sectors, client bases and distribution channels and operating across markets requiring adherence to regulatory frameworks that are similar in nature.

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 in the following tables 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. Comparative figures for the year ended 30 June 2022 have been restated, reflecting the impact of the changes the Group made to its operating segments during the year ended 30 June 2023. The operating segment section above provides further detail on the segments’ performance.

	2023					
	Total segment revenue	Inter-segment revenue	Revenue from external customers	Underlying operating profit	Specific adjusting items (*)	Operating profit
	£m	£m	£m	£m	£m	£m
Energy & Environment	89.6	(1.1)	88.5	16.0	(2.4)	13.6
Rail	74.1	(0.6)	73.5	8.0	(4.1)	3.9
Automotive and Industrial - Emerging	83.0	(0.7)	82.3	10.6	-	10.6
Defense	88.7	(0.1)	88.6	13.4	(0.1)	13.3
Performance Products	85.2	(0.5)	84.7	9.0	-	9.0
Automotive and Industrial - Established	28.6	(1.0)	27.6	(5.8)	(23.4)	(29.2)
Plc	-	-	-	(17.2)	(5.9)	(23.1)
Total continuing operations	449.2	(4.0)	445.2	34.0	(35.9)	(1.9)
Discontinued operation	0.8	-	0.8	0.5	7.4	7.9
Total	450.0	(4.0)	446.0	34.5	(28.5)	6.0
Net finance costs						(6.1)
Total loss before tax						(0.1)

	2023			
	Depreciation, amortisation and impairment	Capital expenditure		
		Other intangible assets	Property, plant and equipment	Right-of-use assets
	£m	£m	£m	£m
Energy & Environment	4.2	0.6	0.6	0.5
Rail	4.5	0.3	0.3	0.7
Automotive and Industrial - Emerging	3.3	2.7	3.1	1.0
Defense	1.8	0.4	0.4	-
Performance Products	0.9	0.6	0.6	-
Automotive and Industrial - Established	21.0	0.7	1.2	1.6
Plc	1.7	-	-	0.1
Total continuing operations	37.4	5.3	6.2	3.9
Discontinued operation	-	0.2	-	-
Total	37.4	5.5	6.2	3.9

	2022 - Restated**					
	Total segment revenue	Inter-segment revenue	Revenue from external customers	Underlying operating profit	Specific adjusting items (*)	Operating profit
	£m	£m	£m	£m	£m	£m
Energy & Environment	68.2	(1.0)	67.2	11.0	(0.6)	10.4
Rail	74.6	(0.3)	74.3	9.4	(4.4)	5.0
Automotive and Industrial - Emerging	69.1	-	69.1	2.7	-	2.7
Defense	45.1	(0.1)	45.0	6.6	(0.4)	6.2
Performance Products	75.0	(1.3)	73.7	8.8	(0.6)	8.2
Automotive and Industrial - Established	54.1	(3.2)	50.9	4.9	(5.2)	(0.3)
Plc	-	-	-	(15.4)	(0.6)	(16.0)
Total continuing operations	386.1	(5.9)	380.2	28.0	(11.8)	16.2
Discontinued operation	9.4	(2.3)	7.1	2.1	(1.3)	0.8
Total	395.5	(8.2)	387.3	30.1	(13.1)	17.0
Net finance costs						(3.8)
Total profit before tax						13.2

	2022 - Restated**			
	Depreciation, amortisation and impairment	Capital expenditure		
		Other intangible assets	Property, plant and equipment	Right-of-use assets
	£m	£m	£m	£m
Energy & Environment	3.2	1.9	0.7	-
Rail	4.8	-	1.1	4.2
Automotive and Industrial - Emerging	-	2.0	1.4	-
Defense	1.7	0.4	0.1	-
Performance Products	0.8	(0.1)	0.6	-
Automotive and Industrial - Established	9.8	0.5	0.8	0.5
Plc	1.9	-	-	-
Total continuing operations	22.2	4.7	4.7	4.7
Discontinued operation	2.9	3.2	-	-
Total	25.1	7.9	4.7	4.7

** See Note 5*

*** Prior year results and capital expenditure have been restated as follows:*

- **Remove plc management charge**: Previously the costs of running the Group function, such as finance, IT, HR, marketing and legal, were allocated to the business units on the basis of revenue and headcount. These costs are no longer allocated as part of the operating segment underlying operating profit, reflecting the way that the results are reviewed by the CEO and the Board. Comparative results have been restated to reflect a change in the allocation of central costs.
- **Revised A&I operating segments:** For the year ended 30 June 2022, the Automotive and Industrial operating segment results were reported to the CEO (the Chief Operating Decision Maker) in total. For the year ended 30 June 2023 the results were reported separately to the CEO for Established A&I and Emerging A&I. Prior year comparative amounts have been restated to reflect this analysis.

The impact of these restatements on the underlying profit of the operating segments is shown below.

	Underlying operating profit: originally reported	Remove plc management charge	Revised A&I operating segments	Underlying operating profit: Restated
	£m	£m	£m	£m
EE	9.1	1.9	-	11.0
Rail	7.7	1.7	-	9.4
A&I - Total	3.7	3.9	(7.6)	-
A&I - Emerging	-	-	2.7	2.7
Defense	5.9	0.7	-	6.6
PP	7.2	1.6	-	8.8
A&I - Established	-	-	4.9	4.9
Plc	(5.6)	(9.8)		(15.4)
Continuing operations	28.0	-	-	28.0
Discontinued operation	2.1	-	-	2.1
Total operating profit	30.1	-	-	30.1

4. Revenue

	Continuing operations		Discontinued operations		Total	
	2023	2022 Restated*	**2023**	2022	**2023**	2022 Restated*
	£m	£m	**£m**	£m	**£m**	£m
Revenue stream						
Service provided under:						
- fixed price contracts	**216.9**	198.5	**-**	-	**216.9**	198.5
- time and materials contracts	**81.1**	83.9	**-**	-	**81.1**	83.9
- subscription and software support contracts	**5.4**	5.2	**0.1**	0.6	**5.5**	5.8
Goods supplied:					**-**	-
- manufactured and assembled products	**140.5**	90.7	**-**	-	**140.5**	90.7
- software products	**1.3**	1.2	**0.7**	6.5	**2.0**	7.7
Intellectual property	**-**	0.7	**-**	-	**-**	0.7
Total	**445.2**	380.2	**0.8**	7.1	**446.0**	387.3
Customer location						
United Kingdom	**137.4**	134.5	**0.3**	0.2	**137.7**	134.7
Europe	**78.5**	72.7	**0.1**	1.3	**78.6**	74.0
North America	**139.4**	88.3	**0.2**	1.9	**139.6**	90.2
Rest of Asia	**30.1**	30.7	**0.2**	2.8	**30.3**	33.5
Australia	**23.4**	22.2	**-**	-	**23.4**	22.2
China	**16.4**	20.9	**-**	0.9	**16.4**	21.8
Rest of the World	**20.0**	10.9	**-**	-	**20.0**	10.9
Total	**445.2**	380.2	**0.8**	7.1	**446.0**	387.3
Timing of recognition						
Over time	**304.6**	289.0	**0.8**	5.5	**305.4**	294.5
At a point in time	**140.6**	91.2	**-**	1.6	**140.6**	92.8
Total	**445.2**	380.2	**0.8**	7.1	**446.0**	387.3

5. Specific adjusting items

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

	2023	2022
	£m	£m
Continuing operations		
Amortisation of acquired intangibles	**4.6**	4.5
Acquisition-related expenditure	**6.2**	0.8
Reorganisation costs		
- Purchases and disposals	**-**	0.3
- Impairment of non-financial assets	**18.7**	2.0
- Other reorganisation costs	**6.4**	3.9
ERP implementation costs	**-**	0.6
Revaluation gain	**-**	(0.3)
Total specific adjusting items from continuing operations before tax	**35.9**	11.8
Tax credit on specific adjusting items	**(3.3)**	(2.3)
Total specific adjusting items from continuing operations after tax	**32.6**	9.5
Specific adjusting items from discontinued operations		
Disposal of discontinued operation	**(7.4)**	1.3
Tax on specific adjusting items from discontinued operation	**1.0**	-
Total specific adjusting items after tax	**26.2**	10.8

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 year, certain "customer contracts and relationships" intangible assets reached the end of their economic life, resulting in an overall decrease in amortisation charges compared to the prior year. This was offset by £0.8m of amortisation of customer relationships and modelling tools acquired as part of the acquisition of E3M and Aither (see Note 8).

Acquisition-related expenditure

The current year acquisition-related expenditure comprises:

- £0.4m of integration costs and an accrual for £0.4m of deferred consideration following the acquisition of Inside Infrastructure (2022: £0.4m),
- £0.2m of external fees and integration costs and an accrual for £0.9m of deferred consideration following the acquisition of E3 Modelling S.A. (see Note 8) (2022: £nil),
- £0.4m of external fees and integration costs and an accrual for £3.2m of deferred consideration following the acquisition of Aither pty. (see Note 8) (2022: £nil); and
- £0.7m of external fees in respect of other strategic projects (2022: £0.4m, including £0.1m retention amount paid to the former owners of PLC Consulting Pty Ltd).

Reorganisation costs

Purchases and disposals

During the prior year a charge of £0.3m was recognised in relation to a reduction in the fair value of deferred consideration in respect of the sale of Ricardo's Detroit engine test business on 3 June 2020. The reduction in the fair value reflected lower levels of traditional engine testing work than originally forecast at the time the business was sold.

Impairment of non-financial assets

Impairment costs of £18.7m (2022: £2.0m) were recognised during the year - see Note 9.

Other reorganisation costs
Reorganisation costs include the following amounts:

- £4.7m (2022: £2.9m) in relation to the restructuring of the A&I Established business, including:

    - £1.1m (2022: £nil) loss on disposal of non-current assets and related decommissioning costs.

    - £0.2m of property exit costs (2022: £0.9m).

    - £1.0m (2022: £0.1m) of other costs in relation to the transformation of the A&I business, including the cost of contractors and other external fees, in addition to £2.4m of associated redundancy costs (2022: £2.3m, less £0.4m prior year credit).

  This activity concluded in the current year.

- £1.5m (2022: £1.0m) in relation to the Rail and EE business. The current and prior year costs have been paid in the current year. This reflects the result of a significant review of the operational structure of the business, aimed at creating a more flexible and agile business, as the teams move towards working together as a combined Clean Energy and Environmental Services business. Costs incurred related to the exit of a number of senior positions in the organisation, including associated legal and external fees.

  This activity concluded in the current year.

- £0.2m of central costs were incurred in relation to the restructuring of the Group. Future costs will be expected as part of the functional alignment across the Group.

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

As a result of an IFRS Interpretations Committee (IFRIC) decision in March 2021, £0.6m of external costs incurred in the year ended 30 June 2022 in relation to the implementation of a new cloud-based ERP system within the PP segment were expensed in the comparative year. These costs were previously capitalised in line with prevailing practice at the time the costs were incurred. They have been classified as a specific adjusting item as they are not reflective of the underlying performance of the business in the year. The ERP system is expected to be utilised by the Group for at least five years.

Disposal of discontinued operation

During the current year, a gain on the disposal of the discontinued Software business of £7.4m was recognised (see Note 2). In the prior year, £1.3m of external fees related to the efforts to sell this business were recognised.

6. Earnings per share

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

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

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

There are no potentially dilutive shares (2022: Nil).

	2023 £m	2022 £m
(Loss)/earnings attributable to owners of the parent	**(5.4)**	8.6
Add back the net-of-tax impact of:		
- Amortisation of acquired intangibles	**3.5**	3.2
- Acquisition-related expenditure	**6.2**	0.8
- Asset purchases and disposals	**-**	0.3
- Other reorganisation costs and impairment	**22.9**	4.9
- ERP implementation costs	**-**	0.5
- Revaluation gain	**-**	(0.2)
- Discontinued operations	**(6.4)**	1.3
Underlying earnings attributable to owners of the parent	**20.8**	19.4

	2023 Number of shares millions	2022 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

(Loss)/earnings per share	2023 pence	2022 pence
Basic	**(8.7)**	13.8
Diluted	**(8.7)**	13.8

Underlying earnings per share	2023 pence	2022 pence
Basic	**33.4**	31.2
Diluted	**33.4**	31.2

(Loss)/earnings per share from continuing operations	2023 pence	2022 pence
Basic	**(19.3)**	13.2
Diluted	**(19.3)**	13.2

Earnings per share from discontinued operation	2023 pence	2022 pence
Basic	**10.9**	0.6
Diluted	**10.9**	0.6

7. Dividends

	2023	2022
	£m	£m
Final dividend for prior period: 7.49p per share (2022: 5.11p) per share	**4.6**	3.2
Interim dividend for current period: 3.35p per share (2022: 2.91p) per share	**2.1**	1.8
Equity dividends paid	**6.7**	5.0

On 6 September 2023 the Directors declared a final dividend of 8.61p per share, which will be paid gross on 24 November 2023 to holders of ordinary shares on the Company's register of members on 3 November 2023.

8. Acquisitions

The revenue for the Group for the current year would have been £6.5m higher and the loss for the year reduced by £0.9m if the acquisition date for the business combinations in Note 14(a) and (b) had been 1 July 2022.

a) Acquisition in the year to 30 June 2023 – Aither

On 10 March 2023, the Group acquired 90% of the issued share capital of Aither Pty Ltd (Aither), a leading Australian water and natural-resources advisory consultancy. The commitment to purchase the remaining amount gives rise to a financial liability (see below), therefore no non-controlling interest is recognised for the remaining 10% shareholding. Total amounts potentially payable in relation to the acquisition include the following:

- Initial cash consideration of £9.4m (AUD 17.2m), which includes an adjustment for cash and normalised net working capital of £0.1m (AUD 0.1m), paid in March 2023 and June 2023 respectively.
- An earn-out agreement based on the earnings before tax, depreciation and amortisation (EBITDA) for the ten months ended 31 December 2023 comprising two elements:
  - 90% earn-out payment to the vendors of the business, if they remain employed by the business at the earnout date.
  - 10% earn-out bonus to staff employed by the business from completion date and throughout the earnout period.

  This amount is considered to represent post-combination remuneration, in line with IFRS 3. The minimum value of this payment is nil and the maximum is £7.7m (AUD 14.7m).
  An expense of £3.1m has been recognised in the current year in respect of this post-combination remuneration, based on expected EBITDA for the period ended 31 December 2023.
- The purchase of the remaining 10% of share capital is expected to take place on the third anniversary of the acquisition, or the second anniversary by mutual agreement.
  - An amount of £0.8m (AUD 1.6m), with a present value of £0.6m (AUD 1.2m), is not linked to the continuing employment of the vendors or other performance conditions and has been treated as deferred consideration
  - A further amount is based on the EBITDA of the most recently completed 12 months ended 31 December at the second-tranche purchase date. The minimum undiscounted value of this payment is £1.1m (AUD 2m) and the maximum is £4.6m (AUD 8.8m). This payment is linked to continuing employment of the vendor, and does not form part of the business combination and is considered to represent post-combination remuneration. An expense of £0.1m has been recognised in the current year in respect of this post-combination remuneration, based on expected EBITDA for the period ended 31 December 2025, and a discount rate of 12.8%.

The following table sets out the fair value of cash consideration payable to acquire Aither, together with the fair value of net assets acquired.

	Note	£m
Fair value of consideration		
Cash consideration		**9.4**
Deferred consideration		**0.6**
Total fair value of consideration		**10.0**
Fair value of identifiable net assets acquired		
Customer contracts		**5.9**
Property, plant and equipment - Right-of-use		**0.5**
Trade, contract and other receivables		**1.2**
Cash and cash equivalents		**0.6**
Lease liability		**(0.5)**
Trade, contract and other payables		**(1.0)**
Deferred tax liabilities		**(1.8)**
Fair value of identifiable net assets acquired		**4.9**
Goodwill	*9*	**5.1**
Total fair value of consideration		**10.0**

The fair value of the identifiable net assets acquired were identified in accordance with the requirements of IFRS 3 Business Combinations and the sale and purchase agreement. The net assets acquired included trade receivables with a gross and fair value of £1.2m (AUD 2.2m), all of which are expected to be collected.

Adjustments have been made for the recognition of customer-related intangible assets separable from goodwill amounting to £5.9m (AUD 10.7m), measured under the multi-period excess earnings method. The initial fair value reflects the discounted value of estimated cash flows arising from revenues from customer contracts and relationships, and reflects management's estimate of future performance at the point of acquisition. As the fair value of customer contracts and relationships is based on unobservable inputs, and the projected outcome is classified as a level 3 fair value estimate under the IFRS fair value hierarchy. Key assumptions included in the calculation of the valuation of the asset include the estimated revenues and associated EBITDA margin, the weighted average cost of capital used of 12.8%, as well as the rate of customer attrition over time. The valuation is sensitive to these assumptions, If revenues or EBITDA margin included in the valuation calculation were decreased, the weighted average cost of capital increased, or customer attrition accelerated, the valuation of the customer contracts intangible assets would be lower. The expected useful economic life of the asset is seven years. If the useful economic life was reduced, the amortisation charge for the year would be increased proportionately.

Goodwill arising on acquisition is considered to relate to the existence of a skilled assembled workforce, including skilled water-management consultants, developed expertise and processes, alongside synergies and growth opportunities in the water management-sector which can be achieved with the existing Energy and Environment operating business. These do not meet the criteria for recognition as intangible assets separable from goodwill. Goodwill is considered to benefit the entire Energy & Environment operating segment and therefore it is not considered possible to be allocated on a non-arbitrary basis below this level. None of the goodwill recognised on consolidation is expected to be deductible for tax purposes.

£0.3m of external fees in relations to the acquisition were included in specific adjusting items during the year (see Note 5). £2.7m of revenue and £0.1m profit after tax is included in the consolidated statement of comprehensive income in the current year in relation to Aither.

b) Acquisition in the year to 30 June 2023 – E3M

On 24 January 2023, the Group acquired 93% of the issued share capital of E3-Modelling S.A (E3M), an Energy and Environment consulting company based in Athens. The commitment to purchase the remaining amount gives rise to a financial liability, no non-controlling interest is recognised for the remaining 7% shareholding. Total amounts potentially payable in relation to the acquisition include the following:

- Initial cash consideration of £19.2m (EUR 21.9m), which includes an adjustment for cash and normalised net working capital of £0.2m (EUR 0.2m), paid in January 2023 and June 2023 respectively.
- An earn-out agreement based on the earnings before tax, depreciation and amortisation (EBITDA) for the twelve months ended 31 December 2023. This amount is considered to represent post-combination remuneration, in line with IFRS 3. The minimum value of this payment is nil and the maximum is £4.8m (EUR 5.4m).

An expense of £0.9m has been recognised in the current year in respect of this post-combination remuneration, based on expected EBITDA for the period ended 31 December 2023.

- The purchase of the remaining 7% of share capital is expected to take place in January 2026.
  - An amount of £0.9m (EUR 1.0m), with a present value of £0.6m (EUR 0.7m), is not linked to the continuing employment of the vendors or other performance conditions and has been treated as deferred consideration.
  - A further amount is contingent on the EBITDA for the 12 months ended 31 December 2025. The minimum undiscounted value of this payment is £0.9m (EUR 1.0m) and the amount is uncapped, This payment is linked to continuing employment of the vendor, and does not form part of the business combination and is considered to represent post-combination remuneration. An expense of £0.1m has been recognised in the current year in respect of this post-combination remuneration, based on expected EBITDA for the period ended 31 December 2025, and a discount rate of 15.2%.

The following table sets out the fair value of cash consideration payable to acquire E3M, together with the fair value of net assets acquired.

	Note	**£m**
Fair value of cash consideration		
Cash consideration		**19.2**
Deferred consideration		**0.6**
Total fair value of consideration		**19.8**
Fair value of identifiable net assets acquired		
Software and technology		**12.5**
Property, plant and equipment		**0.1**
Trade, contract and other receivables		**0.8**
Cash and cash equivalents		**3.6**
Trade, contract and other payables		**(2.7)**
Deferred tax liabilities		**(3.0)**
Fair value of identifiable net assets acquired		**11.3**
Goodwill	*9*	**8.5**
Total fair value of consideration		**19.8**

The fair value of the identifiable net assets acquired were identified in accordance with the requirements of IFRS 3 Business Combinations and the sale and purchase agreement. The net assets acquired included trade receivables with a gross and fair value of £0.8m (EUR 0.9m), all of which are expected to be collected.

Adjustments have been made for the recognition of modelling-tool related intangible assets separable from goodwill amounting to £12.5m (EUR 14.3m), measured under the multi-period excess earnings method. The initial fair value reflects the discounted value of estimated cash flows arising from revenues from the use of the model, and reflects management's estimate of future performance at the point of acquisition. As the fair value of modelling tools is based on these unobservable inputs, and the projected outcome is classified as a level 3 fair value estimate under the IFRS fair value hierarchy. Key assumptions included in the calculation of the valuation of the asset include the estimated revenues and associated operating expenses, the weighted average cost of capital used of 15.2%, as well as the ten-year period over which revenues are expected to occur. The valuation is sensitive to these assumptions, If revenues in the calculation of the valuation were decreased, operating expenses increased, the weighted average cost of capital increases, or the revenues maintained for a shorter period of time, the valuation of the modelling-tool would be lower. The expected useful economic life of the asset is ten years. If the useful economic life was reduced, the amortisation charge for the year would be increased proportionately.

Goodwill arising on acquisition is considered to relate to the existence of a skilled assembled workforce, including skilled consultants with expertise in digital modelling, alongside synergies and growth opportunities in the European energy and environment sector which can be achieved with the existing Energy and Environment operating business. These do not meet the criteria for recognition as intangible assets separable from goodwill. Goodwill is considered to benefit the entire Energy & Environment operating segment and therefore it is not considered possible to be allocated on a non-arbitrary basis below this level. None of these meet the criteria for recognition as intangible assets separable from goodwill. None of the goodwill recognised on consolidation is expected to be deductible for tax purposes.

£0.1m of external fees in relation to the acquisition were included in specific adjusting items during the year (see Note 5).

£2.0m of revenue and £0.1m profit after tax is included in the consolidated statement of comprehensive income in the current year in relation to E3M.

9. Goodwill and impairment of non-financial assets

Movement in goodwill	Note	2023 £m	2022 £m
At 1 July		**90.6**	84.7
Acquisition of business(1)	8	**13.6**	3.8
Impairment(2)		**(5.2)**	-
Exchange adjustments		**(2.9)**	2.1
At 30 June		**96.1**	90.6

The carrying value of goodwill and the key assumptions used in determining the recoverable amount of each CGU, or group of CGUs, are as follows:

	Carrying value		Pre-tax discount rate		Long-term growth rate	
	2023	2022	**2023**	2022	**2023**	2022
	£m	£m	**£m**	£m	**£m**	£m
Rail	**44.4**	46.2	**13.5%**	12.3%	**2.9%**	3.1%
Automotive and Industrial - Established(2)	**-**	5.0	**14.9%**	13.0%	**(10.0%)**	(10.0%)
Automotive and Industrial - Emerging	**14.4**	14.6	**14.9%**	13.0%	**3.9%**	3.0%
Energy and Environment(1)	**32.7**	20.0	**16.9%**	13.8%	**4.0%**	2.8%
Defense	**3.5**	3.7	**14.0%**	13.8%	**3.3%**	-
Performance Products	**1.1**	1.1	**15.9%**	14.0%	**4.4%**	1.7%
At 30 June	**96.1**	90.6				

(1) As set out in further detail in Note 8(a) & (b), the Group acquired Aither and E3M during the current year, adding goodwill of £5.1m and £8.5m respectively to the Energy and Environment CGU. During the prior year, the Group acquired Inside Infrastructure, adding £3.8m of goodwill to the Energy and Environment CGU.

(2) At 31 December 2022, as required by IAS 36, an assessment was carried out to identify whether any indicators existed that the Goodwill balances held by the Group may be impaired. Due to a significantly more challenging performance than expected in the Automotive and Industrial – Established Mobility (A&I Established) segment, an indicator of impairment was considered to exist and the recoverable amount of the cash-generating unit (CGU) was estimated.

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 Established business decreased compared to those expected at 30 June 2022, and the carrying amount of the CGU was therefore determined to be higher than its recoverable value of nil. As a result, an impairment charge of £17.7m was recognised to administrative expenses within specific adjusting items for the A&I Established operating segment. This assessment was updated at 30 June 2023 and a further £1.0m of assets were impaired.

The £18.7m of assets written off include £5.2m of goodwill, £1.8m of intangible assets (primarily development costs, including calibration tools), and £11.7m 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.

	£m
Goodwill	**5.2**
Other intangible assets	**1.8**
Property, plant and equipment	**11.7**
Total impairment	**18.7**

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, and no further impairment was recognised.

Key assumptions

The five-year plan and discounted cash flow calculations thereon are used to calculate a value in use which is compared to the carrying value of the goodwill and other non-financial assets allocated to each CGU, or group of CGUs at 30 June 2023. Impairment was recognised in relation to A&I Established (see above). No other impairment was considered necessary (2022: Nil). The five-year cashflow forecasts are based on the budget for the following year (year one) and the business plans for years two to five. The five-year plan is prepared by management, and is reviewed and approved by the Board. The five-year 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*.

The risks associated with climate change which have been incorporated into the five-year planning process include the known and expected increased regulation in relation the use of the internal combustion engine (ICE) and the impact that will have on our customers operating in this market. The five-year planning process takes into account the requirement to adapt our product and service portfolios in response to megatrends influenced by climate change. Some risks, such as the risk of sea level rise (see discussion of Principal Risks on page 104 of the Annual Report) are expected to arise outside of the timeline of the five-year plan and are not considered sufficiently quantifiable to include in the longer-term element of the value-in-use calculation. No other individually significant key financial risks or expenditures have been identified and any additional costs of meeting our net zero objective are not expected to be significant. Due to regulatory and other changes in the market relating to ICE, a long-term decrease of 10% p.a. has been applied to established mobility cashflows.

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.

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.

Research and Development Expenditure Credits (RDEC) cashflows are included in the value-in-use calculations for A&I - Established, A&I - Emerging, Performance Products and Energy and Environment. They are material to the A&I Established and A&I Emerging groups of CGUs and have been included, taking into account known changes to legislation, on the basis that there is no indication that the UK government will withdraw this benefit.

Sensitivities

The value-in-use calculations were assessed for sensitivity to reasonably possible changes to assumptions. The change in pre-tax discount rate, growth rate, operating profit and working capital which would cause the unit's (or group of units') carrying amount to exceed its recoverable amount was identified and an assessment made as to whether that change was considered reasonably possible. In addition, a scenario was modelled for each of a 10% reduction in operating profit, a 10% increase in working capital movement, a 2% increase in the pre-tax discount rate and a 2% decrease in the long-term growth rate, and a scenario with each of these changes combined.

The following reasonably possible scenarios, resulting in carrying amount exceeding the recoverable amount of goodwill, were identified:

- The Rail group of CGUs recoverable value exceeds its carrying value by £6.7m
    - An increase in the pre-tax discount rate of 1.0% would result in the carrying value of the Rail groups of CGUs to exceed its recoverable value.
    - A decrease in the long-term growth rate of 1.1% would result in the carrying value of the Rail groups of CGUs to exceed its recoverable value.
    - A decrease in operating profit 6% would result in the carrying value of the Rail groups of CGUs to exceed its recoverable value.
- The Performance Products CGU recoverable value exceeds its carrying value by £8.5m
    - A reduction in operating profit of 9% would result in the carrying value of performance products CGU exceeding its recoverable value.

No other reasonably possible changes to individual assumptions were identified which would cause the carrying amount of a unit's (or group of units') goodwill to exceed its recoverable amount.

10. Net debt and borrowings

The objectives when managing capital are to safeguard the ability to continue as a going concern in order to provide returns for shareholders, benefits for other stakeholders and to maintain an optimal capital structure to reduce the cost of capital. Capital is monitored on the basis of the gearing ratio, which is calculated as net debt divided by total capital.

The majority of the Group's cash is held in bank deposits. The Group's sources of borrowing for funding and liquidity purposes come from the Group's £150.0m multi-currency revolving credit facility and through short-term overdraft facilities.

The disclosures in this Note include certain Alternative Performance Measures (APMs). For more information on the APMs used by the Group, including definitions, please refer to Note 1.

a) Gearing ratio

	2023 £m	2022 £m
Net debt	**62.1**	**35.4**
Total equity	**176.6**	**197.6**
Total capital	**238.7**	**233.0**
At 30 June	**26.0%**	**15.2%**

b) Net debt

Analysis of net debt	**2023** **£m**	2022 £m
Current assets - cash and cash equivalents		
Cash and cash equivalents	**49.8**	49.4
Cash included in disposal group held-for-sale	**-**	1.1
Total cash and cash equivalents	**49.8**	50.5
Current liabilities - borrowings		
Bank overdrafts repayable on demand	**(12.6)**	(11.1)
Hire purchase liabilities maturing within one year	**(0.1)**	(0.1)
Total current borrowings	**(12.7)**	(11.2)
Non-current liabilities - borrowings		
Hire purchase liabilities maturing after one year	**-**	(0.2)
Bank loans maturing after one year	**(99.2)**	(74.5)
Total non-current borrowings	**(99.2)**	(74.7)
At 30 June	**(62.1)**	(35.4)
Total cash and cash equivalents at 30 June	**49.8**	50.5
Total borrowings at 30 June	**(111.9)**	(85.9)
At 30 June	**(62.1)**	(35.4)

Movement in net debt	**2023** **£m**	2022 £m
At 1 July	**(35.4)**	(46.9)
Net (decrease)/increase in cash and cash equivalents and bank overdrafts	**(2.2)**	10.1
Repayments of hire purchase	**0.2**	0.1
Proceeds from bank loans	**(128.0)**	(13.0)
Repayments of bank loans	**103.0**	15.0
Amortisation of bank loan fees	**0.3**	(0.7)
At 30 June	**(62.1)**	(35.4)

At the year-end, the Group had current hire-purchase liabilities of £0.1m and non-current hire-purchase liabilities of £nil. This hire-purchase agreement has an implicit rate of interest of 2.4%. The future undiscounted minimum lease payments due within one year is £0.1m and due after one year is £nil.

At the year-end, the Group held total banking facilities of £166.1m (2022: £216.8m), which included committed facilities of £150.0m (2022: £200.0m). The committed facility consists of a £150.0m multi-currency Revolving Credit Facility (RCF) which provides the Group with committed funding through to July 2026. In addition, the Group has uncommitted facilities including overdrafts of £16.1m (2022: £16.8m), which mature throughout this and the next financial year and are renewable annually.

Non-current bank loans comprise committed facilities of £99.2m (2022: £74.5m), 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 (2022: 1.4% to 2.2% above SONIA).

Adjusted leverage is defined in the Group’s banking documents as being the ratio of total net debt to adjusted EBITDA. Adjusted EBITDA is further defined as being earnings before interest, tax, depreciation, impairment and amortisation, excluding the impact of IFRS 16, adjusted for any one-off, non-recurring, exceptional costs and acquisitions or disposals during the relevant period. At the reporting date, the Group has an adjusted leverage of 1.4x, which attracts a rate of interest of SONIA plus 1.85% (2022: SONIA plus 1.65%). 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 financial statements.

11. Contingent liabilities

In the ordinary course of business, the Group has £13.4m (2022: £11.4m) of possible obligations for bonds, guarantees and counter-indemnities placed with the Group’s banking and other financial institutions and 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 employers' liability were a debt to arise under Section 75 of the Pensions Act 1995. In November 2021 the guarantee was extended for a further 3 years and will now 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.