

Leadership and innovation in engineering and technology

Building a platform for growth

Having invested in our Group product range, capability, leadership and new product development and leveraging our existing core strategy and technologies, the Group has delivered a strong set of results, and continues to build solid foundations as a platform for growth and long-term sustainability.

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Discover more at abdynamics.com

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Highlights of 2022

Strong strategic progress and financial performance

Operational highlights

- Whilst the current macroeconomic operating environment still presents challenges in relation to supply chain disruption, the Group has been successful in delivering output and mitigating inflationary cost pressures through price increases for new orders
- Revenue increased by 23% with the recovery of sales to China and the full year's contribution of VadoTech. Organic revenue increased by 18%
- Further progress made on the implementation of strategic initiatives targeting diversification alongside the established pillars and opening up new markets beyond automotive through the launch of ABD Solutions
- ABD Solutions was awarded its first development contract by an industrial equipment supplier in Japan for a driverless retrofit solution for mining vehicles

- New product development continued in line with our technology roadmap for existing track testing and simulation markets and development of the core technology for ABD Solutions. Along with the successful launch of our new range of ADAS dummies, the full AB Dynamics LaunchPad product range and GST 120 have now been certified for use in Euro NCAP testing
- VadoTech Group has been successfully integrated into the Group and delivered a solid performance since it was acquired in March 2021
- Growth in percentage of Group's recurring revenue to 41%, up from 35%, enhanced by the strengthening of the APAC regional footprint
- Post-year-end acquisition of Ansible Motion and the creation of a new market-facing business unit, AB Simulation, enhances the Group's simulation capabilities, expands its simulator product range and achieves critical mass in this attractive sector

Financial highlights

Revenue

£80.3m +23%

(2021: £65.4m)

EBITDA

£16.4m +21%

Adjusted* operating profit

£12.7m +18% (2021: £10.8m)

Adjusted* operating margin

15.8% -80 bps

(2021: 16.6%)

Net cash

£29.2m

(2021: £22.3m)

Adjusted* diluted earnings per share (EPS)

44.5p +19% (2021: 37.4p)

Dividend per share

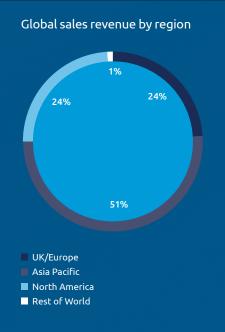
5.3p +109 (2021: 4.8p)

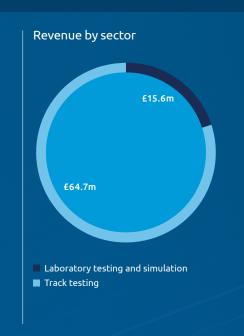
 Adjusted to exclude amortisation of acquired intangibles, acquisition related charges and exceptional items. All profit and earnings per share figures going forward refer to adjusted business performance as defined on page 28 with a reconciliation to statutory measures.

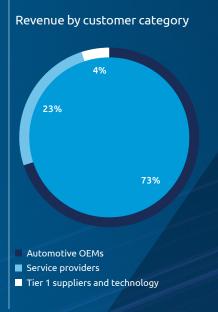
At a glance

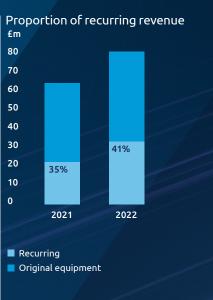
Developing our business











At a glance continued

Track testing

Track testing products and services represent 81% of total Group revenue. The products are used for the test and verification of Advanced Driver Assistance Systems (ADAS), autonomous systems and vehicle dynamics. Test vehicles and ADAS platforms, such as the Guided Soft Target (GST) and LaunchPad, are controlled using complex control software for accurate control and synchronisation of multiple test objects.

This enables our customers to conduct complex, multi-object test scenarios with a simple-to-use software interface to satisfy internal or external regulatory test requirements.

The Group also provides testing services including the provision of ADAS and vehicle dynamics tests through a comprehensive test facility based in California, USA. Following the acquisition of VadoTech, the Group also offers on-road testing services, with operations in China and Japan.

Revenue

£64.7m

Read more about our track testing page 20



Laboratory testing and simulation

Laboratory testing and simulation represents 19% of total Group revenue and includes products relating to simulation, noise and vibration and the assessment of kinematics and compliance in vehicles; and simulation software. These products are used to evaluate vehicle dynamics, noise, vibration and harshness and ADAS across a wide range of applications including conventional vehicles, motorsport and automated vehicles.

Our simulator products along with our market-leading physics based simulation software reduce new vehicle development timescales by allowing meaningful testing earlier in the development process which form the core of our new market-facing business unit, AB Simulation. The use of simulation reduces new vehicle development timescales by allowing meaningful evaluation earlier in the development process.

Revenue

£15.6m

Read more about our laboratory testing and simulation page 23

Delivering a stronger business

As we expand our portfolio of products and services, we are reducing our reliance on specific market sectors and geographic territories. Continued progress in developing our service and support offering through both organic and acquisitive growth has increased the proportion of recurring and service-based revenue.

The launch of ABD Solutions in the prior year and the formation of AB Simulation enables us to drive growth in core and adjacent markets, and our investment in skills, capacity and leadership ensures we have a platform for sustainable long-term growth. ABD Solutions leverages the core technologies of AB Dynamics into new adjacent markets where the customer is the end user of the equipment, developing solutions to automate vehicle applications specifically in the mining, defence and agriculture sectors.

In the current year AB Simulation has been formed as a market-facing business unit focusing on the supply of advanced simulation products and services to the automotive and motorsport industries. This brings together the Group's existing simulators and simulation business as well as the recently acquired Ansible Motion as a coherent unit with critical mass in this attractive market.

How we are evolving

Investing for the future

Along with investing in new product development in our core and adjacent markets, we have invested in capabilities in terms of talent and leadership and built a solid foundation as a platform for sustainable long-term growth.

Our investment case page 5



Acquisition of Ansible Motion

The post-year-end acquisition of Ansible Motion has strengthened the Group's product range, capability and customer base, providing critical mass to the new AB Simulation business unit through the addition of talented employees, premium products and leading R&D capabilities.

▶ Read more on page 16



ESG evolution

Our ESG strategy has developed significantly over the last financial year and continues to be a strategic priority for the Group. This has resulted in our MSCI ESG rating improving to AA and we aim to develop this further in 2023.

Read more on page 34

ABD Solutions

Since the launch of ABD Solutions at the end of the previous financial year, the team has successfully developed the core modular technology required for our targeted areas of penetration and has been successful in winning funded R&D from a major Japanese mining customer. We are also working with a mining customer based in Greenland.

▶ Our investment case page 5



Investing in our people

We have a growing number of staff members and the Group has focused on development and employee engagement. This year we launched a Professional Development Programme for a selection of employees, we also saw a 70% increase in the amount of training hours undertaken by the Group to equip our staff with the training required to support their career development aspirations.

Hours of training 5.767

Read more on page 41



Investment case

Why invest in AB Dynamics

With a track record of revenue growth and strong margins, we deliver sustainable value for our stakeholders through our market-leading engineered products and services. Our strong cash generation and clear capital allocation framework enables us to invest for future growth.



1

Structural and regulatory growth drivers across all our markets

- We are a leader in structural long-term growth markets, supported by favourable regulatory environments and global focus on active safety and autonomous systems development
- Our offering spans both physical and simulated testing across ADAS, autonomous vehicle R&D and vehicle testing
- We are using our core technology portfolio to leverage adjacent markets including mining, defence, materials handling and agriculture
- We have a global presence and diverse geographic end markets, including a new Asia Pacific divisional operating hub
- The proportion of recurring revenue continues to grow as we increase our service and support offering and software sales
- Read more about our markets page 8

2

Highly resilient business solving customers' sustainability challenges

- The wider focus on road safety and reduction in accidents as well as the focus on electric vehicle and battery technology is an important long-term trend that will support continued growth
- The resilience of our business model has enabled us to continue to invest in the business and grow revenue despite the COVID-19 pandemic and recent macroeconomic challenges
- We actively focus on the wellbeing of our workforce through a strong health and safety culture and employee engagement and assistance
- Our global, diversified customer base provides resilience.
 With direct sales and support facilities in the UK, Germany,
 Japan and the USA and indirect sales channels in all other key customer territories, we are well placed to deliver support where our customers need it
- Read more in our Chief Executive Officer's review page 16

3

Strong margins with clear strategy for expansion

- Differentiated products and strong, long-term relationships with customers underpin strong margins
- Continued investment in innovation to deliver differentiated products to drive strong gross margins
- Ability to increase prices enables maintenance of gross margins during inflationary periods
- Current investment in ABD Solutions impacts overheads and margins during the pre-revenue phase. Margin expansion will be delivered once this new business unit delivers positive contribution
- Investment in people, business systems and capacity will deliver future efficiencies and margin expansion

4

Highly cash generative with clear capital allocation framework

- Our strong cash generation enables us to fund ongoing investment in organic growth across our core markets and ABD Solutions, to strengthen business infrastructure for the next phase of expansion and to fund acquisitions
- Our capital allocation priorities are: investment in innovation to grow core business; investment in ABD Solutions; bolt-on acquisitions; and our progressive dividend policy

Read more in our Chief Financial Officer's review page 26 Read more about our capital allocation framework on 29

Chairman's statement

Strengthening our platform for growth



Richard (Dick) Elsy CBE, Non-Executive Chairman

Highlights

- Continued investment in new product development in our core markets
- Good progress made by ABD Solutions
- Post-year-end acquisition of Ansible Motion strengthens our simulation offering

Overview

I am pleased to report a year of very positive financial and strategic performance for the Group.

Following on from our strong set of results in the first half of the year, the Group continued to build on the strategic priorities and focus on building a sustainable and resilient business. Overall results for the year showed revenue growth of 23% to £80.3m, organic growth of 18%, and an 18% increase in operating profit to £12.7m, predominantly due to growth in track testing products and services.

The Group continued to invest in the core automotive sector, which is characterised by strong regulatory and structural growth drivers. At the same time, we have seen good progress in our strategy to diversify the business and provide the foundations for continued growth. To support this growth and diversification the Group invested in ongoing professionalisation, in senior leadership talent and in the development of our Group-wide ERP system.

ABD Solutions has made good progress, successfully proving the concept of retrofitting existing technologies to enable the automation of conventional vehicle fleets. This has resulted in winning R&D funding from a major Japanese mining customer.

The acquisition of Ansible Motion shortly after the year end expands our capability in the key simulation sector and I am pleased to welcome the employees of Ansible Motion to the AB Dynamics family.

Our strategy and the detailed financial results are covered in the Chief Executive Officer's review on pages 16 to 18 and in the Chief Financial Officer's review on pages 26 to 29.

Employees

I would like to take this opportunity to thank our global team of hard working and committed employees who have all contributed to a successful year, responding to changing demands and adapting to changing work patterns as the Group navigates the current supply chain and wider macroeconomic issues. The Group attracts talent at all levels within the business and continues to invest in training all the way through from apprentices to graduates and continuing professional development.

The Group has grown strongly in recent years, and we now have around 434 employees, with around half located in the UK. The Board takes our responsibility towards employee engagement and development seriously and during the year launched a Professional Development Programme for emerging talent to develop our future leaders. In parallel, the Group continued the rolling process of employee engagement surveys, the results of which are used to continuously develop and improve our employee experience.

Investments

The acquisition of Ansible Motion and the establishment of a new market-facing business unit, AB Simulation, will continue to drive the Group strategy forward in order to deliver sustainable growth. Other investments included continued new product development, progress in the implementation of our ERP system and investment in ABD Solutions.

Chairman's statement continued

ESG

I am pleased to report that the hard work and determination by the members of the ESG Committee and wider staff have delivered rapid progress on our ESG strategy, resulting in an improvement in our MSCI ESG rating to AA. The Board is committed to ongoing improvements in all aspects of ESG. Further information on our approach to ESG can be found on pages 34 to 51 and the activities of the ESG Committee are summarised on page 81.

Corporate governance

Strong corporate governance and risk management is an essential element of the Board's activities and is key to ensuring ongoing stability and growth of the Group. I am pleased to confirm that AB Dynamics plc is in compliance with the Quoted Companies Alliance (QCA) Code as required under the AIM Rules. The Board takes into consideration feedback provided by various ratings agencies in setting policies and in developing our ESG strategy as part of our continuous improvement in corporate governance. I report separately on the Group's approach to governance and its procedures in the Statement of corporate governance, which can be found on pages 66 to 76.

Dividend

Based on the strong financial performance and the Board's confidence in continued growth and delivery in 2023, the Board is recommending a final dividend of 3.54p per share payable on 27 January 2023 subject to shareholder approval at the AGM. The ex-dividend date will be 29 December 2022 and the record date will be 30 December 2022. The total dividend for the year will therefore be 5.3p per share, which is an increase over the prior year of 10%, continuing the Board's progressive dividend policy.

Outlook

AB Dynamics operates within markets that are supported by long-term regulatory and structural growth drivers in automotive and holds an enviable position in the sectors in which it operates. These market growth drivers, coupled with the ongoing investments in all areas of the business, provide the Board with strong confidence that the outlook remains positive.

Our continued strategic clarity and ongoing investments provide a strong platform for future growth and the Board remains confident in delivering continued progress in the forthcoming year.

Richard Elsy CBE

Chairman 23 November 2022



Vision and values

Last year, a working committee was established by employees to independently create and develop their own vision and values for the business with the support of an external facilitator. These values reflect the organisation's aspirations for appropriate workplace behaviour, help people at all levels focus on what's important and play an important role in building a positive culture. These values are:

Customers People

Diversity Innovation

Excellence Responsibility

Since these values were created they have been well-established across the business and are displayed proudly and prominently in the headquarters and across our international operations.

Critically, these values are now embedded into the recruitment process to ensure that our new hires' values are aligned with the Group's. We are also encouraging the leaders within the business to openly discuss them with our people as part of the performance review process to make sure that their targets are in line with our values.

▶ Read more on page 38

Our markets and strategy

Our mission is to accelerate our customers' drive towards net zero emissions, improving road safety and the automation of vehicle applications.

Road safety

Structural drivers

The automotive sector continues to evolve and adapt to the structural and regulatory changes driving rapid unprecedented change. The global challenge of climate change is driving strong demand for the acceleration of the implementation of electric vehicles and the ongoing societal need for improvements in road safety is driving the development of ADAS and increasing levels of autonomous systems.

Continued emergence of new entrants into the automotive market, particularly in electric vehicles and autonomy, has placed additional pressures on traditional automotive OEMs to rapidly develop new technologies. Therefore, the sector remains heavily focused on R&D in the following key areas:

- · Active safety and ADAS systems
- Autonomy and increasingly automated driving functions
- Electric vehicle and battery technology

The growing use of simulation is accelerating the efficiency and speed of development, allowing customers to test in a virtual environment.

These clear market drivers align with the mission and ESG aims of AB Dynamics to assist the sector to improve road safety and aid the global drive towards net zero emissions. The development of ADAS systems has already led to significant improvements in road safety in Europe, the USA and Japan. As these technologies are implemented and regulated in low- and middle-income countries, this will ultimately significantly reduce the estimated 1.35m road deaths globally per year with pedestrians, cyclists and motorcyclists making up more than half of all road deaths.

Link to strategy













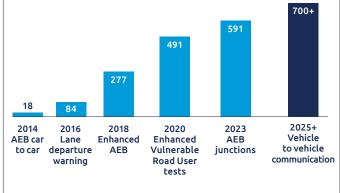
Regulatory drivers

The market for ADAS and active safety continues to be driven by regulation and consumer-facing safety organisations such as European New Car Assessment Programme (Euro NCAP).

In order to receive an NCAP safety rating, vehicles must pass an increasing number of tests. These tests will drive demand for our products.

In 2014 the number of ADAS test scenarios performed for Euro NCAP ratings was 18: this has grown to in excess of 500. For the first time in 2023 Euro NCAP will introduce new tests designed to reward vehicle systems that protect motorcyclists. The test scenarios include collision with the rear of a motorcycle braking in queuing traffic, detection of a motorcycle in a vehicle's blind spot, and junction scenarios where an inattentive driver may turn in front of an oncoming motorcycle.

Furo NCAP test scenarios



Link to strategy





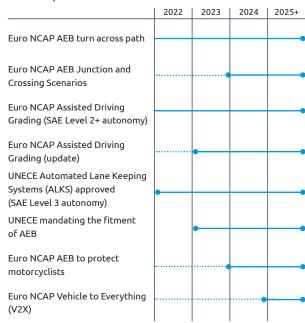




New 2022 regulations which have come into force which all vehicle manufacturers must meet to sell their vehicles in the United Kingdom and Europe. In its first phase Automatic Emergency Braking (AEB) has been mandated on newly introduced car and van models, while a second phase, to be implemented in July 2024, extends this requirement to all vehicle registrations in these classes. The regulations also include emergency lane keeping for cars and vans. Blind Spot Information Systems and Moving Off Information Systems for certain vehicle classes.

Euro NCAP test scenarios (growth since 2014)

Roadmap 2022-2025



Our markets and strategy continued

Regulatory drivers continued

Euro NCAP test scenarios (growth since 2014) continued The accompanying legislation also gives new powers for market surveillance authorities to monitor real-world performance of these systems. Importantly, the authority is not limited to carrying out the specific tests defined by the type approval regulations, they can test for broader requirements. This means that vehicle manufacturers must meet the wider requirements of the regulation and not just pass the specific tests. For ADAS based scenarios, this may include testing the vehicle at a variety of approach speeds, offsets, loading and lighting conditions, driving increased need for test equipment.

The growth in testing volume and complexity continues to drive demand for ADAS platforms and driving robots that are both more capable and more versatile. To recognise the need for new test tools, this year Euro NCAP updated its listing of equipment used in official testing to include AB Dynamics' latest and most capable platforms (LaunchPad 80 and GST 120).

In the USA, the National Highway Traffic and Safety Administration (NHTSA) operates a similar ratings scheme to Euro NCAP but functions as a government regulator. The US government has committed to improve road safety and has begun to mandate the use of ADAS to assist in reducing injuries and fatalities, with a particular focus on the upward trend in pedestrian injuries and fatalities in the USA over recent years.

Outside of the automotive sector, other industries such as mining, defence, agriculture and materials handling are increasingly seeking to automate vehicle applications to improve operational safety and/or increase productivity and efficiency.

Operational safety and vehicle efficiency are the market drivers for mining applications. Transport accounts for 40% of all accidents and 60% of all deaths in quarries. Mining has the potential to be the fastest growing market with forecast growth of approximately 50% compound annual growth rate. Demand for solutions to operational safety and efficiency risks is a clear market driver for vehicle applications, whilst also aligning with the strategic objectives of the Group.

ABD Solutions' mission is to make the route to autonomy faster, delivering retrofit solutions that drive safety and efficiency in existing fleets. Vehicle applications for the key addressable markets solve problems with labour shortages, human limitations, downtime and managing dangerous environments.

ABD Solutions' technology and expertise addresses the challenges faced by our customers to enhance safety, productivity, and utilisation. While realising cost reductions and increased productivity through fast, retrofit applications, tailored for specific environments and customer requirements.

Market size and growth rates

Road safety addressable market

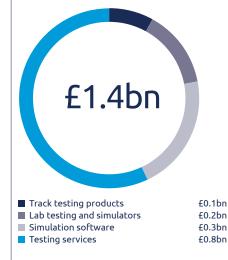
Based on data collated in 2021 the total addressable market size is approximately £1.4bn.

The largest single sector is testing services, where AB Dynamics operates through its testing facility in Bakersfield, USA, and on-road testing services through VadoTech in Asia Pacific. The core track testing products sector represents approximately £100m market size with strong growth in ADAS platforms offset by a more stable market for driving robots. The laboratory testing equipment and simulation market continues to grow and represents approximately £190m.

The focus on AB Simulation and acquisition of Ansible Motion enhances penetration in the attractive simulation sector.

Overall compound annual growth rate in the existing addressable market is forecast to be 16% over the next five years.

Road safety addressable market



Our markets and strategy continued

Vehicle applications

Market size and growth rates continued

Vehicle applications addressable market

With the introduction of ABD Solutions, our addressable market has increased significantly with large growth opportunities across our key target markets of mining, defence, agriculture and materials handling. Analysis of these specific markets shows a total addressable market size of £4.8bn and a compound annual growth rate over the next five years of 25%.

These four target markets can be sub-divided into those driven by operational safety (mining and defence) and those driven by productivity and efficiency (agriculture and materials handling). The markets can be further characterised by lower volume/higher price point (mining and defence) and higher volume/lower price point (agriculture and materials handling).

Mining has the potential to be the fastest growing market with forecast growth of approximately 50% compound annual growth rate (CAGR) based on assumptions around the global mining truck equipment population and rates of adoption of automated technologies. The anticipated growth is driven by the need to improve operational safety, removing the driver of large mining trucks from hazardous environments, and also protecting other personnel from accidents. In addition, the mining sector has high operating costs in terms of personnel due to the often remote and less hospitable locations.

The automated agriculture sector, specifically automated tractors, is forecast to grow at 24% CAGR as demands on arable land increase, low gross margins drive demand for cost reduction, and availability of operators is a specific problem in remote regions of developed countries.

Defence is forecast to grow at 16% CAGR over the cycle, driven by the need to improve operational safety and, where possible, remove armed forces personnel from certain hazardous operations such as route clearance, counter-IED and logistics in theatres of operation.

The materials handling market is diverse and covers a range of applications including warehousing, ports, and airport baggage handling, etc. The addressable market for automating these applications is forecast to grow at 14% CAGR and is driven by the need to reduce operating costs and improve efficiency.

Vehicle applications addressable market



Combined market size and growth

Overall, the combined market size of the existing AB Dynamics business, plus the addressable markets introduced through ABD Solutions, provides an overall addressable market of approximately £6.2bn, with a CAGR of 24% over the five-year cycle.

"Mining has the potential to be the fastest growing market with forecast growth of approximately 50% compound annual growth rate (CAGR) based on assumptions around the global mining truck equipment population and rates of adoption of automated technologies."

Our markets and strategy continued

Delivering on our strategy

Progress has been made across all our strategic objectives, most notably diversification from the launch of ABD Solutions and growth through the acquisition of Ansible Motion.













Service and support Product and innovation Capability and capacity Acquisitive arowth Diversification International footprint Strategic objective Strategic objective Strategic objective Strategic objective Strategic objective Strategic objective Building a platform for long-term Transition towards a greater Increase the Group's international Market-led new product Clear and defined acquisition Diversification into new adjacent development with a focus on sustainable growth. criteria of value enhancing markets utilising the Group's core proportion of software as a source footprint in customer-led research and innovation. companies that facilitate the technology and capability. of higher margins and recurring locations to increase customer Group's strategic priorities. revenues meet the market's intimacy, customer support and needs as requirements become market intelligence. more complex. **Achievements Achievements Achievements Achievements** Achievements **Achievements** · LaunchPad 80 released to Recruitment of senior · Acquisition of Ansible Motion ABD Solutions has made strong Launch of AB Simulation, a new Successfully expanded to all the market management team into all strengthens our simulation progress successfully winning market-facing business unit to major customer regions required roles market position R&D funding from a Japanese meet the needs of a more LaunchPad 80 and GST 120 • The acquisition of Ansible Motion

• Soft Motorcycle 360 launched at the testing expo

Continued focus on capabilities

for ADAS testing requirements

as well as a continued effort in

developing leading physics based

simulation software. Sustainable

received full Euro NCAP

aVDS-HP launched

accreditation

Future outlook

revenue growth.

Future outlook

system in the UK

Foundations to support current and Further develop pipeline of future growth. Further develop pipeline of potential acquisition targets

Implementation and adoption of

several modules of the new ERP

Future outlook

Further develop pipeline of potential acquisition targets. Deliver further value enhancing acquisitions to support organic growth strategy delivery.

Future outlook

Continued development of core modular technologies required for a market focus on mining and defence.

Developed the core technology

mining customer as well as signing

a Memorandum of Understanding

agreement with a mining

operation in Greenland

Future outlook

Continue to focus on developing solutions which promote recurring revenue and meet the needs of a changing and complex market.

complex changing market

Future outlook

base globally

Continue to drive a direct sales channel model and increase customer intimacy.

increased the Group customer

AB Simulation

Strategic report

Building a platform for growth in simulation

Introduction

Building upon the strong simulator product growth within the core AB Dynamics business, the Group is pleased to announce the formation of AB Simulation, a market-facing business unit providing a dedicated and focused supply of advanced simulation products and services to the automotive and motorsport industries. The objective of this strategic development is to deliver growth through the consolidation of our existing expertise in simulation, broadening our portfolio of products and services, and acquiring and integrating complementary capabilities. The recent acquisition of Ansible Motion in September 2022 is a key part in delivering the AB Simulation strategy.

Market analysis

Significant industry growth is being driven by the need for automotive OEMs to reduce vehicle development timescales and costs by enabling meaningful virtual testing earlier in the development process, enabling the safe development of active safety and autonomous systems as a pre-cursor to physical testing, and to improve the quality of vehicle characteristics (i.e. ride, handling, ergonomics and NVH) by creating the link between virtual models and physical testing.

How will AB Simulation address these challenges?

Following the appointment of a dedicated Managing Director and Technical Director, AB Simulation is focused on the growth of the simulation business, leveraging the Group's capabilities to offer a complete simulation solution for the automotive sector.

It will bring together:

- The existing AB Dynamics simulator business responsible for the development and delivery of the Advanced Vehicle Driving Simulators (aVDS) product range which incorporates desktop, static and dynamic Driver-in-the-Loop (DIL) simulators
- rFpro, the market leader in the supply of engineering grade, physics based simulation software used in the development and testing of autonomous vehicles, ADAS, vehicle dynamics and human factor studies
- Ansible Motion Limited, an exciting recent acquisition of the Group based in Norfolk, which designs, manufactures, integrates and supports ground vehicle simulators for engineering use, with a global and complementary customer base

The benefits of the Ansible Motion acquisition include:

- Acquiring and eliminating a successful competitor in the simulator market
- Creating AB Simulation with critical mass, breadth of product offering and the capabilities and reach to compete globally
- A complementary customer list which broadens the customer portfolio to support future growth

How will AB Simulation address these challenges?

The formation of AB Simulation will significantly benefit customers by providing a broad range of products and services to enable the development of better and safer vehicles, more rapidly and more cost effectively and supplying complete end-to-end simulation solutions comprising hardware, software, application and use-case consultancy, training and aftermarket support.

The new simulation business unit will drive sustainable revenue growth by broadening the product range to capture a larger portion of the addressable market, improve project margins through the development of wholly owned intellectual property and achieve delivery excellence and customer satisfaction through the development of best practices in project management.

A new AB Simulation brand identity is being developed which will leverage the pedigree and reputation of the AB Dynamics Group and its global network of trusted partners is being created to provide credible product demonstrations and references in Europe, North America and Asia.

Together, the simulator products on page 13 will provide a broad set of options to the customer base and will generate improved margins.

rFpro, which provides the simulation software for the aVDS, Alpha, Delta and static ranges, is diversifying from being purely a provider of specialist vehicle dynamics simulation to being an effective and leading provider of simulation tools required for modelling autonomous systems. A new cloud based service aimed at training data generation and Software-in-the-Loop (SIL) for autonomous vehicles testing is being developed. The data produced by rFpro will be of the highest quality and accuracy and will include higher processing volume techniques like raytracing and spectral rendering within a large variety of relevant test cases.

AB Simulation continued

Strategic report

Static Simulators



aVDS Static

Entry level simulator with active steering and brake for early model development



Theta Cube

Extremely highquality self-contained transportable simulator



Sigma

Fully immersive static simulator, featuring a real or replica vehicle cockpit and projection vision system

Dynamic Simulators



Alpha Series

New range of high frequency, low latency simulators currently under development. Designed to specifically to address the gap in the market for competitively priced high-performance simulators offering significant advantages over high-end hexapod systems

Under development



aVDS

High dynamic response simulator primarily for motorsport applications with a pedigree from F1



Delta S3

High fidelity simulator with exceptionally large motion envelope for sustained cueing (featuring 360° yaw and scalable surge and sway)



aVDS HP

High dynamic response simulator with high payload capability (700 kg) for automotive applications

£250k £400k £750k £2.0m £2.8m £3.0m £3.3m Total system price

Creating value for stakeholders

Key inputs

Product and technology leadership

Our innovative product development and significant intellectual property ensure cutting-edge products are available for every application across the markets we serve. We work closely with our suppliers and take the steps necessary to ensure their performance meets our expectations.

Supplier relationships

Customer relationships

Long-term relationships with all major automotive OEMs and test facilities enable us to provide support tailored to their needs and also assist in early identification of trends.

Global reach

We have international routes to market, with direct sales and support offices in key territories to facilitate growth and support our customers. We use distribution and representatives in other locations to expand our reach.

Talented workforce

Our highly skilled employees operate in niche capability areas. Our engineers and customer support teams work closely with our customers, supporting their requirements.

How we create value



Underpinned by our values

Business model continued

Our purpose

We accelerate our customers' drive towards net zero emissions, improving road safety and the automation of vehicle applications through leadership and innovation in engineering and technology.

Our business



Track testing

Track testing products and services are used for the test and verification of ADAS, autonomous systems and vehicle dynamics. Vehicles and ADAS platforms, such as the GST and LaunchPad, are controlled using complex control software for accurate control and synchronisation of multiple test objects.

This enables our customers to conduct complex, multi-object test scenarios with a simple-to-use software interface to satisfy internal or external regulatory test requirements.

The Group also provides test services including the provision of ADAS and vehicle dynamics tests through a comprehensive test facility based in California, USA. Following the acquisition of VadoTech, the Group now also offers on-road testing services, with operations in China and Japan.

Laboratory testing and simulation

Laboratory testing and simulation includes products relating to simulation, noise and vibration and the assessment of kinematics and compliance in vehicles; and simulation software. These products are used to evaluate vehicle dynamics, noise, vibration and harshness and autonomy across a wide range of applications including conventional vehicles, motorsport and automated/autonomous vehicles.

Our simulator products along with our marketleading physics based simulation software reduce new vehicle development timescales and costs by allowing meaningful testing earlier in the development process.

The value we create

Customers

We provide innovative solutions tailored to customers' specific needs.

Investors

Through the execution of our strategy we grow the value of our shareholders' investment over time.

Employees

We are committed to providing a safe and rewarding working environment.

Communities

We engage positively with our local communities and offer support through charitable giving and volunteering.

Suppliers

We work closely with our suppliers, with a reputation for integrity and ethical behaviour.

Environment

We are fully committed to reducing our own environmental impact by lowering our energy consumption, and helping our customers drive towards net zero emissions.

Our values Customers People Diversity Innovation Excellence Responsibility

Chief Executive Officer's review

Building key drivers for market growth



Dr James Routh. Chief Executive Officer

Highlights

- The Group delivered significant growth in revenue up 23% to £80.3m
- The Group's efforts in its ESG strategy resulted in an increase in its MSCI ESG rating to AA
- ABD Solutions successfully developed the core modular technology required for its initial market
- Post-vear-end acquisition of Ansible Motion and the establishment of a new market-facing business unit AB Simulation

Overview

I am pleased to report that despite the challenging economic and operational backdrop, the Group delivered a strong set of results supported by recent investments in its capabilities and a recovery in customer activity levels following the pandemic. The Group has evolved significantly over the last three years, building a solid and scalable platform from which to capitalise on a multi-year growth opportunity. I would like to thank our global team of talented and dedicated employees for their continued hard work and tenacity.

The performance for the year was positive across both halves with a stronger second half reflecting normal seasonality. The Group delivered record levels of order intake, revenue and adjusted EBITDA, despite the headwinds of global inflation and supply chain constraints and further investments to support its long-term growth objectives.

We continued to deliver against our strategic priorities by launching new products, developing our service offering to drive recurring revenues, and delivering on our diversification plans through progress in ABD Solutions. We also expanded our presence in the simulation market through the acquisition of Ansible Motion and the establishment of a new market-facing business, AB Simulation.

Our ESG strategy has developed significantly during the year. ESG is an intrinsic part of our overall purpose and strategy (see page 34 for details) and this year we have focused on our environmental performance, the diversity of our people, our engagement with our valued employees and local communities, and continuous improvement in our governance and compliance. This resulted in an improvement in our MSCI ESG rating to AA, with ambition to make further improvements during 2023.

Whilst the positive momentum from FY 2022 has continued into the new financial year, macroeconomic headwinds created by the combination of global inflation, forecast recession and uncertainty have the potential to affect the Group during 2023. However, the Group is well positioned, with market-leading products and services, and remains supported by regulatory and structural growth drivers that provide a strong position for continued growth and performance during 2023.

"The Group continued to deliver against our strategic priorities by launching new products, developing our service offering to drive recurring revenues, and delivering on our diversification plans through ABD Solutions."

Chief Executive Officer's review continued

Financial performance

The Group delivered significant revenue growth in the year of 23%, to £80.3m (2021: £65.4m). The second half of the year was particularly strong with revenue of £42.5m (H2 2021: £38.1m), a record half-year period. This growth was delivered despite the ongoing impacts of inflation and supply chain constraints, which were successfully mitigated through proactive inventory management and price increases to the market.

The growth in revenue was delivered by track testing which grew 30%, with laboratory testing and simulation broadly flat. The proportion of recurring revenue continued to increase growing to 41% (2021: 35%), benefitting from the full year impact of the acquisition of VadoTech, which supplemented an increase in sales of software, long-term service and support contracts, spares, maintenance and calibration. The level of recurring revenue is now expected to broadly stabilise ahead of new market offerings which will be released in the near future.

Group adjusted operating profit increased by 18% to £12.7m (2021: £10.8m), a reduction in operating margin of 80bps to 15.8% (2021: 16.6%). The reduction in operating margin was entirely due to our investments in ABD Solutions and capabilities in terms of talent and leadership. Overall Group gross margins improved by 70bps to 57.5% (2021: 56.8%) due to an improvement in the relative mix between the higher margin track testing sector and the lower margin laboratory testing and simulation sector.

Group earnings before interest, tax, depreciation and amortisation (EBITDA) increased by 21% to £16.4m (2021: £13.5m), an EBITDA margin of 20%. The Group delivered strong adjusted operating cash flow of £20.7m with the net cash position at year end of £29.2m (2021: £22.3m) underpinning a robust balance sheet and providing significant funding headroom to support the post-year-end acquisition of Ansible Motion. The strong year-end cash position was delivered despite ongoing investments in new product development, our Group-wide ERP system and payment of the final earnout of €6m to the previous owners of VadoTech.

Sector review

The track testing business delivered revenue of £64.7m (2021: £49.7m), a 30% increase against the prior year, with growth in sales of driving robots and ADAS platforms and the full year impact of the prior year acquisition, VadoTech. The first half of the financial year showed a strong recovery in track testing activity levels post-COVID with revenues of £30.4m (H1 2021: £20.9m), followed by an even stronger second half with revenues of £34.3m (H2 2021: £28.8m).

Laboratory testing and simulation revenue was flat year-onyear at £15.6m (2021: £15.7m) against a very strong prior year comparator during which revenues grew by 62%. Significant growth in simulation sales with high demand for our simulation software and aVDS simulators was offset by lower SPMM sales due to timing of delivery. The post-year-end acquisition of Ansible Motion will enable further development and growth in this segment in future years.

Strategic progress

During the year, the Board conducted its annual strategic review which has endorsed the continued focus on building and growing the core business, coupled with delivering on the Group's diversification plans through ABD Solutions. This organicled growth strategy, compounded through value-enhancing acquisitions, enables the Group to set ambitious aspirational growth objectives.

Following the launch of ABD Solutions at the end of the last financial year, the Group has made strong progress against its stated strategic priorities. ABD Solutions has successfully developed the core modular technology required for our initial market focus in mining and defence and has been successful in winning funded R&D from a major Japanese mining customer and a gold mining operation in Greenland.

In the core business the Group has developed and launched several new products including the new variant of our driving simulator product, the aVDS-HP, aimed at the general automotive market.

The Group also expanded its track testing product offering to cover ADAS testing dummies, including a market-leading articulating pedestrian, a scooter/moped and a motorcycle that can be used in conjunction with the LaunchPad 80 and high test speeds. A new ADAS platform product, LaunchPad Spin, is currently nearing completion, which expands the LaunchPad product family to lower speed, high manoeuvrability applications. We expect that these new products will be market leading and will drive growth in order intake and revenue during 2023.

Towards the end of the financial year the Group launched a new market-facing business called AB Simulation, which encompasses our physics based simulation software, rFpro, the existing AB Dynamics simulator product line and the newly acquired Ansible Motion simulator technology to provide a market-leading range of products to address the growing automotive simulation market.

Following our initial investments in 2022, the Group continues to build bench strength and capabilities in the senior management team with the appointment of a Chief Operating Officer, President Asia Pacific, Managing Director AB Simulation and Group Operational Excellence Director. In addition to these senior hires the Group continues to build out the wider capabilities and has initiated a Professional Development Programme for leaders of the future. More details of the senior management team can be found on page 64, where we describe the structure of the Executive Committee (Excom).

The development of our Group-wide ERP system has progressed significantly during the year, with the first modules having gone live in the UK and the implementation for the wider Group due to commence in 2023.

Chief Executive Officer's review continued

Acquisitions

Shortly after the financial year end, the Group acquired Ansible Motion Limited, a UK-based provider of advanced simulator solutions to the automotive market, for an initial cash consideration of £16.0m and shares in AB Dynamics plc to the value of £3.2m. Subject to financial performance in 2023, there is a potential earnout payment of up to £12.0m, providing a maximum potential consideration of £31.2m.

Ansible Motion designs and manufactures high end motion platform systems for Driver-in-the-Loop development of vehicle dynamics, ADAS and automated systems and already utilises rFpro as its physics based virtual environments. The Ansible Motion range of driving simulators complements the existing product offering from AB Dynamics and provides a comprehensive range of simulators that addresses a wider range of simulator applications.

Ansible Motion will be integrated into the newly formed AB Simulation business unit and will be immediately earnings accretive and is expected to deliver approximately £12m of revenue and approximately £2.2m of adjusted EBIT during 2023.

Following the acquisition of VadoTech Group in March 2021, the business has delivered in line with our expectations at the time of acquisition and integration has now been fully completed, reporting to the President Asia Pacific.

Acquisitions continue to form a key part of the long-term strategic development of the Group and we operate a continuous process to identify and execute acquisition opportunities. The current long-term pipeline remains positive and we expect to continue to deliver further value enhancing acquisitions moving forward.

Summary

The Group has delivered an outstanding performance against a challenging market backdrop which includes the ongoing impacts of inflation and supply chain constraints. The financial results show further strong progress, delivering record levels of order intake, revenue, adjusted EBITDA and cash generation. In parallel, the Group has further strengthened in terms of strategic position through both organic investments and acquisitions and has now fully built out the senior leadership and operating capabilities.

We see significant opportunity in our core markets in automotive which are supported by long-term structural and regulatory growth drivers, and are continuing to invest in new product development and technology. In addition, we are investing in new technologies to diversify the business into attractive adjacent markets through ABD Solutions.

Momentum into the early part of the new financial year has been encouraging, supported by a solid order book providing good visibility through the first half. Whilst being mindful of ongoing supply chain disruption and wider economic uncertainty, the Board remains confident that the Group will make further financial and strategic progress this year and its expectations for FY 2023 are unchanged.

Our market drivers both in our core business and in ABD Solutions remain strong. Despite some potential short-term headwinds relating to global macroeconomic conditions, this backdrop, along with the Group's recent investments in capability and new products, provides confidence of delivering continued progress in 2023 and beyond.

Dr James Routh Chief Executive Officer 23 November 2022 "The Group has delivered a strong financial and operational performance, with continued momentum in our key markets and progress against our strategic objectives."

Q&A with Dr James Routh

Driving forward



Staff celebration of 40-year anniversary

This year marks the 40th anniversary of AB Dynamics. The business started in 1982 supplying noise, vibration and suspension engineering services to the automotive industry. Since then, AB Dynamics has grown into an international group of businesses employing more than 500 staff across three continents.

This achievement has only been made possible by the incredible talent within the Company that enables the business to grow and reach its strategic goals.

To acknowledge this we invited employees to the headquarters in Bradford on Avon for a celebration event. It was an opportunity to bring all the teams together to enjoy games, wood-fired pizza, ice cream and a pop-up bar.

The event helped to recognise and thank the people in the business, whilst also encouraging an environment of teamwork and communication.

Tell us about AB Simulation and Ansible Motion?

As the market for advanced simulators and simulation software continues to grow and develop, we have made the strategic decision to establish AB Simulation to capitalise on the opportunities in this sector. AB Dynamics already had a strong position in driving simulators through the aVDS product range and in physics-based simulation software through rFpro, and the acquisition of Ansible Motion expands the driving simulator product range and adds significant R&D and manufacturing capability. The combined business now has a comprehensive product, technology and commercial offering.

What progress has ABD Solutions made since launching in 2021?

ABD Solutions has made significant technical and commercial progress during the year. From a standing start we have created a highly capable team with a combination of both internal and external talent and established the brand and market proposition. We have successfully demonstrated the core technology on articulated, hydrostatically steered mining trucks, including the integration of sensor technology and perception algorithms.

In parallel, we were successful in gaining R&D funding from a major Japanese mining customer who will further assist us in refining the applications specific elements of the control software and gain system sales in the region.

How is the balance of focus being maintained between the core business and ABD Solutions?

We are of course committed to our core business in terms of continuous investment in new product development, expanding our capabilities and working in partnership with our customers on new technologies. In parallel, we have invested into ABD Solutions to provide a degree of diversification by market sector. Both areas are equally important and are subject to a balanced approach in terms of management focus.

How has the Group's ESG strategy progressed?

ESG is an intrinsic part of our stated strategic purpose and during the year we have significantly developed our ESG strategy by refining our ESG operating model and engaging with an independent adviser on ESG strategy and disclosure. Earlier in the year we were proud to have gained MSCI AA rating, as well as ISO 14001 in our UK and German operations. We have increased our environmental disclosure to ensure we have a clear baseline on which to base our CO₂ reduction activities towards our 2030 goal of becoming carbon neutral. We have redefined our CSR criteria and expanded our employee engagement programme and for another year we continue to be proud of our strong health and safety record.

What does the future look like for the Group?

The Group has a strong track record of both organic and acquisitive growth. Our resilient business model is supported by long-term regulatory and structural growth drivers in the fields of ADAS, electrification and automation of vehicle applications. These growth drivers, coupled with our ongoing investment in new products and technology, capabilities and talent, position AB Dynamics very well for ongoing future growth.

Operational review – Track testing

Advancement of ADAS testing solutions and broadened portfolio drives growth

Introduction

The Group's track testing sector provides products and services utilised on proving grounds, test tracks and public roads to evaluate the performance of vehicle active safety systems, autonomous technologies, electric vehicles and vehicle dynamics. The sector is broadly split into the three primary sub-sectors of driving robots, ADAS platforms and testing services and all track based systems are controlled by our comprehensive control software.

Driving robots are used to replace a test driver in the vehicle under test to provide highly accurate and repeatable driving performance and can be delivered through direct electromechanical actuation or via drive-by-wire systems. The driving robot system is controlled by the Group's Synchro or Ground Traffic Control software and integrates with other test objects including the ADAS test platforms.

ADAS test platforms are used as vehicle or vulnerable road user (e.g. pedestrians, cyclists, motorcyclists) objects in each test scenario and include the GST and LaunchPad. The GST is a very low-profile electric vehicle onto which a radar representative soft car is mounted. The LaunchPad has similar characteristics to the GST but is smaller and used to mount other potential objects such as pedestrians, cyclists and motorcycles. In both cases, the platforms are designed to withstand failed tests whereby the vehicle under test strikes the test object and moves over the platform. The ADAS platforms are controlled and synchronised with the vehicle under test by our comprehensive suite of software.

The Group operates a test facility in Bakersfield, USA, where testing of ADAS systems and vehicle dynamics is performed using the ABD track testing product range for OEMs, technology developers and government agencies.

In China the Group provides on-road vehicle testing services for the assessment of all aspects of vehicle performance, particularly focusing on electric vehicle performance, charging capability and vehicle connectivity.

 The market drivers for growth in the track testing sector are detailed in our markets and strategy section on page 8



Highlights 2022

- AB Dynamics' newest range of ADAS platforms (GST 120 and LaunchPad 80) approved as test tools for official Euro NCAP testing
- New test requirements aimed at protecting motorcyclists drive strong demand for LaunchPad 80
- Increased demand for driving robots to support core vehicle development and development of new electric vehicle models
- Requirements for automated driving functions fulfilled using guided soft targets as Mercedes-Benz introduces 'Drive Pilot' (first approved level 3 Automated Lane Keeping System (ALKS))
- Group collaboration sees the launch of next generation of VRU ADAS targets including new pedestrian and motorcycle dummy

Operational review - Track testing continued

Financial performance

The track testing business delivered revenue of £64.7m (2021: £49.7m), a 30% increase against the prior year and a 32% increase at constant currency. The first half of the financial year showed a strong recovery in track testing activity levels post-COVID-19 with revenues of £30.4m (H1 2021: £20.9m), followed by an even stronger second half with revenues of £34.3m (H2 2021: £28.8m).

The track testing performance was driven by notable sales growth across driving robots, ADAS platforms and testing services following the recovery of order intake in H2 2021. The full year impact of the prior year acquisition, VadoTech, delivered an additional £4.3m of revenue.

Order intake within track testing was significantly higher than revenue, with orders strongly weighted to the second half of the financial year. Overall book to bill ratios were positive for all track testing product categories, including driving robots, which provides confidence for FY 2023.

Driving robot sales increased 22% to £20.6m (2021: £16.9m), following the recovery of order intake during H2 2021. The Group expects continued moderate growth in driving robots once new regulatory requirements for new ADAS technologies are released.

Revenues in ADAS platforms increased 31% to £29.7m (2021: £22.7m) due to the strong first half of the financial year with revenue recovering strongly in H1 to £13.3m (H1 2021: £9.6m). Demand for ADAS platforms, particularly the LaunchPad family of products, continues to build, in particular the Group's new LaunchPad 80 product used for testing higher speed objects such as motorcycles. The Group also launched the GST 120 during the year, providing the ability to test up to 120 kph and providing enhanced deceleration capabilities through its anti-lock braking system (ABS). The LaunchPad 80 and the GST 120 have now been approved as official Euro NCAP testing equipment, which will further strengthen demand.

The regulatory trend towards multi-object test scenarios will further drive demand for a range of platforms that meet these test requirements, including platforms to carry a range of objects (e.g. pedestrian dummies, cyclists, scooters, motorcycles, etc.) that can operate at a range of speeds and can interact with a variety of test vehicles from passenger cars to commercial vehicles. The recent launch of a range of ADAS testing dummies, including an articulated pedestrian and a motorcycle further expand the Group's offering in this area.

Revenue related to the provision of testing services increased 43% to £14.4m (2021: £10.1m) due to the full year impact of the acquisition of VadoTech Group in the prior year, partly offset by a weaker performance at DRI. Track testing operations at DRI were impacted due to the US government delaying the award of new contracts from the government agency NHTSA.

Progress during the year

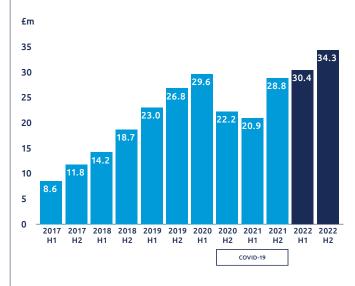
The Group continues to build customer relationships, drive improvement in revenue and gross margins and invest in new product development to meet the growing demand from manufacturers and test providers to keep up to date with changes in regulations.

The growth in testing volume and complexity continues to drive demand for ADAS platforms and driving robots that are both more capable and more versatile. To recognise the need for new test tools, this year Euro NCAP updated its listing of equipment used in official testing to include AB Dynamics' latest and most capable platforms (LaunchPad 80 and GST 120). These, together with the new articulating dummy and soft motorcycle 360, the Group continues to expand its end-to-end market offering.

The Group delivered continued growth in the proportion of recurring revenue through further success in the sales of tiered service and support packages to the existing customer base.

"All AB Dynamics platforms are now included on the official Euro NCAP listing of test equipment."

Track testing revenue



Operational review - Track testing continued

Principal operations

The track testing sector principally operates from the AB Dynamics headquarters in Bradford on Avon (UK), with sales and support offices located in Giessen and Munich (Germany), Yokohama (Japan) and Wixom (Michigan, USA). The track testing services business is based in Torrance and Bakersfield (California, USA). The on-road testing services business is based in Beijing (China) with a regional HQ in Singapore.



Growth potential

The anticipated launch of Euro NCAP's new roadmap for 2025-2030 brings the prospect of further new test requirements, including:

- New tests for automated driving functions
- Enhancements to vehicle safety assist functions
- The inclusion of testing of heavy trucks, expanding the newly introduced commercial vehicle rating scheme
- Additional and enhanced categories of test targets to complement diversity in road users and increased sophistication of sensors

AB Dynamics contributes to the development of the Euro NCAP roadmap for safer vehicles through participation in industry collaboration projects, such as Safety Enhancement through Connected Users on the Road (SECUR), a consortium project set up to establish test methods for evaluating connected vehicle technology.

Track testing sales growth (£m) – CAGR 36% 2022 64.7 2021 49.7 2020 51.8 2019 49.8





£64.7m

- Driving robots
 ADAS platforms
- ☐ Track testing services £14.4m

£29.7m

"New regulatory requirements driving growth."

Operational review – Laboratory testing and simulation

Strong operational delivery and ongoing organic and acquisitive investment in simulation

Introduction

The Group's laboratory testing and simulation sector provides advanced products used to characterise the dynamics of vehicles and replicate the real world in a simulated environment for applications such as vehicle dynamics, ADAS and autonomy. The sector is split into two primary sub-sectors of laboratory testing equipment such as Suspension Parameter Measurement Machines (SPMM) and simulation.

In simulation the Group provides both physical simulators and advanced, physics based simulation software. Simulators are used by both automotive manufacturers and motorsport teams to accurately represent the real world utilising the rFpro software, coupled with state-of-the-art, high frequency response and low latency motion platforms and static driving simulators. Parameters such as vehicle dynamics, tyres, environmental conditions, material properties, sensors and light conditions (including shadows and reflections) can be adjusted, and the variance simulated in a highly accurate model.

The Group's SPMM products are large scale testing rigs used to characterise the kinematics and compliance of vehicles. These machines are widely used by automotive OEMs and tier one suppliers to characterise vehicle dynamics, as well as providing vital input data to be used in simulation. The ANVH product is a testing machine used to optimise suspension systems early in the development cycle to reduce noise, vibration and harshness (NVH) transmission to the vehicle cabin. This is particularly useful in electric vehicles, where road noise and vibration are the predominant source of noise.



"Our simulation sector continues to perform well, supported by our organic and acquisitive investment in capability and market growth drivers."

Highlights 2022

- Good simulation growth of 12% against a very strong prior year comparator with a particularly strong increase in sales of rFpro software
- Delivery of the new, highly capable aVDS-HP simulator to a major automotive OEM and its subsequent market launch
- The Group delivered SPMM number 40 to Toyota in Japan, highlighting the longevity and market-leading performance of our kinematics and compliance capability
- Post-year-end acquisition of Ansible Motion in the UK expands the simulator product portfolio to address a wider range of applications and will be immediately earnings accretive
- Acquisition of simulator technology intellectual property will further accelerate simulator product development with the intention of releasing new products to market in late 2023
- A new market facing business unit formed during the year and includes rFpro (acquired in 2019) and Ansible Motion acquired post-year-end

Operational review – Laboratory testing and simulation continued

Financial performance

The laboratory testing and simulation revenue was flat year-onyear at £15.6m (2021: £15.7m) against a very strong prior year comparator during which revenues grew by 62%.

Simulation delivered robust revenue growth of 12% to £10.4m (2021: £9.3m), which was particularly strong given the prior year revenue growth of 98%. This was driven by the strong order book for our aVDS simulators at the start of the financial year and significant growth in revenues from rFpro, following investment in a number of new capabilities and features. The post-year-end acquisition of Ansible Motion will enhance our product range, supporting continued growth.

Revenues in laboratory testing equipment (including SPMM) declined by 19% to £5.2m (2021: £6.4m), entirely due to timing of revenue recognition against long-term SPMM contract builds. The market conditions remain strong and supportive and the order book for SPMM machines supports continued progress during FY 2023.

"The acquisition of Ansible Motion enhances the Group's product range, capability and customer base."

Progress during the year

The Group has made strong progress during the year, particularly in the growth of our simulation business. The strong order book at the beginning of the financial year provided a good platform for sales of our aVDS simulator products and rFpro delivered a very strong commercial performance across both automotive and motorsport customers.

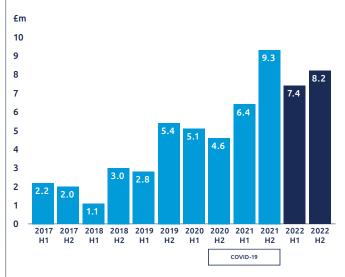
The aVDS-HP simulator development was completed and delivered to a major UK based automotive OEM, expanding our product family to deliver increased vertical displacement and class-leading latency and frequency response. rFpro created a number of new features during the year, including highly accurate headlight modelling. The Group also made significant progress for our SaaS version of rFpro ready on launch in 2023.

The acquisition of Ansible Motion and background intellectual property relating to simulator technology enables the Group to provide a full family of simulator products to address the wide range of applications in mainstream automotive, motorsport and autonomy. The newly formed AB Simulation business unit now allows the Group to go to market with a clear marketing strategy, utilising the existing ABD sales network in our key geographic markets.

Ansible Motion also now provides an additional R&D and manufacturing facility in Norfolk, UK, and the combined team of engineers and technologists are working collaboratively on new technologies.

The Group was very proud to have delivered the 40th SPMM system, the SPMM Plus, to a major Japanese OEM, marking a milestone in this long-standing product which has been supplied to global customers for the past 25 years. The product has evolved significantly over this period to be the leading kinematics and compliance test machine in the market.

Laboratory testing and simulation







Operational review – Laboratory testing and simulation continued

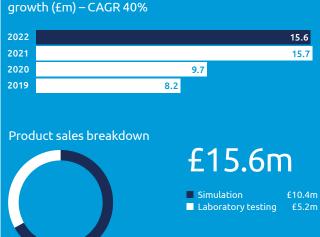
Principal operations

The laboratory testing and simulation sector principally operates from the AB Dynamics headquarters in Bradford on Avon (UK), with sales and support offices located in Giessen and Munich (Germany), Yokohama (Japan) and Wixom (Michigan, USA). The recently acquired Ansible Motion business provides an additional R&D and manufacturing facility in Norwich (UK). The simulation focused business of rFpro is based in Romsey (UK) and Wixom (Michigan, USA).



Growth potential

- Drive to utilise simulation to accelerate product development and reduce product development risk in automotive
- Significant scope for expansion of rFpro simulation software capability as autonomous simulation matures, requiring more complex analysis
- Expansion of simulator product range through the acquisition of Ansible Motion and investment in background intellectual property provide significant scope for growth in simulator product sales
- Requirements for integrated tool chains between the virtual and physical world lead to opportunities to combine simulation with track test products
- Electrification of vehicles will drive more demand for simulation and SPMM machines to optimise vehicle dynamics with revised mass and centre of gravity



Laboratory testing and simulation sales

"Our continued organic and acquisitive investment in simulation underpins the market need to accelerate automated vehicle development."

Chief Financial Officer's review

Delivering growth in revenue and operating profit and strong cash generation



Sarah Matthews-DeMers, Chief Financial Officer

"The Group's strong cash generation enabled investment in the business."





Overview

Against a backdrop of macroeconomic conditions that remain challenging, the Group has delivered a strong performance. whilst also continuing to invest to capitalise on the significant long-term structural and regulatory growth drivers within its markets.

The Group has managed supply chain disruptions through accelerating procurement and flexible production scheduling, with inflationary cost pressures managed through implementation of price increases for new orders.

Revenue increased by 23%, with the recovery of sales to China and a full year's contribution from VadoTech, albeit against a weak prior year comparative in which the first half was impacted by the COVID-19 pandemic.

Gross margins increased by 70 bps at 57.5% (2021: 56.8%), driven by the mix effect of a higher proportion of track testing revenue and supported by effective customer pricing leverage.

Adjusted operating profit of £12.7m increased by 18% against the prior year with the gearing impact of additional revenue offset by investment in the existing business and in ABD Solutions, the Group's new market-facing business unit that develops solutions to automate vehicle applications, resulting in an adjusted operating margin of 15.8%, down 80bps on the prior year, as expected.

Excluding the investment in ABD Solutions, the 23% increase in revenue would have dropped through to a 30% increase in operating profit and operating margin of 17.5%.

The Group maintained its very strong financial position, with net cash at 31 August 2022 of £29.2m underpinning a robust balance sheet and providing the resources to continue the Group's investment programme.

Chief Financial Officer's review continued

Trading performance

Revenue increased by 23% to £80.3m (2021: £65.4m) despite supply chain disruption driven by recovery of sales across all areas of the business and a full year's contribution from VadoTech, the acquisition made during the prior year. Organic revenue increased by 18%, against a prior year comparative in which the first half of the year was affected by COVID-19.

The proportion of recurring revenue increased to 41%, providing an increased level of resilience.

Track testing revenue of £64.7m was up 30% against the prior year (£49.7m), reflecting increases across driving robots, ADAS platforms and testing services following the recovery of order intake during H2 2021. The full year impact of VadoTech resulted in revenue related to the provision of testing services increasing to £14.4m (2021: £10.1m). ABD Solutions added £0.5m of revenue as part of an initial development contract with an industrial equipment supplier in Japan for a driverless retrofit solution for mining vehicles.

Laboratory testing and simulation remained broadly flat on the prior year at £15.6m (2021: £15.7m) reflecting a significant growth in simulation sales with high demand for our simulation software and aVDS simulators, offset by lower SPMM sales due to timing of delivery. The post-year-end acquisition of Ansible Motion will enable further development and growth in this segment in future years.

Gross margins increased by 70 bps to 57.5% (2021: 56.8%), impacted by a higher proportion of track testing revenue, which is higher margin than the Group's other products, and supported by effective pricing management.

Adjusted operating profit of £12.7m increased 18% against 2021. with a reduction in adjusted operating margin to 15.8% (2021: 16.6%), as expected. This was impacted by the investment of £1.3m in ABD Solutions, the Group's new market-facing business unit that develops solutions to automate vehicle applications, as well as continued investment in the existing business.

Adjusted earnings before interest, tax, depreciation and amortisation (EBITDA) increased by 21% to £16.4m (2021: £13.5m). Return on sales (defined as EBITDA divided by revenue) was 20.4% (2021: 20.6%), a decrease of 20 bps.

Net finance costs were £0.4m (2021: £0.4m), comprising lease interest and the unwinding of the discounted value of the deferred consideration on VadoTech.

Adjusted profit before tax was £12.4m (2021: £10.4m).

The Group adjusted tax charge totalled £2.2m (2021: £1.9m), an adjusted effective tax rate of 17.7% (2021: 18.2%). The effective tax rate is lower than the current UK corporation tax rate due to allowances for research and development and Patent Box. In future years the effective tax rate is expected to increase along with the UK corporation tax rate.

Adjusted diluted earnings per share was 44.5p (2021: 37.4p). an increase of 19%, reflecting the increase in operating profit and the reduction in the tax rate.

Adjustments totalled £7.5m (2021: £6.6m), of which £5.5m related to amortisation of acquired intangible assets. £0.3m to costs in relation to acquisitions and £1.7m to ERP development costs.

Statutory operating profit increased by 24% to £5.2m (2021: £4.2m), with statutory profit before tax up 29% to £4.9m (2021: £3.8m). The statutory tax charge was £1.0m (2021: £0.8m), leaving statutory profit after tax of £3.9m (2021: £3.0m). Statutory basic earnings per share was 17.3p (2021: 13.2p). A reconciliation of statutory to underlying non-GAAP financial measures is provided on page 28.

Return on capital employed (ROCE)

Our capital-efficient business and high margins enable generation of strong ROCE (defined as adjusted operating profit as a percentage of capital employed). During the year, ROCE has increased from 11.5% to 14.2% as a result of the full year contribution from the investment in VadoTech, acquired in the previous year.

Cash generation

Operating activities generated adjusted cash inflow of £20.7m (2021: £16.0m) with cash conversion of 126% (2021: 118%) after a reduction in working capital of £3.2m. After paying tax of £0.7m, deferred consideration on the acquisition of VadoTech of £5.1m and dividends of £1.1m, this allowed us to invest £3.8m in property, plant and equipment and product development.

Net cash at the end of the year was £29.2m (2021: £22.3m), which allowed us to fund the acquisition of Ansible Motion after the vear end.

Acquisitions

After the year end, on 20 September 2022, the Group acquired 100% of Ansible Motion Limited for initial consideration of £19.2m with deferred contingent consideration of up to £12.0m.

The initial consideration comprised cash of £16.0m and £3.2m of new ordinary shares in AB Dynamics plc issued to the vendors.

Ansible Motion has a strong record of profitable and cash generative growth. Based on unaudited accounts, in the year ended 31 March 2022 Ansible Motion generated revenue of £8.0m (2021: £5.4m), earnings before interest, tax, depreciation and amortisation (EBITDA) of £1.9m (2021: £0.8m) and operating profit of £1.8m (2021: £0.7m).

The deferred contingent consideration is subject to certain performance criteria being achieved for the year ending 31 August 2023.

Research and development

While research and development forms a significant part of the Group's activities, a significant proportion relates to specific customer programmes which are included in the cost of the product. Development costs of £1.7m (2021: £1.2m) have been capitalised in relation to projects for which there are a number of near-term sales opportunities. Other research and development costs, all of which have been written off to the profit and loss account as incurred, total £0.4m (2021: £0.5m).

Chief Financial Officer's review continued

Foreign currency exposure

The Group faces currency exposure on its foreign currency transactions and translation exposure in relation to its overseas subsidiaries.

The Group maintains a natural hedge whenever possible to transactional exposure by matching the cash inflows and outflows in the respective currencies.

Foreign exchange translation has provided a minor headwind on revenue and profit, with the movement in the stronger US dollar, offset by the weaker Euro and Yen. On a constant currency basis, restating the current year at 2021 average exchange rates, revenue would have been £0.7m higher and adjusted operating profit £0.1m higher.

	2022	2021
Year-end rate		
US dollar	1.16	1.37
Euro	1.15	1.16
Yen	161	151
Average rate		
US dollar	1.31	1.36
Euro	1.19	1.15
Yen	158	145

Dividends

The Board is recommending a final dividend of 3.54p per share, giving a total dividend for the year of 5.3p per share, which is an increase of 10% over the prior year, continuing the Board's progressive dividend policy.

Alternative performance measures

In the analysis of the Group's financial performance and position, operating results and cash flows, alternative performance measures are presented to provide readers with additional information. The principal measures presented are adjusted measures of earnings including adjusted operating profit, adjusted operating margin, adjusted profit before tax, adjusted EBITDA and adjusted earnings per share.

The Annual Report includes both statutory and adjusted non-GAAP financial measures, the latter of which the Directors believe better reflect the underlying performance of the business and provide a more meaningful comparison of how the business is managed and measured on a day-to-day basis. The Group's alternative performance measures and KPIs are aligned to the Group's strategy and together are used to measure the performance of the business and form the basis of the performance measures for remuneration. Adjusted results exclude certain items because, if included, these items could distort the understanding of the performance for the year and the comparability between the periods.

We provide comparatives alongside all current year figures. The term 'adjusted' is not defined under IFRS and may not be comparable with similarly titled measures used by other companies. All profit and earnings per share figures in this Annual Report relate to underlying business performance (as defined above) unless otherwise stated.

A reconciliation of adjusted measures to statutory measures is provided below:

	2022		2021			
	Statutory	Adjustments	Adjusted	Statutory	Adjustments	Adjusted
EBITDA (£m)	14.4	2.0	16.4	11.3	2.2	13.5
Operating profit (£m)	5.2	7.5	12.7	4.2	6.6	10.8
Operating margin (%)	6.5	9.3	15.8	6.4	10.2	16.6
Profit before tax (£m)	4.9	7.5	12.4	3.8	6.6	10.4
Taxation (£m)	0.9	1.3	2.2	0.8	1.1	1.9
Profit after tax (£m)	3.9	6.3	10.2	3.0	5.5	8.5
Diluted earnings per share (pence)	17.1	27.4	44.5	13.1	24.3	37.4
Cash flow from operations (£m)	18.7	2.0	20.7	14.3	1.7	16.0

Chief Financial Officer's review continued

Alternative performance measures continued

The adjustments comprise:

	2022 £m	2021 £m
Amortisation of acquired intangibles	5.5	4.4
Acquisition related costs	0.3	0.8
ERP development costs	1.7	1.4
Adjustments	7.5	6.6

Amortisation of acquired intangibles

The amortisation relates to the businesses acquired in previous years, DRI, rFpro and VadoTech.

Acquisition related costs

The costs in the current year relate to the acquisition of Ansible Motion Limited which completed on 20 September 2022, after the year end. The costs incurred during 2021 relate to the acquisition of the VadoTech Group as well as staff retention payments to the employees of rFpro.

ERP development costs

These costs relate to the development, configuration and customisation of the Group's new ERP system which is hosted on the cloud.

Taxation

The tax impact of these adjustments was as follows: amortisation of £0.8m (2021: £0.7m), acquisition related costs of £0.1m (2021: £0.1m) and ERP development costs of £0.3m (2021: £0.3m).

Net cash

The reconciliation of cash and cash equivalents to net cash is as follows:

	2022 £m	2021 £m
Cash and cash equivalents	30.1	23.3
Lease liabilities	(0.9)	(1.0)
	29.2	22.3

Return on capital employed (ROCE)

ROCE is calculated as follows:

	2022 £m	2021 £m
Adjusted operating profit	12.7	10.8
Shareholders' equity	112.0	105.0
Net cash	(29.2)	(22.3)
Deferred tax	6.4	6.6
Deferred consideration	_	4.9
	89.2	94.2
Return on capital employed	14.2%	11.5%

Sarah Matthews-DeMers

Chief Financial Officer 23 November 2022

Capital allocation

Capital allocation framework to deliver sustainable compounding growth as well as growing returns to shareholders.

1.

Continuous organic investment and innovation to protect and grow core business Organic investment into ABD Solutions driving growth in adjacent markets by leveraging core technology

Disciplined approach to investment, returns and capital efficiency

3.

Complementary acquisitions contributing to one or more of the Group's stated strategies 4.

2.

Progressive dividend policy resumed following a pause through COVID-19 pandemic

Key performance indicators

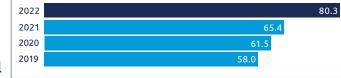
Clear performance measures that highlight sustainable value creation

Growth of the business, quality of earnings and efficient use of resources are crucial target areas for AB Dynamics and we employ a number of performance measures to monitor them. The KPIs used to monitor the financial performance of the business are set out opposite.

These KPIs enable progress to be monitored on the implementation of the Group strategy, level of investment and business development.

Financial figures

Revenue £80.3m +23%



Adjusted operating profit

£12.7m +18%



Definition

Revenue is measured as the value, net of sales taxes, of goods sold and services provided to customers.

Reason for choice

This is a key driver for the business, enabling us to track our progress in increasing market share by product and by region.

Comment on results

The growth was driven by an increase in demand for robots and ADAS platforms as well as the full year contribution from VadoTech.

Link to strategy



Definition

Earnings before interest, tax, amortisation of acquired intangibles, acquisition costs and other adjustments for one-off non-recurring items.

Reason for choice

Adjusted operating profit provides a consistent year-on-year measure of the trading performance of the Group's operations.

Comment on results

The increase in revenue and improvement in gross margin were partially offset by continuing investment in the business, particularly in ABD Solutions.

Link to strategy



Key performance indicators continued

Key to strategy



Product and innovation



Capability and capacity



Acquisitive growth



Diversification



Service and support



International footprint

Financial figures continued

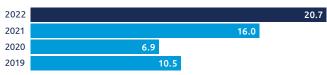
Adjusted diluted EPS

44.5p +19%



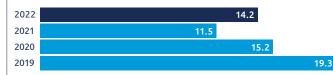
Adjusted operating cash flow

£20.7m +29%



Return on capital employed

14.2% +270bps



Definition

Profit after tax excluding amortisation of acquired intangibles, acquisition costs and other adjustments for one-off non-recurring items, divided by the fully diluted weighted average number of shares.

Reason for choice

This measure is designed to include the effective management of interest costs and the tax charge and measure the total return achieved for shareholders.

Comment on results

Adjusted diluted EPS increased by 19% as a result of the increase in adjusted operating profit and reduction in the tax rate.

Link to strategy



Definition

Cash flow for operating activities adjusted for acquisition costs and other adjustments for one-off non-recurring payments or receipts.

Reason for choice

This provides a measure of the cash generated by the Group's trading. It represents the cash that is generated to fund capital expenditure, interest payments, tax and dividends.

Comment on results

Adjusted operating cash flow increased by 29% to £20.7m as a result of improved working capital. Cash conversion was 126% (2021: 118%).

Link to strategy





Definition

Adjusted operating profit as a percentage of capital employed, defined as shareholders' funds less net cash held, deferred tax and deferred consideration.

Reason for choice

This measures efficient use of capital.

Comment on results

ROCE increased from 11.5% to 14.2% in the year due to the full year contribution of VadoTech, acquired during 2021.

Link to strategy



ABD Solutions

Strategic report

Making progress with ABD Solutions

Introduction

Since launching in the prior year, ABD Solutions has progressed well against its strategic objectives and has been successful in developing its core modular technology required for the Group's targeted adjacent markets. ABD Solutions was successful in winning a funded development contract from a major Japanese mining customer, as well as signing a Memorandum of Understanding with another large mining customer in Greenland, Amaroq plc.

In September 2022 ABD Solutions launched Indigo Drive at the Defence Vehicle Dynamics 2022 exhibit. Indigo Drive is an end-to-end system which is vehicle-agnostic and retrofittable, allowing any land vehicle to be automated.

Vehicle automation can bring significant improvements to safety by removing people from high-risk areas as well as providing increased operational efficiency, resulting in a reduction in fuel consumption and vehicle emissions. A retrofittable solution also maximises the investment of existing high-value assets by significantly extending their usable life.



"Our vehicle-agnostic, retrofittable autonomy systems provide safety and efficiency improvements rapidly and cost-effectively and we strive to bring autonomy to any fleet, even in the harshest environments."

Highlights 2022

- ABD Solutions successfully developed the core modular technology required for its targeted areas of penetration
- Won a funded development contract from a major Japanese mining customer
- Signed Memorandum of Understanding with a large mining customer in Greenland
- Launched Indigo Drive its end-to-end system to make existing fleets driverless

ABD Solutions architecture



Vehicle Actuation

- Mechanical Robots
- Drive by Wire
- CAN
- J1939



Vehicle Communications

- Radio
- V2X
- Satellite
- GPS/GNSS
- Indoor and Outdoor



Vehicle Autonomy



Vehicle Management



Object Detection

- LiDAR
- Camera
- InfraRed
- Radar



Vehicle Diagnostics

- Telemetry
- OBD2
- CAN/J1939
- Sensors



Technology Partners/Integration

- Indoor Positioning
- Electrification and Hybrid Propulsion
- Sensors
- OEMs
- Site Ops/ Management Systems
- Data Analytics

"ABD Solutions enables the Group to build a broader based business and diversify across a wide range of industrial sectors."

Fleet Management System





Defence



Agriculture



ESG Strategy

Embedding sustainability



Sustainability roadmap

As a Group it is our core purpose to accelerate our customers' drive towards net zero emissions, and to improve road safety and the automation of vehicle applications. We do this through leadership and innovation in engineering and technology and we are well placed to support the transition towards a more socially and environmentally sustainable economy. It is our responsibility to continually improve our own ESG credentials, as well as support our customers and suppliers as they do the same. Sustainability principles lie at the very core of our business. By enhancing the safety of vehicles for all road users through the provision of our products and services, we seek to deploy our technology to improve road safety. One of our key objectives, a reduction of road based injuries and fatalities, is fundamentally aligned to ESG principles. More recently we have broadened our scope to improve safety in other potentially dangerous environments like defence and mining. Furthermore, we play a role in facilitating our customers' drive towards zero emissions through the automation of vehicles and our simulation products.

Following the creation of an ESG Committee during 2021, the Board and our ESG Committee have accelerated our ESG agenda in FY 2022, focusing on areas that would have the most impact, while building on our existing sustainability commitments and practices. This year we will focus on initiatives to reduce our CO₂ emissions, waste and water usage and collect the data required to accurately measure these metrics, which will enable us to set detailed targets in future years. We continue to focus on the health, safety and wellbeing of our employees and diversity and inclusion, as well as improving the monitoring of our suppliers. We recognise that improving our ESG performance, and enhancing our disclosure, is critical and we will report further as our plans develop.

Our key ESG achievements since our last Annual Report include:

- We have achieved ISO 14001 accreditation for our Environmental Management System, covering our UK and German operations
- We have Group-wide data collection for waste generation, to create a baseline year for targets
- Once again, we recorded no fatalities or reportable or lost time incidents in the year, maintaining our high safety standards
- All Anthony Best Dynamics Limited's premises now use renewable energy sources to power their operations
- We maintained high levels of employee engagement with surveys and other initiatives such as an electric vehicle salary sacrifice scheme and a mid-year salary increase to staff in recognition of the cost of living crisis

Our priorities for the next twelve months

- Continue to build on our medium-term plan of achieving carbon neutrality by 2030
- Determine our baseline emissions and enhance our Scope 3 emissions disclosure
- Enhance and further develop our corporate social responsibility (CSR) programmes adopting a more global approach
- Continue to develop the programme of initiatives aimed at embedding ESG in the diversification strategy of ABD Solutions
- Develop and publish a Group Environmental Policy
- Further enhance ESG data and our disclosure to help us identify the right targets, so we can continue to measure, improve and report on our ESG performance
- Assess our climate-related risks to enable reporting in line with the Task Force on Climate-related Financial Disclosures once these regulations become applicable to the Group
- Communicate our ESG priorities across the Group, building engagement with all our employees

Sustainability governance

The Group has a robust structure of sustainability oversight and risk governance in place. At the highest level, the Board of Directors has ultimate oversight of, and responsibility for, our ESG governance and strategy. Our Non-Executive Director and Chair of the ESG Committee, Louise Evans, supports the Board in this function. The ESG Committee reviewed the Group's ESG performance over the course of five meetings during FY 2022. The ESG Committee has overall responsibility for translating our ESG strategy into actionable plans, in compliance with relevant legal and regulatory requirements. The Board has received significant external input on ESG this year, with feedback from auditors, investors and sustainability experts.

Sustainable business goals

We also considered our mission in relation to the United Nations Sustainable Development Goals (UN SDGs) and determined that our support for road safety, our alignment with innovation in transport and our commitment to our people support the UN SDGs as set out in the table.

UN SDG	Торіс	Sustainable Development Goal target	AB Dynamics alignment	More information
3 GOOG MEATH AND WELL SEING	Health and safety	Halve the number of global deaths and injuries from road traffic accidents	AB Dynamics plc's core business model and purpose is to advance road safety through facilitating deployment of active safety, Advanced Driver Assistance Systems (ADAS) and automation The Group benefits from regulatory tailwinds on all new vehicles to ensure OEM adherence	Page 36
5 SPACES	Our people	Achieve gender equality and empower all women and girls	40% of the AB Dynamics plc's Board is female in line with best practice The proportion of women in our overall workforce is higher than average for our industry. We aim to further increase female representation across all levels throughout the business Sponsorship and support of women in STEM subjects	Page 38
7 AFFERRALIANS	Environmental leadership	Accelerate action on modern renewable energy – especially in heating and transport	Rapid development of electric vehicles and autonomy has placed additional commercial pressures on OEMs to rapidly develop and deploy new technologies with a continued focus on R&D We are committed to using renewable energy sources in our operations wherever possible Our products and services support this development goal	Page 44
9 MOSSIFY MONATION AND MYSISTRICITIES	Sustainable innovation	Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation	We support the development of EVs through on-road testing of battery technology and charging infrastructure ABD Solutions' core mission is to accelerate the transition to autonomy by providing retrofit solutions that reuse existing vehicles to automate vehicle applications	Page 50
11 SUSTAINABLE CITIES AND COMMUNITIES	Transport and safety		The core mission of the Group is to advance road safety and support vehicle electrification, thereby reducing emissions within city centres	Page 8
13 CLIMATE ACTION	Climate change	Take urgent action to combat climate change and its impact and integrate climate change measures in policies, strategies and planning	Through aiding development of EVs we provide support to electrify the transport network critical to reducing GHG emissions Detailed disclosure of our Scope 1, 2 and 3 emissions provides clear evidence of integrating climate measures including installation of renewable energy, sourcing of energy from renewable only sources and revised travel policies	Page 44

Governance



Health and safety

Working environment

Employee wellbeing

The Group places utmost importance on safeguarding the safety, health and wellbeing of our employees whether working in our offices, on clients' sites or from home. We ensure that the working environment is safe and conducive to healthy, content employees who are able to balance work and family commitments. We believe that a more proactive, wide-ranging approach to health and safety helps build trust with employees and helps them stay happy, healthy and productive. Our Mental Health and Wellbeing Policy covers a range of flexible working policies with the key objective being to enable employees to balance their working life with other priorities, thereby enhancing their wellbeing.

Our Flexible Working Policy includes a degree of working from home, part time or job sharing, depending on function and location and in agreement with line managers. All employees are eligible to take career breaks or sabbaticals in consultation with their line managers. Risk assessments, which were conducted by each of the Group's subsidiaries, are reissued to employees regularly throughout the year, to make sure the Group is keeping pace with the changing environment. The Group continues to monitor staff safety and wellbeing to ensure the workplace risks are minimised to a level as low as reasonably practicable.

Our COVID-19 response

We continued our operations during the COVID-19 pandemic with minimal disruption. The changes made to working practices included the introduction of a suite of measures and safety guidelines and, most notably, working from home for many employees. The measures reflected risk assessments conducted at a subsidiary level as well as the government restrictions. As the Group operates manufacturing and production facilities and track based testing sites, a limited number of staff were not able to work from home and continued to visit or be based at our premises. Where staff remained on site, each subsidiary undertook its own revisions to risk assessments dependent on location and types of activity. As government restrictions

have now largely been removed, and the focus has moved to living with COVID-19, our staff have returned to the office, and procedures have been updated.

Safety first

We believe that the focus on safety is essential to delivering a high performing, open and constructive safety culture. The Group is committed to continuous improvement in health and safety performance, which is a standing item at every Board meeting. This year the Group has built further on the processes and procedures across its subsidiaries, standardising reporting, and this will enable us to set further Group-wide health and safety targets in FY 2023. In this way the Group can actively promote a strong safety culture, striving to instil the same safe working principles in every employee wherever they are, and in whichever Group business they work.

Health and safety governance

Our health and safety organisational framework clearly defines those responsible and accountable for health and safety across our businesses. The Board is committed to maintaining a strong safety culture throughout the Group. Health and safety performance is reviewed by the Board at each scheduled Board meeting. The Executive Committee (Excom) has responsibility and authority to implement ongoing improvements to safety processes and systems, delegating responsibility to local subsidiary management where required. The Group requires that all employees take responsibility for their own safety and that they are mindful of the safety of those around them, thereby creating collective responsibility to ensure we meet our high standards for health and safety and that we continually improve them. This is evidenced in our strong safety record on page 37. Local management teams are accountable for monitoring the health and safety methodology set by the Group, with each manager having received appropriate briefings on these requirements, and ensuring compliance with local regulatory requirements, culture and specific business needs.

All the subsidiaries within the Group must meet the key requirements of the Group's methodology, summarised as follows:

 Health and safety must remain an agenda item at every monthly management meeting. This ensures that teams identify issues in a timely manner, with a process of continuous improvement in place that underpins our strong safety culture

- Each subsidiary must create a Health and Safety Committee (if they do not already have one) and must hold Health and Safety Committee meetings quarterly. This allows for the sharing of best practice and the efficient roll-out of specific Group safety initiatives
- Ensure that each Committee has at least one trained health and safety representative who is certified to a recognised standard in the territory in which the business operates
- All incidents must be fully investigated with remedial actions and preventative measures put in place to ensure the incident does not reoccur and risks are mitigated going forward
- All subsidiaries must report to the Chief Executive Officer quarterly (within two weeks of each Committee meeting), providing a report which summarises the findings of this process and each subsidiary's health and safety metrics

Health and safety training

All employees receive health and safety training (which includes accident prevention and handling of hazardous substances) as part of their induction process. The inductions consist of a reminder of both employer and employee legal requirements. Additionally, they highlight the main hazards which are found throughout the organisation and the control measures in place. This includes manual handling, hazardous materials, display screen equipment, vehicles and using workplace equipment. Emergencies are also covered including the actions to follow in the event of a fire evacuation. Risk assessments also describe how workplace hazards are dealt with and how we apply control measures (including for our employees at work at our customers' sites). Finally, environmental issues are discussed with regard to the impacts we have on the environment with guidance on how to reduce the impact such as recycling and energy use.

In FY 2022, the Group's largest subsidiary, Anthony Best Dynamics Limited, conducted 71 health, safety and environmental inductions. In addition, key staff undergo more specific and regular training to manage or mitigate safety risks relevant to their area of operations. This year across Anthony Best Dynamics Limited these included 15 fire marshal trainings and 7 LaunchPad Dyno safety trainings. We also have a team of trained and qualified first aiders within each area of the Group.

Safety performance

We have a proud track record of safety performance and in FY 2022, we continued to invest in the tracking and prevention of incidents. All subsidiaries across the Group carry out risk assessments as part of their local health and safety programmes but during FY 2023 we will work towards standardising and harmonising our risk assessments across the Group. Detailed risk assessments have been completed for all operational and support departments of Anthony Best Dynamics Limited and AB Dynamics GmbH. These have been completed in consultation between the Health and Safety Manager, the relevant department head or supervisor, and the staff. All assessments highlight the hazards associated with a part of the operation and are duly signed off by the team leader (who owns the risk) and all the staff concerned, so they understand the risks involved and the associated control measures. These risk assessments cover all identifiable risks to personal safety and are reviewed annually, with any mitigative action reported.

The table below records a summary of the Group's health and safety statistics for the year. We record the root cause of accidents, and in FY 2022, most were caused by slips or falls and were recorded as minor injuries. Any injuries were treated by our locally trained first aiders, administering treatment for minor cuts and abrasions or advice to rest. All minor incidents or 'near misses' are reviewed regularly and where trends are identified, further control measures are introduced to reduce risks and prevent recurrence. We are pleased to have maintained our strong safety record with no fatalities ever recorded. In addition, there were no reportable (under UK RIDDOR rules) or lost time incidents over the last five years. The overall injury rate per 100 employees has continued to decline since FY 2019, as evidenced in the table below.

Employee safety

	FY 2022	FY 2021	FY 2020	FY 2019	FY 2018
Average employees	434	333	275	181	128
Reportable incidents	0	0	0	0	0
Lost time incidents	0	0	0	0	0
Near misses	26	15	9	13	7
Minor injury, First Aid Cases (FAC)	6	13	13	14	9
Injury rate (FAC) per 100 employees	1.4	3.9	4.7	7.7	7.0

Our data covers 100% of employees and includes contractors.

Lost time incidents are defined as an injury or illness sustained on the job by an employee that results in the loss of productive work time resulting in them being unable to perform regular job duties, taking time off for recovery or being assigned modified duties whilst in recovery. The minor injury rate is currently measured against first aid or medical treatment cases that did not result in a recorded incident or lost time injury.

"We have a proud track record of safety performance and in FY 2022, we continued to invest in the tracking and prevention of incidents. All subsidiaries across the Group carry out risk assessments as part of their local health and safety programmes but during FY 2023 we will work towards standardising and harmonising our risk assessments across the Group."



Our people

Engagement

Employee engagement and communication

The Group recognises the importance of communicating with all staff to help maintain trust and confidence between all parties. This is achieved by various formal processes and ad-hoc actions throughout the year. On a formal basis, our CEO conducts regular all staff briefings and meetings are held throughout the year between employees and their line managers to ensure that personal objectives are aligned with the Group's strategy and to formally identify development needs and career aspirations. Based on local requirements, weekly and monthly management team meetings are held to provide a forum for Group updates. Internal announcements are issued on a regular basis and include business updates, guidance on maintaining a safe working environment and matters of general interest. The Group's website is used for the distribution of preliminary and interim announcements and press releases.

Through workforce engagement, the views of our employees are heard at the Board level and are considered in Board discussions and decision making. To further support staff engagement all employees have been invited to participate in staff surveys. This consists of a baseline survey to be undertaken on an annual basis and then followed by regular pulse surveys throughout each year. Our last baseline survey in October 2021, carried out by an external consultant, highlighted a 'workplace and tools' score above the benchmark, with factors like 'health' achieving a lower rating, reflecting COVID-19 concerns. Information obtained from the survey was reviewed at a local management and Group level and results were communicated to all employees. Detailed action plans were developed, and included structured communication and staff engagement plans for several subsidiaries, monthly team meetings to communicate results, weekly leadership team meetings, and half yearly CEO communication meetings to all employees. Since then, four 'pulse' surveys have been conducted, tracking the effects of these actions and maintaining our high level of engagement with staff.

As the Group has undergone significant change in the past few years, in FY 2021 an inter-disciplinary 'Values Team' was established to work with staff to define our renewed vision and values, which underpin the Group's strategy, processes and culture. Our vision is to 'provide world class innovative automation and vehicle application solutions created sustainably with passion by our people, delivering excellent products and services to our partners'. Our key values: customers; people; diversity; innovation; excellence; and responsibility; ensure our behaviours, culture and personal values align with those of the business and enable us to continue to drive the strategy forward. Embedding our values across the Group has therefore been a key focus for FY 2022. Values have been introduced as part of our performance appraisal process and managers are encouraged to discuss them with employees.

Key values

- () Customers We create valuable partnerships with our customers through collaboration to understand and deliver their requirements.
- 2) People We empower people by supporting and challenging each other to thrive. Integrity and respect are at the forefront of everything we do.
- 3) Diversity We recognise the importance of strengthening, improving and enriching our culture and practices through diverse opinions, skills and people.
- 4) Innovation We inspire creativity by giving people the space to challenge the 'now' and engineer for the future.
- 5) Excellence We are never satisfied with the status quo. We invest in our people, products and processes by encouraging learning and self-enrichment to deliver worldclass services and products to our customers.
- 6) Responsibility Personal ownership and commitment to ourselves, our customers, our shareholders and the environment. We are always looking for opportunities to improve the sustainability of our operations.

Further details on the Group's engagement with stakeholders, including the material topics discussed with investors and corporate governance bodies, are contained in the Section 172 statement on pages 52 to 53.

Diversity and inclusion

We recognise that being a truly diverse and inclusive Group is crucial to our values and to our ability as a business to grow, innovate and attract and retain talent. Different experiences, views and opinions allow us to consider a range of opinions when making decisions, which we believe results in better outcomes for the business and for our stakeholders. We operate globally and recognise the cultural differences that may exist in the countries in which we do business. We do not tolerate any form of discrimination. We are committed to equality of opportunity in all our employment practices, procedures and policies. When we hire or promote someone, we choose the best candidate irrespective of age, race, national origin, disability, religion, sex, gender reassignment, sexual preference, marital status or membership/non-membership of any trade unions. All staff are provided with a safe, secure and healthy environment in which to work, regardless of where in the world they are located.

We aim to create an environment where the contributions of all staff are recognised and valued, and everyone is treated with dignity and respect. We do not tolerate any form of bullying or harassment within the Group. We apply the same standards when we select business partners. The ESG Committee is responsible for setting the Group's approach to diversity and inclusion. For more detail of the Group's initiatives in relation to diversity, see People potential on pages 38 to 42. The Group-wide policy is located on the Group's website.

As a Group we believe training, development and progression opportunities must be available to all staff.

While ability and aptitude remain the determining factors in the selection, training, career development and promotion of all employees, the Group is conscious that there remain inherent disadvantages for women in engineering. Therefore. in FY 2022 we have chosen to continue as a Corporate Partner to the Women's Engineering Society (WES). Actions we take to increase our profile within WES's membership and to facilitate opportunities include targeted job advertisements to women; membership of WES for all female engineers; and the mentoring of students who are considering a career in engineering.

Diversity and inclusion continued

The Board recognises the importance of gender diversity and has been working to improve the Group's gender mix. A significant proportion of the Group's workforce are engineers and technicians. As advised by Engineering UK, only 12% of engineers are female on a national basis; therefore, the Group remains above average for our industry with women representing 18% of our overall workforce. The Board notes the recommendations of the Hampton-Alexander and Parker Reviews and the Financial Conduct Authority (FCA) in relation to increasing Board and senior management gender and ethnic diversity. We are proud to note that within the senior management team, the proportion of female representation is at 17% while the Group Board is at 40%, in line with these recommendations.

Set out below is an analysis of the Group's employees by gender in October each year.

Employees by gender

	FY 202	2	FY 2	021	FY 2020		
	Male	Female	Male	Female	Male	Female	
Board	60%	40%	60%	40%	67%	33%	
Executive management	83%	17%	100%	_	100%	_	
Senior management	83%	17%	80%	20%	80%	20%	
All employees	82%	18%	82%	18%	81%	19%	

The Group is supportive of flexible working such as working from home or part time and flexible hours according to the requirements of the position. The Group employs contract and temporary workers across some of its locations to fufill local requirements. It should be noted that in FY 2022 we have seen a slight increase in the percentage of temporary employees within our workforce, reflecting somewhat unique conditions at some locations which have discrete projects ongoing and hence require a temporary workforce. This is particularly the case in our manufacturing facilities globally, to ensure we meet our customer requirements. Many of our temporary staff choose to become permanent employees.

Number of part-time and contract/temporary employees

	FY 2022	FY 2021 ¹	FY 2020	FY 2019
Part-time employees (no.)	27	21	20	21
Part-time employees to total employees (%)	7%	8%	7%	13%
Temporary/contract employees (no.)	22	8	10	3
Temporary/contract employees to total employees (%)	5%	3%	4%	2%

^{1 2021} VadoTech Group data not included due to data availability.



Attracting and retaining young talent

Attracting and retaining young talent within the Group is a key strategic element of ensuring the sustained growth of the business for the future. As a result, we enhanced our graduate scheme last year. It plays a critical role in enabling students to obtain real-world, hands-on experience in a technology-driven organisation. Of his time so far on the graduate scheme, Jamie Balsdon said:

"I have had a unique experience developing skills and knowledge in many areas within the Company. I have enjoyed a supportive and engaging environment with great people and regular support. I have been involved with many projects working alongside many talented people. From product development to commissioning, the variety is what makes the graduate scheme uniquely beneficial and creates an excellent basis for a long-term role to follow."

Students also completed three one-year engineering placements with us this year. Following the successful completion of his placement, student Alastair Knight said:

"I had a great experience working as the mechanical design intern for AB Dynamics. It has given me a great range of practical experiences that I will take back into my final year at university. One of the things I appreciated the most on my placement was being able to work on real projects that were going to customers. I enjoyed working alongside a great team of skilled and experienced engineers and workshop technicians. Having that resource nearby whilst I was at AB Dynamics has immensely improved my engineering abilities and approach to problem solving."

Alistair has been offered the chance to join our graduate scheme on completion of his studies.

Talent and career management

Attracting and retaining key talent are critical to driving strong operational performance, maintaining our market position and enabling us to deliver on our ambitious growth plans. Accordingly, the Group is committed to developing the capabilities of the existing workforce and hiring talented people to meet current and future requirements.

In recent years our continued efforts to enhance staff engagement and wellbeing have resulted in consistently strong retention rates. Average length of service is currently 4.4 years, with annual employee turnover at 17% (FY 2021: 18%) across the Group.

Average number of employees by region

Location	FY 2022
UK	252
Germany	18
Spain	1
USA	43
China	94
Singapore	7
Japan	19
Total	434

Annual employee turnover by year

	FY 2022	FY 2021 ¹	FY 2020
Total annual employee voluntary turnover (No.)	61	36	18
Total annual employee voluntary turnover (%)	15%	13%	7%
Total annual employee turnover (No.)	72	51	35
Total annual employee turnover (%)	17%	18%	13%

1 2021 VadoTech data not included due to data availability.

Annual performance evaluations

	FY 2022 ¹	FY 2021 ²	FY 2020
Percentage of employees who receive annual performance evaluations	83%	99%	99%

- 1 Includes VadoTech for only part of the year.
- 2 2021 VadoTech data not included due to data availability.

Building upon the improvements made to recruitment practices in prior years, a new recruitment system has been employed this year to further improve candidate experiences and hiring timelines. The system has also introduced new mechanisms to reduce biases across the recruitment process, which is critical to curating a workforce diverse in opinions, skills and people.

In FY 2022, the Group also made a proactive effort to promote internal applications for open positions and as a result 18% of UK employees have been promoted or had their responsibilities increased over the last year. This has been supported by the ongoing talent mapping processes that have been implemented.

Annual performance evaluations are undertaken across the Group, with 83% of employees having received a performance appraisal in this year (FY 2021: 99%). The reduced percentage this year is a result of the acquisition of VadoTech in FY 2021 and the impact on the Group's employee mix. Salary reviews are aligned with performance evaluations to ensure employees are paid fairly and correctly for the position they perform. All employees have the opportunity to benefit from a discretionary performance based bonus with the exception of some employees within recent acquisitions.

We continually review our benefits and total compensation packages across the Group. We offer a comprehensive range of benefits to our staff which reflect local regulations and market practices and where appropriate include annual performancerelated bonuses, employer matching contributions into pension schemes, life insurance, income protection and private health cover. Through a detailed benchmarking exercise we can confirm that these packages are above or in line with local market regulations and the competitive environment within which we operate. We are mindful of the effects of cost of living increases on our employees and during the year implemented an additional payrise of £2,000 to those most significantly affected.

We also have other forms of workplace recognition in place. We regularly organise social events to celebrate success and also hold annual awards to highlight key achievements within the Group.

Talent and career management continued Career development

The Group remains committed to retaining key staff and supporting their ongoing career development through life-long learning. This provides benefits for both the Group, through a more highly skilled workforce, and the individual employee, who gains both qualifications and experience that they can use to further their careers whilst with the Group and in any future roles elsewhere. The Group's talent mapping and succession planning processes have continued to play a key role in facilitating staff development and enabled a significant proportion of employees to take on wider responsibilities either through formal promotional opportunities or growth in current roles during the year.

The career development of our engineering colleagues has been an important area of focus and a structured engineering career path has been prepared and communicated to employees within our largest subsidiary, Anthony Best Dynamics Limited. This documents the responsibilities and performance requirements of all grades within our engineering teams and how individuals can progress their career and will further support the identification of development needs. In the future this will be implemented across the Group.

Targeted leadership training is also an integral part of ensuring our workforce remains engaged and innovative, whilst enabling the Group to grow a diverse pipeline for key roles and leadership positions. To further demonstrate the Group's commitment to developing internal talent, the 'ABD Professional Development Programme' (PDP) was launched in May 2022. The overarching aim of the PDP is to challenge and support potential future business leaders to set and meet their own professional goals, emphasising the role that each individual can play in modelling cultural change using business reality as the main arena for development. The launch of the PDP was a five-day event, which took place in May 2022. The PDP has twelve initial participants and has consisted of a series of on-the-job training projects which are tailored to each participant's existing role, in addition to senior manager mentorship workshops. PDP has thus far been very well received and has already resulted in two internal promotions.

Training opportunities

The Group is committed to ensuring that all employees have access to the training required to support their skills and career development. Although some of the challenges of COVID-19 remained towards the end of 2021, the Group was able to deliver flexible training programmes through a combination of online, distance learning and in-person training. The Group's training budget for FY 2022 was £170,000 (FY 2021: £115,000) which resulted in increased average training time and spend per employee in FY 2022 compared to FY 2021. 100% of employees received training in FY 2022 (FY 2021: 100%) and courses taken during the year included: Finance for Non-Financial Managers, Presentation Skills, Scissor Lift Training, APM Project Management Qualification, Right to Work E-Learning, Gantry Crane Training, The New Team Leader, Forklift Novice & Refresher Training, Pilz Machine Safety Course, IWFM Level 4 in Facilities Management, Delta Tau Development Environment Training (DT), Scaled Agile Framework (SAFe) training, EtherCAT, Problem Solving Training, DFMA Training, Licences Workshop (Dept. of International Trade), iHASCO Training Awareness and Cardboard Compactor/Baler User Training. Additionally, we implemented annual online training on cyber security and anti-bribery for all staff. We have further training modules on modern slavery, diversity and inclusion and mental health awareness depending on location and job specification of the staff.

Training time

	FY 2022	FY 2021 ¹
Total number of training hours	5,767	3,395

1 2021 VadoTech data not included due to data availability.

Average number of training hours per employee by region

	FY 2022	FY 2021 ¹
UK	14.2	14.6
Germany	13.3	10.0
USA	5.5	4.3
China	12.8	_
Singapore	4.6	_
Japan	42.2	0.0
All	13.9	12.3

1 2021 VadoTech data not included due to data availability.

Training expense per employee

	FY 2022	FY 2021 ¹	FY 2020	FY 2019
Total training expense per employee (£)	399	199	259	425

1 2021 VadoTech data not included due to data availability.

Talent and career management continued Graduates and apprentices

Maintaining a diverse pipeline of talent is at the core of our ESG strategy and is key to fulfilling our future customer requirements. We offer a range of opportunities and tailored programmes to early career starters with hands-on experience and training, equipping the new generation of employees with the right skills and ensuring that knowledge is retained within the business. We partner with local schools, colleges and universities, offering interesting and rewarding apprenticeships, placement schemes and work experience.

As of 31 August 2022, we have two apprentices in training and one graduate enrolled in our two-year graduate scheme. The rotational graduate scheme is a structured training programme aimed at equipping graduates with both soft skills and technical development opportunities across the business. In FY 2022 we also had three university placement students enrolled in our work experience programme who completed their year in industry.

As the Group's global presence grows, ensuring that high quality early career opportunities are available to all is a key focus. The Group aims to actively expand the reach of work experience, apprenticeship and graduate programmes to more young people from lower income backgrounds, so to help increase social mobility in the local communities in which it operates.

Community partnerships CSR strategy

In line with the Group's expanding global presence and the Group's global subsidiary governance framework, in FY 2022 we developed a new and updated corporate social responsibility (CSR) policy and strategy. The new strategy encompasses five key guiding ESG criteria, of which all CSR activities are required to meet at least two: environment, social opportunity, community, diversity and inclusion and industry. The new model represents the Group's growing global focus and continued ambitions to put CSR at the heart of our business model. These criteria are underpinned by our corporate core values and principles: customers; people; diversity; innovation; excellence; and responsibility.

Whilst our fundamental approach remains unchanged, our new model takes a wider approach encompassing and linking together our five pillars: community; social opportunities; diversity and inclusion; industry; and environmental.

- Community: Committed to strengthening and maintaining relations and being actively involved in the local regions where we operate, creating mutual synergies for both our business and our communities
- Social opportunities: Committed to demonstrating our understanding of social responsibility in the context of wider systemic inequalities, we strive to improve social mobility, supported by our belief that, irrespective of their background, talent and drive should be the only factors influencing an individual's development opportunities and outcomes
- Diversity and inclusion: Committed to the promotion of diversity within the STEM environment and within the armed forces, acknowledging that the best results come from a diverse workforce
- Industry: Recognising the value of partnerships with our customers and communities to increase awareness of the Group
- Environmental: Committed to actively seeking ways to reduce our environmental impact, through linkage with both industry and communities. Adding environmental to our new strategy demonstrates our aim to become an integral player within the communities and environments in which we operate



Community partnerships continued **CSR strategy** continued

Whilst our legacy CSR model was primarily focused on UK based initiatives, through the launch of our five new criteria we aim to encourage all of the Group's subsidiaries to take a more active role, managing and promoting their own CSR agendas. Our enhanced CSR model will enable a regional approach through the election of regional representatives across Europe. APAC and North America. This will enable each region to become more involved in their local communities and cater to regional CSR priorities, allocating their budget most effectively. To ensure collaboration and transparency, the regional representatives will be expected to meet quarterly to discuss updates and developments in community developments, picking up any relevant CSR synergies that can be applied Group wide.

Whilst the ESG Committee has overall responsibility for CSR across the Group, the management of each operating business is now expected to comply with the Group's strategy and maintain detailed records of its engagement with its communities and the activities it has undertaken.

Science, Technology, Engineering and Mathematics (STEM) and wider community initiatives

Whilst the first half of our financial year was impacted by the consequences of the COVID-19 pandemic, our role as a corporate citizen supporting and engaging with communities continues to be paramount. As restrictions remained in place throughout the majority of the first part of the year, we were not able to undertake as many of the community based activities in which we would normally engage. Nonetheless, we have attended a number of virtual and in-person careers fairs (for students or veterans) and work experience placements. Throughout the year the Group has also continued to make donations towards several charitable and fundraising activities, primarily in support of STEM related institutions, and participate in events (where possible) with a focus on the south west of England, where the Group is headquartered. Our annual budget is correlated with headcount, so as we have grown in size in recent years, we have seen an increase in the number of CSR initiatives. As restrictions have now eased and in line with our five CSR criteria, we are planning on attending more in-person careers fairs in FY 2023.

In FY 2022 we continued to place heavy emphasis on creating opportunities for people at the start of their career, with the Group's early years programmes designed to attract diverse individuals from a range of backgrounds to seek new education and career options. Our initiatives and programmes throughout the year were centred around acknowledging talent and identifying opportunities, placing diversity and inclusion at the heart of our CSR strategy and demonstrating our understanding around breaking down barriers and inequalities around sex, gender identity, class and ethnicity to drive both our current and future workforce.

We want to enhance and expand on our global CSR initiative. placing emphasis around increasing social opportunities for both individuals and groups. Our model reflects our belief in engaging and developing global talent from all backgrounds, and our ability to be part of the social solution, improving participation in society. We aspire to create an impact now and leave an inspiring legacy in both the communities and individuals we benefit.



Professional Development Programme launched

As part of the Group's commitment to developing internal talent, the 'ABD Professional Development Programme' (PDP) was launched in May 2022. The initial group of 12 participants from as far afield as Germany, Singapore and the US commenced the programme with an intensive four-day residential programme which consisted of classroom learning, presenting to fellow participants and outdoor team-building activities.

One of the participants said of their time in the programme so far:

"I felt extremely lucky to be selected for the PDP programme; to date the programme has opened numerous doors for me including understanding what opportunities might be available to me moving forward, building my internal network, and having the advice, experience, and support of a senior mentor within the business. The first five months have flown by, I have learned so much and am excited to see what the next seven months might bring."

Governance



Social

Formula Student competition sponsorship

The next-generation of engineers are a key part of the Group's future success. We are continuously aiming to foster young talent and attract those looking to kick-start their careers within the Group. One way we do this is by supporting The Formula Student competition at various locations around the world. Formula Student sees over 100 university teams from across 30 countries compete annually to design and build single-seater cars before racing them at various events across the world.

Companies across the AB Dynamics Group engage with the competition in various ways to build an established relationship with the Formula Student community.

This year in Germany two members of the BlueFlash Team from HAWK University undertook high voltage training at VadoTech in Berlin to assist them in safely handing the high voltage systems found in their electric Formula Student car. VadoTech has had a partnership with the university since 2018.

AB Dynamics sponsored this year's UK event held at the home of the British Grand Prix, Silverstone race circuit. Both rFpro and AB Dynamics also sponsored one of the University of Bath's Formula Student teams (Team Bath Racing Electric) as well as providing technical advice and support.

Our static driving simulator was used for a virtual competition for the students. The fastest driver around a virtual Silverstone circuit won a drive of our aVDS dynamic simulator at the Bradford on Avon facility. Some of the AB Dynamics team also volunteered to be a part of the judging panel, helping to give back to an event that once supported their own junior careers.

AB Dynamics also sponsored Japan's Formula Student event in September. This region is a strategic growth area for the Company and it is important to encourage high quality talent into the business from the area.



"The next generation of engineers are a key part of the Group's future success. We are continuously aiming to foster young talent and attract those looking to kick-start their careers within the Group."



Environmental leadership

We have a long history of managing our environmental impact. It is our mission to empower our customers to accelerate the development of vehicles that are safer, more efficient, and have less impact on the environment. Our commitment to the environment extends to ourselves, our customers and our shareholders. We are continually looking for opportunities to improve: environmental sustainability is essential.

We are focused on finding ways to reduce our impact across the whole value chain to achieve our commitment of carbon neutrality by 2030. That means minimising the impact we and our products have on the environment. We focus on areas including greenhouse gas emissions, energy consumption, the use of renewable energy, water resources and the reduction and management of waste. Our commitment to transparency includes the regular public disclosure of our carbon emissions.

The Group recognises the importance of creating environmental awareness, protecting the environment, and using natural resources efficiently by continuously reducing the environmental impacts of our operations and services. In turn, the Board and senior management are committed to continually measuring. monitoring, evaluating and improving the environmental performance of all the Group's operations. We will continue to deploy green technology wherever possible and appropriate, and to make careful and considered decisions in all our operations to reduce our current carbon footprint. Beyond our own operations, we will also continue to assist the global automotive sector to develop new technologies and processes that will reduce CO. emissions. Reflecting these efforts, and as part of the overall government target for the UK to be net zero by 2050, we have set ourselves the target to be carbon neutral by 2030 which will be the focus of our efforts.

In FY 2022, the Group has continued to develop its approach towards reducing carbon across its operations. Our most significant achievements include:

 Achieving ISO 14001 accreditation in Anthony Best Dynamics Limited, our largest subsidiary, and in our AB Dynamics GmbH subsidiary

Environmental leadership continued

- We have expanded the scope of Group-wide data collection and set baseline levels for waste generated across the Group.
 We have also set associated short-term targets at a subsidiary level in line with our carbon neutral objective
- In line with our target to achieve carbon neutrality by 2030, the Group currently reports Scope 1 and 2 and some Scope 3 emissions
- In the UK our Scope 1 and 2 emissions have reduced. We have focused on increasing our use of 'clean inputs' completing the installation of solar panels on two sites in the UK, which generated a total of 67,114kWh of power in FY 2022. In addition, all Anthony Best Dynamics Limited properties in the UK are supplied with renewable energy, having secured commitments from our leaseholders to move their energy supplies to Engie. Engie offers 100% UK generated renewable power from certified renewable sources and is fully certified as zero carbon emissions by UK Renewable Energy Guarantees of Origin (REGOs), providing verification of the renewable energy it supplies to the Group
- Our Group travel policy focuses on our commitment to minimise the environmental impact of business travel. We seek to promote greener and smarter commuting solutions for staff, minimising local traffic congestion. We encourage all staff to consider joining meetings remotely (e.g. using MS Teams) and taking public transport or travelling by rail instead of air as a way to reduce emissions. Car sharing schemes are also encouraged. The Group also supports a 'cycle to work' scheme in Anthony Best Dynamics Limited. This is a salary scheme whereby the cost of the bicycle is deducted from gross income and spread over a period of time to help encourage emissions free commuting. In a new initiative aimed at reducing staff's commuting emissions (Scope 3), in March 2022 we launched a new electric vehicle scheme for all employees in the UK. The Group has partnered with Octopus Electric Vehicles (OEV) to launch the 'Electric Dreams' salary sacrifice car scheme. The scheme enables eligible employees to save up to 40% to purchase a brand new electric car with the added benefit of free charging hours included. The Group has provided access to EV charging points at all main operating sites in the UK. In the six months since launch, 40% of UK staff have registered interest in the scheme, with three EVs delivered and five EVs on order. Octopus estimates that each car will save 1.3 tonnes of CO₂ over the lifetime of the lease, assuming a switch from petrol to EV and based on an average contract mileage per driver



"The EV scheme gives me peace of mind and enables me to have a nicer car than I could normally afford. I also feel like I am doing my bit for the environment."

Lee Burdin Production Manager

Employee electric vehicle scheme

In March this year we introduced our new Electric Dreams Scheme which has been made available to UK based staff. The aim of the programme is to offer employees brand new electric vehicles through a cost-effective and tax-efficient leasing scheme.

The programme is run through our vehicle fleet partner, Octopus Electric Vehicles. Everything required to run the vehicle is included in a single monthly payment, including insurance, tax, maintenance and a home charging system. A range of vehicles are available to suit all budgets and requirements.

This is a significant addition to the benefits available to employees and also helps to reduce our workforce's carbon footprint. On top of this, the vehicles can be charged at reduced rates at one of the twelve charging points located at the Bradford on Avon facility, with some of the energy being produced by the facility's solar panels.

Managing environmental performance

Governance

The Group's activities can be summarised as largely manufacturing and assembly operations, combined with office based research, product development and other commercial functions, where we receive materials and products from suppliers, assemble them into product and dispatch to customers. With the acquisition of VadoTech, we now include some on-road vehicle testing. Therefore, the Group's main direct impact on the environment is limited to the consumption of heating and power and fuel or electricity for customer vehicles, while providing test services and developing and testing products.

We recognise the importance of monitoring, controlling and improving our environmental performance in order to meet our medium-term target of carbon neutrality in 2030. The Group remains committed to identifying and assessing environmental risks, such as packaging waste, arising from all operations. Waste management initiatives are encouraged and supported by the Group and materials are recycled where practicable. Local management teams are committed to good environmental management practices and are responsible for implementing the necessary initiatives to meet their local obligations. Each facility participates in recycling paper, plastic, cardboard and wood from pallets and continues to focus on reducing energy consumption through the efficient use of heating and lighting. The Group's usage of water is minimal and predominantly relates to cleaning, bathrooms and staff refreshments.

This year the Group has built on the environmental reporting processes and procedures across its subsidiaries to provide a unified framework. The main tools used to track and monitor our environmental impact across our sites are our Environmental Management Systems. This year, across Anthony Best Dynamics Limited, 122 individuals have taken part in our Environmental Management System introduction training. Both internal and external environmental audits have been completed in Anthony Best Dynamics Limited and AB Dynamics GmbH, and they have achieved ISO 14001 certification this year. Over the next year we aim to implement this across all Group subsidiaries, standardising reporting and enabling us to set further environmental targets in FY 2023.

Our environmental reporting covers all entities over which the Group has financial control for the financial year ended 31 August 2022. Data for businesses acquired or disposed of during each reporting period is also included where available. We are pleased with our environmental performance for the year and can confirm that we have not received or paid any environmental fines or penalties either in the last twelve months or in the previous four years.

Energy and greenhouse gas emissions

Reducing global greenhouse gas emissions to combat climate change is one of the biggest global challenges of our time. We aim to minimise our carbon footprint as the UK and the rest of the world transition to a low carbon economy. As the Group does not use its own logistics or freight, its primary direct energy usage and related ${\rm CO}_2$ emissions arise from its facilities and vehicles. As a business, we continue to assess our impact on the environment and try to mitigate or reduce the Group's energy consumption wherever possible.

The Group has a target to achieve carbon neutrality by 2030. We have a range of initiatives underway to support this ambition such as solar panels on two sites in the UK, which generated a total of 67,114kWh of power in FY 2022, and working with suppliers to reduce the embedded carbon across our product life cycle. Additionally, as noted above, after securing commitments from our leaseholders to move their energy supplies to Engie, all properties in our largest subsidiary are powered by renewable energy. Engie offers 100% UK generated renewable power from certified renewable sources and is fully certified as zero carbon emissions by UK Renewable Energy Guarantees of Origin (REGOs), providing complete traceability of the energy it supplies to the Group.

Anthony Best Dynamics Limited and AB Dynamics GmbH also have subsidiary level targets to reduce electricity and gas usage by 5% per annum as part of their certified ISO 14001 Environmental Management Systems.

As a step towards focusing our efforts on the most impactful areas of our business, we have improved the collation of Groupwide data so we can better understand our emissions and energy usage and create a Group baseline. The Group's data can be found below. This is the third year the Group has reported emissions in this manner.

The Group's emissions are broken down by Scope 1, Scope 2 and some Scope 3 emissions. For the first time in FY 2022, Scope 2 emissions associated with the Greenhouse Gas Protocol 'market based' method have also been calculated, in addition to 'location based' Scope 2 emissions. Absolute Group emissions

include all emissions from the 2021 VadoTech Group from March 2021, the acquisition date, with FY 2022 being the first full year of VadoTech data inclusion. The VadoTech acquisition has in turn, contributed to an increase in the overall Group's emissions total for FY 2022 compared to FY 2021. Total Group emissions excluding VadoTech have also been disclosed to present the underlying year-on-year changes in emissions in our existing subsidiaries as a result of measures implemented throughout FY 2022.

In FY 2022, the Group's total Scope 1, 2 and 3 emissions (market based) increased by 34% year on year on an absolute basis and 9% year on year on an intensity basis (per £m of revenue). The 30% increase in our Scope 1 emissions is in large part attributed to safety-critical on-road vehicle testing undertaken by VadoTech. It should be noted, however, that Group gas usage reduced by 23% in FY 2022 due to completely switching off boilers in UK sites across the summer months. FY 2022 Scope 2 emissions (market based) reduced by 24% across the Group. This reduction is primarily a result of the procurement of renewable energy contracts in the UK and the decarbonisation of national grids in countries in which we operate.

Our Scope 3 emissions include emissions from business travel and water supply and treatment. Compared with FY 2021, our FY 2022 Scope 3 emissions have increased significantly across the Group. The 189% increase can be attributed to a significant uplift in business travel since the relaxation of COVID-19 restrictions across the world. Our business travel data collection has also increased in scope since FY 2021 reporting, with data disclosure now including hotel stays and use of other modes of transportation, such as trains, that were not previously accounted for. In FY 2023 we will endeavour to improve the extent of our measurement of Scope 3 emissions further, in order to obtain a better understanding of our total emissions.

In FY 2022, our energy consumption increased by 15% year on year on an absolute basis. In addition to the impact of the FY 2021 acquisitions, the increase in energy consumption in FY 2022 is also in part as a result of increased air conditioning use at our UK sites in periods of extreme hot weather. Overall, the trend in our energy consumption data has generally followed our emissions data as our greenhouse gas emissions are mainly due to the use of energy at our sites for heat and electricity and from Company owned vehicles used for testing and travel. This relationship should decrease as we reduce our operational carbon footprint.

Energy and greenhouse gas emissions continued **GHG** emissions

		Absolute emissions (including VadoTech)							Like-for-like emissions (excluding VadoTech)						
			FY 2022	FY 2022		FY 2021		YoY change		FY 2022			FY 2021		YoY change
	Units	UK	Global (excl. UK)	Group	UK	Global (excl. UK)	i Group	n total (FY 2021 –FY 2022)	UK	Global (excl. UK)	Group	UK	Global (excl. UK)	Group	in total (FY 2021 –FY 2022)
Scope 1 total	tCO ₂ e	118	416	535	132	279	411	30%	118	30	148	132	40	171	-14%
Gas	tCO ₂ e	93	14	107	120	19	139	-23%	93	14	107	120	19	139	-23%
Company owned vehicl use	e tCO,e	25	402	427	12	261	272	57%	25	15	40	12	21	33	24%
Scope 2 (location based)	tCO ₂ e	142	298	440	149	396	547	-19%	142	12	154	149	198	347	-56%
Scope 2 (market based)	tCO ₂ e	5	300	305	3	398	401	-24%	5	12	17	3	199	202	-92%
Total Scope 1 and 2 (location based)	tCO ₂ e	260	715	974	281	676	957	2%	260	41	301	281	237	518	-42%
Total Scope 1 and 2 (market based)	tCO ₂ e	123	716	839	135	678	812	3%	123	42	165	135	239	373	-56%
Scope 3 total	tCO ₂ e	324	147	471	54	109	163	189%	324	41	365	54	41	94	287%
Business travel	tCO ₂ e	323	147	471	49	109	159	196%	323	41	364	49	41	90	305%
Water supply and treatment	tCO ₂ e	1	N/A	1	4	N/A	4	-84%	1	N/A	1	4	N/A	4	-84%
Total Scope 1, 2 and 3 (location based)	tCO ₂ e	584	862	1,446	335	785	1,120	29%	584	83	666	335	278	613	9%
Total Scope 1, 2 and 3 (market based)	tCO ₂ e	447	864	1,310	188	787	975	34%	447	83	530	188	279	468	13%

Energy and greenhouse gas emissions continued **Emissions intensity**

	Absolute e	missions (including \	/adoTech)	Like-for-like emissions (excluding VadoTech)			
	FY 2022 FY 2021 YoY % change		FY 2022	FY 2021	— YoY % change		
		i	n total (FY 2021		ir	n total (FY 2021	
Units	Group	Group	–FY 2022)	Group	Group	–FY 2022)	
Revenue £m	80.3	65.4	23%	80.3	65.4	23%	
tCO ₂ e							
per £m							
Intensity by revenue (Scope 1 and 2 market based) revenue	10.45	12.42	-16%	2.05	5.71	-64%	
tCO ₂ e per £m							
Intensity by revenue (Scope 1 and 2, 3 market based) revenue	16.32	14.91	9%	6.60	7.15	-8%	

Energy consumption by type

		FY 2022		FY 2021			— YoY Change	
	Units	UK	Global (excl. UK)	Group	UK	Global (excl. UK)	Group	in Total (FY 2021–FY 2022)
Total electricity	kWh	800,097	529,524	1,329,621	703,067	485,554	1,188,621	12%
Purchased electricity	kWh	732,983	529,524	1,262,507	641,037	485,554	1,126,591	12%
On-site generated electricity (solar)	kWh	67,114	_	67,114	62,030	_	62,030	8%
Gas	kWh	550,030	79,712	629,742	727,241	104,153	831,394	-24%
Company owned vehicle use	kWh	61,716	1,630,061	1,691,777	45,756	1,051,626	1,097,382	54%
Personal vehicle company use	kWh	35,651	47,789	83,440	9,294	132,554	141,848	-41%
Total energy consumption	kWh	1,447,494	2,287,086	3,734,580	1,485,358	1,773,887	3,259,245	15%

Notes:

Emissions for the Group are calculated using methodologies consistent with the Greenhouse Gas (GHG) Protocol: A Corporate Accounting and Reporting Standard. Source data (meter readings) has been used wherever possible; where this is not available this has been supplemented by billed data and a small amount of estimated data.

For FY 2022, the UK government's GHG Conversion Factors for Company Reporting 2022 (DEFRA factors) were used for fuels and UK electricity. Emissions factors provided by Carbon Footprint Ltd were used for operations in other locations globally.

The Scope 2 emissions associated with the Greenhouse Gas Protocol 'market based' method have been calculated for the first time for FY 2022. In line with the Greenhouse Gas Protocol Guidance, this figure has been calculated using residual-mix emissions factors where available (Germany and UK). In our other operating regions where residual-mix emissions factors were unavailable, country-specific emissions factors have been used instead (as per the location based method) in line with the Greenhouse Gas Protocol Guidance. UK sites consume grid electricity backed by REGOs, which has been taken into consideration within the calculations.

FY 2022 emissions and energy data do not include VadoTech operations in Japan and Spain or DRI operations. Water consumption and treatment data was only available for Anthony Best Dynamics Limited.

FY 2022 business travel data is inclusive of private vehicles used for Group business, train travel, air travel and hotel stays. Certain data, estimated to be immaterial to the Group's emissions, have been omitted as it has not been practical to obtain (use of certain types of public transport: buses). Metering and monitoring improvements continue to be implemented to capture and improve the Company's data stream.

FY 2021 and FY 2022 emissions intensity metrics have been calculated using Scope 2 'market based' data.

VadoTech was acquired in March 2021; therefore, FY 2021 Group data only includes its emissions data for March to August.

FY 2021 emissions and energy data has been restated to reflect a change in methodology and improved data availability.

Water management

Water usage across the Group has been brought into focus in FY 2022 as part of our overall ESG strategy, with oversight from the ESG Committee. Although water is not widely used in the design, manufacturing or servicing of our products, the Group acknowledges that water is a scarce resource and therefore management is essential to minimise the Group's impact on water availability and quality.

Most of the Group's water usage relates to cleaning, bathrooms and staff refreshments. In FY 2023 we aim to collect and disclose water withdrawal data across the business to set a Group baseline. Targets to reduce our water withdrawal can then be identified and established across the business. All staff have attended awareness training programmes throughout the year to raise awareness of the environmental impact of our water usage and are encouraged to limit water use and employ best practice to reduce usage in our facilities where possible.

Anthony Best Dynamics Limited water withdrawal

	FY 2022	FY 2021
Freshwater withdrawal (m³)	1,714	4,870
Intensity ratio (m³ per £m revenue)	32.3	108.5

Waste management

All Company waste (both hazardous and non-hazardous) is managed in a sustainable manner, complying with all relevant environmental legislation and regulations as they relate to each location and community we operate in. We follow a waste management hierarchy of Prevention, Reuse, Recycling, Energy Recovery and Disposal, to ensure the reduction in waste sent to landfill and the associated reduction in GHG emissions supports our carbon neutral ambition.

This year the Group has established a baseline for the total amount of waste generated across all Group operations. In FY 2022, 98% of all waste produced by the Group was nonhazardous, 83% of all waste was recycled and 4% of waste was sent to landfill. With a baseline now calculated, the Group can actively monitor initiatives to reduce the amount of waste generated across all operations and to divert waste from landfill.

In order to achieve the Group's ambitions, a new waste management procedure has been implemented, waste handling training has been rolled out for all staff and we have improved labelling of waste disposal in all sites. An annual audit of all departments with significant waste output will also be carried out and results of this as well as progress in relation to our waste targets will be monitored and reviewed by the ESG Committee.

At a subsidiary level, Anthony Best Dynamics Limited and AB Dynamics Europe GmbH have an ongoing waste reduction target of 5% per annum and aim to recycle 60% of all waste generated annually as part of their certified ISO 14001 Environmental Management Systems. In FY 2023, we will investigate whether quantitative, time-bound waste targets are also appropriate for other subsidiaries.

2022 waste management

	Unit	Non-hazardous waste	Hazardous waste	Total waste
Tonnes to landfill	Metric tonnes	4.10	_	4.10
Tonnes recycled	Metric tonnes	76.40	_	76.40
Tonnes incinerated	Metric tonnes	9.40	_	9.40
Tonnes treated	Metric tonnes	_	1.74	1.74
Total	Metric tonnes	89.90	1.74	91.64

Waste management intensity

	Unit	Non-hazardous waste	Hazardous waste	Total waste
	Tonnes			
Intensity ratio	per £m revenue	1.12	0.02	1.14

Waste by type

уре		
Material type	Unit	FY 2022 total waste
Gases (in containers), paints, adhesives oils, batteries, accumulators, etc.	Metric tonnes	1.74
Paper/cardboard	Metric tonnes	17.90
Other mixed commercial waste	Metric tonnes	13.50
Plastic and plastic packaging	Metric tonnes	11.90
Glass	Metric tonnes	7.12
Metal	Metric tonnes	11.18
Agricultural (garden, horticultural, forestry, etc.)	Metric tonnes	7.11
Wood	Metric tonnes	13.64
Electrical/electronic	Metric tonnes	7.55
	Material type Gases (in containers), paints, adhesives oils, batteries, accumulators, etc. Paper/cardboard Other mixed commercial waste Plastic and plastic packaging Glass Metal Agricultural (garden, horticultural, forestry, etc.)	Material type Unit Gases (in containers), paints, adhesives oils, batteries, accumulators, etc. Metric Paper/cardboard Other mixed commercial waste Plastic and plastic packaging Metric tonnes Metric tonnes Metric tonnes Metric packaging Metric tonnes Metric tonnes



Sustainable products

In line with the UN SDG 9 (Sustainable Innovation), our ambition is to continue to be a pioneer of innovation, and support in the development of the electronic vehicle market, through testing of battery technology and charging infrastructure. ABD Solutions' core mission is to accelerate the transition to autonomy by providing retrofit solutions that reuse existing vehicles to automate vehicle applications, helping our customers achieve their sustainability targets.

Resource efficiency and product innovation

We integrate sustainability into our product design by considering key factors such as energy and resource efficiency. Our suite of products (physical track testing) does not have a high carbon footprint, and our simulation business (which enables OEMs to replicate the set-up of a particular vehicle and drive it around various settings virtually) reduced emissions by taking cars off the road. By encouraging our customers to use autonomous testing we significantly reduce the CO₂ emissions compared to on-road vehicle testing. Wherever possible, we minimise our raw material use and avoid the use of conflict materials in our manufacturing processes. We use minimal levels of hazardous substances in our production process but continue to examine how we can improve this. We are looking at our product life cycle management to consider how emissions can be reduced in line with the Group's target to achieve carbon neutrality by 2030.

As a Group we have implemented several measures to encourage resource efficiency across our operations. These include meeting all energy needs in the UK from renewable sources, water conservation initiatives, raw material efficiency, waste minimisation initiatives, including a centralised waste and recycling facility, and resource recovery projects like our solar heating panels on two UK facilities. We have worked closely with our supply chain to review the sustainability risks associated with procurement and to implement initiatives to reduce lifecycle carbon, through programmes to reduce packaging and source locally where possible.

We lead through engineering innovation and technology. Our employees are encouraged to generate new ideas relating to new products, new processes, major improvements or technology breakthroughs. We remain passionate about technology and aim to lead new trends in our market through our Engineering Design Centre, responsible for innovative products like our Advanced Driving Simulator.

All our employees undergo rigorous training on product safety issues and to raise their awareness of their environmental protection responsibilities. This year we also introduced specific training workshops on quality control, precautionary testing and product safety which all relevant staff (approximately 29% of the workforce) attended, to ensure the highest environmental, quality and safety standards are maintained.

Responsible sourcing

In order to achieve our sustainability goals, it is vital that we develop, educate and work closely with our supply chain to uphold the ethical, human rights and environmental criteria that are at the heart of our business. We recognise the need for a proactive and engaged supply chain strategy, that meets our own high standards and that of our stakeholders. Our communications and relationships with customers, suppliers and advisers are managed within each subsidiary by senior management, and the Group expects the same high standards of expertise and business principles to be maintained in such dealings. Our aim is to ensure that there is consistency across our international entities, to enable us to monitor compliance. We have chosen to operate under a centralised, head officecontrolled framework but devolve responsibility for compliance within this framework to operating divisional or jurisdictional management, with the aim of global harmonisation around local requirements and legislation.

Supplier due diligence

Our supply chain is geographically diversified. All suppliers need to remain compliant with the legal framework in their countries. Before new suppliers are selected they are subject to a due diligence assessment which involves on-site visits and checks to determine if they are 'fit for purpose'. This includes an assessment of their financial strength, environmental credentials and quality assurance. All suppliers are required to have a quality management system in line with ISO 9001 and, in line with these requirements, are audited by an independent third party annually

and re-accredited every three years. We select suppliers for audit based on our supply chain risk assessments. Throughout the course of the year, these audits assess each supplier's approach to human rights, data protection, modern slavery and health, safety and environmental issues amongst other matters. If any risks are identified, the Group works with suppliers to address them. Suppliers are then monitored in line with our non-conformance process, for environmental quality and safety issues, with any corrective actions recorded and monitored.

We intend to work with our suppliers to build mutually beneficial, long-term partnerships, to ensure measurable, long-term sustainability improvements throughout our supply chain. In FY 2023 we will focus on developing a Company-wide standardised supplier assurance and management schedule encompassing a regular schedule of supplier audits, to ensure our supply chain meets our high performance standards and simultaneously delivers on our social and environmental standards.

Prompt payment

We understand the importance of predictable payments when operating a business and encourage good practice across the Group. When entering into new agreements for the supply of goods and/or services, our subsidiaries are responsible for agreeing appropriate payment terms. Group companies are encouraged to abide by the payment terms they have agreed, so long as they are satisfied that the supplier has provided the goods or services in accordance with the agreed terms and conditions.



Ethics and compliance

We are committed to ensuring that the behaviours and practices of our organisation, including those within our supply chains. reflect our own high ethical standards and compliance with applicable laws and standards. We strive to conduct business honestly, openly and with integrity, as this approach will support our long-term success and sustainability. We hold our leaders accountable for ensuring their businesses operate according to the strict ethical standards we expect. We have in place a series of Group policies forming a global subsidiary governance framework to guide our actions and those of our employees, suppliers and partners to ensure good governance and ethical behaviour across our Group. These policies include Human Rights, Anti-bribery, Modern Slavery, Conflicts of Interest, Competition and Anti-trust. These policies can be located on our website.

Employees (including part time and contractors) trained on business ethics policies in 20221

	FY 2022	FY 2021
Percentage (%) of employees trained on the Group's business ethics policies in the current fiscal year	71%	20%

¹ VadoTech data not included due to data availability.

Human rights and modern slavery

We are committed to respecting human rights in accordance with international human rights principles, and these are integral to our business operations. The Group aims to manage and mitigate the risks associated with potential human rights breaches and modern slavery and to ensure we have transparency across our subsidiaries, via the implementation of standardised policies and methodologies forming part of the Group's global subsidiary governance framework. The ESG Committee maintains responsibility, oversight and compliance with the Group's human rights principles with the overall objective of ensuring good governance, oversight and monitoring of our supply chain and wider supplier relationships. Local management teams remain

accountable for: observing the operational approach set by the Group, with each manager receiving appropriate briefings on these requirements; and ensuring compliance with local regulatory requirements, culture and specific business needs. Underpinning this approach are robust policies and procedures. together with appropriate training, which gives our workforce and other business partners guidance on breaches of human rights standards (such as human trafficking and child labour) and modern slavery and the measures we take to tackle such issues within our organisation and supply chain. All human rights abuses will be acted upon and appropriate action will be taken in a timely manner. We continue to believe that our exposure to the risks of human rights abuses and modern slavery is low within our business and supply chain, and we are confident that the policies and procedures that we have in relation to anti-slavery and human trafficking are in compliance with the Modern Slavery Act 2015 and our public statement, to this effect, is available on the Group's website (www.abdplc.com). Further, our internal policies in relation to Human Rights and Modern Slavery are published in English on our website and are available locally for our workforce in four languages.

Whistleblowing

The Group encourages an environment where honest and open communication is expected, with employees feeling comfortable to bring forward any concerns or violations of Group policies. Whilst we believe we have a robust framework in place and an embedded commitment to doing the right thing, where these high standards have not been met, we encourage our workforce to come forward and speak up. This is embedded into our Whistleblowing Policy which provides legal protection for all whistleblowers and an online whistleblowing hotline, available 24/7 through an independent provider (EOS Group). Our employees are encouraged to raise any concerns anonymously via the hotline to an independent Non-Executive Director of the Group. Our Whistleblowing Policy aims to encourage openness and will support and safeguard staff who raise genuine concerns in good faith, with non-retaliation provisions under this policy. even if they turn out to be mistaken. All reports made through this tool shall be investigated in line with the Group's policy. Such investigations are supervised by the independent Non-Executive Directors. Two whistleblowing reports were received and investigated during FY 2022 and resolved without the need for further action.

Anti-bribery and corruption

We prohibit bribery and all forms of fraud and will take legal or disciplinary action in all cases of actual or attempted fraud across all operations. We have a Group-wide policy on anti-bribery and corruption which has been circulated to every member of staff globally through the Company's HR portals and QMS systems. Employees receive online training on anti-bribery and corruption to improve their understanding of the Group's requirements and embed compliance. The policy and training modules are available in the four key languages spoken across the Group.

Information systems and technology

The Group believes it has robust and secure information technology (IT) systems with security controls and procedures in place, although we acknowledge that no IT system can be completely secure. The Group IT Manager is responsible for the integrity and security of the IT systems and strategy. The Group has processes in place for penetration testing, business contingency, data back-up and recovery, and there are various processes, software and hardware in place to prevent data security breaches and unauthorised access to the Group's systems. These cybersecurity policies and procedures are reviewed annually. Additionally, we have engaged an independent consultant to review our information security management system, and aim to achieve TISAX Assessment Level 3 certification (for our UK and German operations) in FY 2023. The Group also holds regular cybersecurity awareness training for staff in the majority of its operations, to ensure that our employees remain vigilant to cyber security breaches.

Tax transparency

The Group is committed to compliance with all applicable tax laws and regulations in all areas it operates in or is required to make filings in. All required tax filings are made accurately and on time with the relevant authorities. We are committed to a transparent and open approach to reporting on tax and do not engage in aggressive tax planning or tax avoidance schemes.

S172(1) statement and stakeholder engagement

Engaging with our stakeholders

Governance



Customers

AB Dynamics works with the biggest names in the automotive industry (including OEMs, proving grounds and motorsport teams).

Understanding our customers underpins the success of our business. Regular engagement ensures that the Group continues to operate with a 'customer first' attitude. We see customer satisfaction as an important aspect of our Group performance overall. This enables us to identify any changes required to our services and to deliver continuous improvements.

Aims and objectives for our stakeholders

- Delivery on time and on budget
- Safety
- Value
- Relationships
- Quality
- Service and support

How we engage

- Regular contact through key account managers and support engineers
- Programme of webinars
- Attendance at industry events
- Customer surveys

Outcomes

- High level of engagement across all our customer groups.
- Please refer to our activities of our Board on page 71 and to our ESG report on pages 34 to 51 for more information



Industry bodies

In the complex and fast-moving automotive area, which is driven by innovation, data technologies, customer demand and budget constraints, policymakers and regulators face tremendous challenges to formulate effective, evidence-based and future-proof standards that improve safety, enhance environmental performance and serve the public interest. Productive engagement with industry bodies and trade associations is increasingly necessary and enables the Group to keep abreast of changes in the industry and lead our sector to make real improvements in both safety and environmental performance.

Aims and objectives for our stakeholders

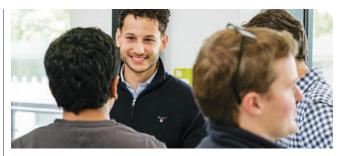
- Safety in the community
- Focus research to improve safety
- Environmental performance
- Global improvement of industry standards
- Human factors

How we engage

- We are members or engage with over 18 industry bodies, including research organisations, certification and/or standards committees in the UK, Europe, the USA, Asia and Australia
- Chair of various committees related to motorcycle and passenger car safety and human factors
- Attendance at industry events
- Speakers at industry events

Outcomes

 Increased participation at industry events including showcasing the launches of our new products



Investors

The support of our investors is vital to the long-term performance and success of the Group.

As an AIM listed company it is important to provide our shareholders with reliable, timely and transparent information. Our shareholders are constantly evaluating their portfolios and considering their exposure in our stock. To maintain a loyal shareholder base, it is important that we keep them well informed. We provide them with information to ensure their understanding of the business is up to date and enable them to make informed decisions.

Aims and objectives for our stakeholders

- Financial performance
- Governance
- People and culture
- ESG initiatives and environmental management

How we engage

- Annual Report and Accounts
- AGM
- Group website: www.abdplc.com
- Investor roadshows
- Results presentations
- Stock exchange announcements
- Investor visits and ad-hoc meetings and correspondence throughout the year
- Open days

Outcomes

- Approval of all our resolutions at our AGM 2022
- High engagement on our site visit held at our main UK site
- Positive investor feedback on engagement, accessibility and transparency
- For more information please refer to the activities of the Board on page 71 and to the ESG report on pages 34 to 51

S172(1) statement and stakeholder engagement continued

Engaging with our stakeholders continued



Employees

With over 400 employees spread across the globe, the engagement and commitment of our employees is key to the Group's resilience and continuing success.

Our strength is in the products and services we provide through our people. Therefore, it is important to have a strong culture and invest time and effort in building diverse, skilled, motivated and highly trained teams.

Aims and objectives for our stakeholders

- · Remuneration and reward
- Employee training and development
- Company reputation
- Health and safety
- Diversity and inclusion
- Employees' wellbeing
- Talent management

How we engage

- Through sector and business unit line managers
- Inductions
- Employee training
- HSE reviews
- Support women in engineering
- Staff engagement survey
- · Vision and Values project
- Community outreach
- The CEO's full-year and half-year presentations on strategy and Group performance

Outcomes

- High level of engagement measured through a rolling programme of employee engagement surveys
- Our staff have an average length of service of over four years
- Please refer to our ESG report on pages 34 to 51 for more information



Supply chains

Our external supply chains are an integral part of our business and effective engagement with our suppliers is an essential element of our ability to perform.

Our suppliers provide a range of parts and services. The smooth functioning of our business depends upon the performance of those suppliers. Regular engagement ensures that we can maintain good relationships, and that the business, and its customers, are not exposed to unnecessary risks.

Aims and objectives for our stakeholders

- Good working relationships
- Supply chain resilience
- Prompt payment
- Quality and reliability

How we engage

- Provision of Group policies to suppliers
- Supplier conferences and workshops
- Supplier due diligence
- Supplier quality assurance
- Ensure prompt payment of suppliers in accordance with agreed terms and conditions

Outcomes

- Our subsidiaries are responsible for agreeing prompt payment terms, for more information please see page 50.
- We have sought to strengthen our supplier relationships as a way to manage the risk to our supply chain, which has included engagement with some new suppliers



Communities

The Group has long-term links with many of the communities within which it operates, most notably Bradford on Avon and the counties of Somerset and Wiltshire (UK), where we are headquartered and around half of our employees are based.

We see ourselves as part of the communities in which we live and work. Our active contribution and engagement with those communities is an important part of who we are and we are working to improve this engagement in all our locations.

Aims and objectives for our stakeholders

- Support our local communities
- Encourage participation and diversity within STEM environment
- Encourage participation within our industry segment

How we engage

- Sponsorship and charitable donations
- Employee volunteering
- University partnerships
- STEM Ambassadors

Outcomes

- The Group has revised its CSR criteria to allow each employee two volunteering days a year
- The revised CSR criteria allow employees to lead engagement in projects in their communities
- For more information please refer to our ESG report on pages 34 to 51

Risk management

Proactively identifying and managing risk throughout the Group

To ensure sustainable delivery of shareholder value, the Group has implemented a risk management framework and management structure that ensure risks are identified, assessed and mitigated wherever possible. It is recognised that certain risks are beyond the control of the Group; however, the Board is committed to the protection and enhancement of the assets and reputation of AB Dynamics.

Methodology

The Board has overall responsibility for the management and maintenance of systems and processes to manage risk and ensure delivery of our strategic priorities.

Risk management responsibility is set out in the displayed structure. The Audit and Risk Committee has responsibility for reviewing the effectiveness of the risk management framework and internal controls and ensures that the Group is in full compliance with relevant regulations and laws, supported by the Company Secretary. Executive Directors have responsibility for overall management and delivery of the strategy, considering the risk environment and regular review of the risk management framework.

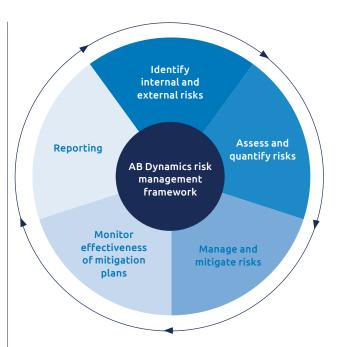
Senior management within the individual operating companies is then responsible for identifying and recording risks, implementing agreed mitigation actions, ensuring compliance with Group internal controls and ensuring compliance with relevant local laws and regulations.

Although the Group does not currently have a dedicated internal auditor, the function of internal control is carried out by Group Finance, supported by the Company Secretary. Its responsibility is to monitor compliance and conduct or, where appropriate, commission specific reviews.

The Board has developed the framework to identify and manage risks, set the risk appetite of the Group and determine the overall risk tolerance levels.

A bottom-up risk analysis is undertaken considering detailed individual risks that fit into four main categories: strategic, operational, financial and compliance. This is combined with a strategic top-down review to ensure that all appropriate risks are identified, assessed and quantified. Mitigation plans and actions are then put in place to ensure risks are reduced to a level that is as low as reasonably practicable.

The risks are assessed both pre- and post-mitigation to identify the overall risk level based on a combination of probability of occurrence and the magnitude of potential consequences. For identified risks that are considered by the Board to be material, the Board monitors specific actions to mitigate these risks. For all other risks, the actions are implemented at local management level and are reviewed regularly by Executive Directors and the Executive Committee.



Risk management continued

Board

- Overall accountability for corporate risk management and strategy
- Determines overall risk appetite

Internal control

- Monitoring of compliance with internal controls and policies of the Group
- Conducts or commissions specific reviews where necessary

Audit and Risk Committee

- Reviews effectiveness of risk management framework and internal controls
- Ensures compliance with relevant regulations and laws

Executive Directors

- Management of the Group and delivery of the strategy
- Monitoring and mitigation of key risks
- Regular reviews of the risk management framework

"Macroeconomic factors have increased risk in relation to supply chain, inflation and foreign exchange. To address this we have invested in inventory, employed different sourcing techniques, implemented price increases and hedged foreign exchange transactions where possible."

Operating companies

- Identify and record risks
- Implementation of risk mitigation actions and compliance with internal controls and policies
- Responsible for compliance with relevant laws and regulations

Principal risks and uncertainties

Managing our risks throughout the Group

Strategic risk

Supply chain disruption	Downturn or instability in major geographic markets or market sectors	Loss of major customers and change in customer procurement processes	Failure to deliver new products	Dependence on external routes to market	Acquisition integration and performance
Description The availability of key components has led to increased supply chain risk. Increased input costs leads to pressure on margins.	Description Adverse changes in macroeconomic conditions in key territories or specific automotive markets, including China, or the impact of other events such as a pandemic could potentially reduce or delay demand for the Group's products and services. Inflationary cost pressures and a recessionary environment could result in a reduction in orders.	Description Loss of a significant customer to competition could result in reduced revenues. Change in procurement processes could lead to pricing pressure.	Description With industry and regulatory development, the Group needs to ensure new product development responds to changes in the market with new products delivered on time and to budget.	Description The Group uses several agents and resellers to address particular geographic markets: Risk of reduced revenues if agreements end at short notice Limited control of market pricing with resellers Potential financial consequences on termination	Description The Group has completed several acquisitions. There is potential for acquisitions to not deliver the expected performance, resulting in a potential financial impact.
Mitigation Dual sourcing for key components wherever possible provides mitigation for key suppliers or a tooling failure Maintaining safety stock levels sufficient to protect against short-term disruption Flexibility in production scheduling to mitigate price increases Price increases to customers mitigate impact of inflationary cost pressures on margins	Mitigation Revenue spread across a range of geographic markets Active safety and autonomous vehicle technology required despite automotive downturn New strategy and action plan implemented to enter adjacent markets Constant monitoring of market trends, drivers and needs to ensure market leadership	Mitigation Following the acquisition of VadoTech, the largest customer now represents 12.5% of Group revenues Continued product development and high levels of customer service to retain key customers Long-term relationships with all key customers	Mitigation Process for identifying new product opportunities established New product development process implemented	Mitigation Direct sales model in key territories with offices in Germany, the USA and Japan The Group will maintain agents and resellers in other territories as appropriate Risks relating to financial consequences are understood and all transitions managed to minimise potential quantum of termination payments	Mitigation Extensive financial, commercial and legal due diligence Appropriate warranties and indemnities from sellers Use of earnout deal structures to ensure management retention and incentivisation Recruitment of senior management to support acquisitions, including finance Close management and monitoring of business performance against budget
Change Increased ↑	Change Increased	Change No change ←→	Change No change ↔	Change No change ↔	Change No change ←→

Principal risks and uncertainties continued

Operational risk

-					
Cybersecurity and business interruption	Competitor actions	Loss of key personnel	Threat of disruptive technology	Product liability	Failure to manage growth
Description Risk of malicious cyber attack on Group IT systems or significant failure of IT infrastructure, particularly with increased remote working.	Description Competitors may develop new technologies and/or products which may restrict revenue growth. Competitors may establish physical assets in key locations.	Description In previous years the Group had dependence on a small number of key individuals which could affect future business growth if they left the Group.	Description Unforeseen new and novel technology displaces the need for Group products and services. Simulation potentially reduces the volume of physical testing products.	Description Risk that products supplied by the Group fail in service and result in a claim under product liability, particularly during the introduction of new products.	Description Rapid growth places demand on the Group's management and resources. Suitable facilities are required to support the current and forecast demand of the market. Failure to ensure adequate capability and capacity could result in reduced revenues and/or growth.
Mitigation External audit completed during 2021 and recommended actions being implemented Cyber Essentials certification achieved in the UK Implementation of a new cloud based CRM/ERP system during the year Implementation of enhanced security around remote access	Constant product and technology development Monitoring of competitors and the IP/patents to ensure no infringement of Group intellectual property Monitoring of competitor product launches and territory actions	Mitigation Expansion of staff headcount and specific actions around succession planning and talent management Strong staff retention rate with average length of service of more than five years with over two-thirds of employees recruited in the last three years Recruitment and training of new management Broadening of the senior management team	Mitigation Constant horizon scanning of new technologies Engagement with customers and regulators to ensure we meet their current and future requirements Established simulation capability and invested in infrastructure, systems and processes for growth to ensure the Group can address both virtual and real-world testing	Mitigation Robust product development process ensuring products are safe and fit for purpose Monitoring and investigation of any issues experienced Established quality system to ensure that manufactured products meet the design standard Suitably qualified and experienced engineering and technology staff Product liability insurance policy in place	Mitigation Strategic priority placed on Group's capability and capacity Implementation of a fiveyear financial model which determines requirements for people, facilities and equipment Engineering Design Centre has scope for further operating expansion Implementation of appropriate IT infrastructure through comprehensive CRM/ERP system Overseas offices established in the USA, Germany and Japan to support customers and product installed base
Change No change ←→	Change No change ↔	Change No change ←→	Change No change ↔	Change No change ↔	Change No change ↔

Principal risks and uncertainties continued

Financial risk		Compliance risk	Environmental risk
Foreign currency	Credit risk	Intellectual property/patents	Environmental risk
Description The Group operates internationally and is exposed to both transactional and translational foreign exchange risk. The main currencies to which it is exposed are the Euro and US dollar. Exposure to the Japanese yen is expected to grow. The risk is enhanced by macroeconomic factors including the Ukraine Russian conflict, potential disruption in China, inflationary cost pressures and a recessionary environment and related currency volatility in the overseas entities.	Description The Group has the potential to be exposed to bad debt risk from customers; however, there is no history of material bad debt in the business.	Description The Group utilises its intellectual property to deliver product and service revenue. Intellectual property theft and/or infringement could adversely affect product sales.	Description Failure to identify and effectively manage climate change risks and opportunities could result in decreased demand for our products and services as well as loss of customer confidence.
Mitigation Group finance function monitors currency forecasts to review the net exposure on revenue and costs Majority of the Group's revenues are contracted in GBP Use of foreign currency contracts to hedge remaining exposure where appropriate	Mitigation Risk is assessed on a case-by- case basis and payment terms established according to risk Advance payments and letters of credit used where appropriate	Mitigation The Group has patented technology where appropriate that covers the key sales territories Where products are not able to be protected through patents, design features and/or encryption is used to protect the core IP Continual review of current patent and IP status and review of new products/technology conducted to ensure IP is protected	Mitigation ESG Committee formed in FY 2021 with responsibility for the creation of ESG policies and framework while promoting sustainable long-term growth Continued focus on building the medium term plan for achieving carbon neutrality by 2030 Current development of a Group Environmental Policy
Change Increased ↑	Change No change ←→	Change No change ↔	Change Increased ↑

Dr James Routh **Chief Executive Officer** 23 November 2022



Chairman's introduction to corporate governance

Good governance - a core value of the Board



Richard (Dick) Elsy CBE, Non-Executive Chairman

Dear shareholders.

I am pleased to introduce our Corporate governance report for the year ended 31 August 2022.

Board effectiveness and evaluation

Good governance is underpinned by an environment of constructive challenge and the open sharing of views at Board level. Establishing and nurturing this within the Board has been an important personal responsibility and I was pleased to see this positively reflected in a more detailed independent review of Board performance commissioned by the Board.

Our external evaluation found that our Board and Committee meetings are collaborative, with a good level of constructive challenge and awareness of both our achievements and our challenges. The evaluation found an effective Board that demonstrates a commitment to continuous development. I am pleased by this outcome and in this spirit of continuous improvement we have started to implement our development points and we will report on our progress next year. The Board remains uncomplacent as we continue to lead the Group's journey to continued growth.

Growth and scale

As we welcome the employees of Ansible Motion into our group of businesses, we are ensuring that they understand our governance values and best practices as they are integrated into our new market-facing business unit. AB Simulation. These are further steps in the growth of the Group into a multinational business with 22 legal entities.

It continues to be essential to scale our governance structures to meet these increased demands of our Group today and allow for future growth whether organically or by acquisition. The Board has maintained a strong focus during the year on the Group's short, medium and long-term strategic objectives, including the integration of recent acquisitions, with the Board monitoring the performance of the acquired businesses.

Chairman's introduction to corporate governance continued

Growth and scale continued

With regulation, risk and responsibilities for directors around the management of legal entities all increasing, we understand that a strong global subsidiary governance framework can both enhance our value and prevent costly financial and reputational damage. We operate under a centralised, head office-controlled framework but devolve responsibility for compliance within this framework to operating divisional management, with the aim of global harmonisation around local legislation. This is achieved via a robust business-wide delegation of authority.

Culture and values

The Board recognises its leading role in establishing the culture and values of the Group and embedding these throughout our Group. The Group benefits from a very high degree of employee engagement, measured in our rolling programme of engagement surveys, and our employees are supported by our HR team. alongside a multifunctional group of colleagues who represent the wide range of expertise from our business units, were active in managing the communication and promotion of our culture and values. Our core values of customers, people, diversity. innovation, excellence and responsibility are reflected in our policies and our business ethics framework. This year, our ESG Committee has updated our Group CSR criteria to deepen our links and involvement with our local communities, as is detailed further in the ESG strategy report on pages 34 to 51.

Stakeholders

Consideration of the Group's full range of stakeholders, including our people, investors, strategic partners and suppliers, continues to be an integral part of the Board's discussions and decision making. The Section 172 statement on pages 52 to 53 describes how the Board took its wider responsibilities into account, including an overview of the Board's engagement activities with each of our key stakeholder groups.

AGM

Our AGM will take place on 11 January 2023. You can read more about our plans for the AGM later in this report and in the notice of meeting on pages 129 to 133.

Richard Elsv CBE

Non-Executive Chairman 23 November 2022

Statement of corporate governance

This Statement of corporate governance is an explanation of how the Group has applied the ten principles of the QCA Code throughout the year. The Code and these standards are integrated into the Group's operations and compliance supports the achievement of our strategic objectives. Whilst day-to-day operational decisions are managed by the Chief Executive Officer, certain strategic decision-making powers and authorities of the Company are reserved as matters for the Board.

The Board recognises the value of good corporate governance and can confirm that it has complied with the Ouoted Companies Alliance Corporate Governance Code 2018 (the 'QCA Code') for the period under review, as required by the AIM Rules.

Independent Board review and evaluation

Part 1: to review if the Board is spending its time effectively, considering and discussing the correct matters and with good quality information was completed in July 2021 and reported in the Group's Annual Report 2021.

Part 2: addressed if the Board is operating effectively as a team, demonstrating a balance of support and constructive challenge with a blend of skills to successfully navigate the Group's strategic challenges. This part was performed in August 2022.

Part 2 of the evaluation described an effective Board with an interest in continuous development. Further details of the outcome of the report can be found on page 72.

Summary of compliance with the QCA Code

The Board has reviewed the principles and provisions of the QCA Code. Following this review, the Board is pleased to confirm that the Company has complied with the Code for the financial year ended 31 August 2022.

The QCA Code can be found on the QCA's website (www.thegca.com) and further information on compliance with the Code can be found below.

The Board held eight full meetings through the year ended 31 August 2022, and the Directors' attendance at those meetings is set out on page 70.

The Board is committed to the pursuit and maintenance of very high standards of corporate governance by promoting ethical and sustainable values and behaviours consistently across the Group's businesses. This report, along with the sections detailed below, aims to provide clear and meaningful explanations of how the Board and its Committees have discharged their governance duties and explains how the Group promotes open and transparent discussions and welcomes constructive challenge in every aspect of its business.

"The Board recognises the value of good corporate governance and can confirm that it has complied with the QCA Code during the year."

▶ Read more about our Statement of corporate governance on page 68

Board of Directors

A leadership team creating sustainable shareholder value

Length of tenure



Balance of Executive and independent **Non-Executive Directors**



Gender diversity





Richard (Dick) Elsy

Non-Executive Chairman

Appointments:

Joined the Board as Non-Executive Director on 1 August 2020.

Chair of the Remuneration Committee from 1 August 2020-1 July 2021.

Non-Executive Chairman (assessed as independent on appointment) and Chairman of the Nomination Committee from 1 July 2021.

Skills and experience: IND

Dick is a career veteran from the automotive industry, with the bulk of his time spent at Land Rover and then Jaguar, where he was Engineering Director. He ran Torotrak plc, and was CEO of the High Value Manufacturing Catapult, Europe's largest advanced manufacturing research institution.

In 2020 Dick chaired the Ventilator Challenge UK Consortium, an extraordinary programme to repurpose the automotive, motorsport and aero industries to build thousands of complex medical devices in a matter of a few weeks in response to the pandemic crisis.

Number of Board meetings attended:

8 of 8

External appointments:

Dick is Non-Executive Director of AWE and chairs both the Faraday Advisory board and STFC Industry and Business Partnership's board for UKRI. He is a Fellow of the Royal Academy of Engineering and an honorary professor at Strathclyde University.



Dr. James Routh Chief Executive Officer

Appointments:

Joined the Group and was appointed to the Board as an Executive Director on 1 October 2018.

Skills and experience: IND RE



James brings significant engineering and management leadership experience gained across international businesses. Prior to joining the Group, James was Group Managing Director at FTSE 250 listed Diploma PLC for six years where he delivered a series of successful international acquisitions. His previous career involved engineering leadership positions predominantly in the aerospace and defence industry, including senior roles at Chemring Group PLC and Cobham PLC. James holds a PhD in Engineering and is a Chartered Mechanical Engineer and Fellow of the Institution of Mechanical Engineers.

Number of Board meetings attended:

External appointments:

James is Non-Executive Director and Senior Independent Director at Tracsis plc.

Board of Directors continued

Governance



Sarah Matthews-DeMers Chief Financial Officer Appointments:

Joined the Group and was appointed to the Board as an Executive Director on 4 November 2019.

Skills and experience: f\$

Sarah has extensive experience of financial management in public company environments, investor relations and strategic development. Most recently Group Finance Director of Carclo plc, Sarah was previously Director of Strategy at Rotork plc where she led a wide-reaching strategic review. Prior to this she was Deputy Group Finance Director at Avon Rubber plc, being part of the senior management team during a period of significant transformation. She began her career at PwC, working with many international manufacturing and technology companies. Sarah is a Chartered Accountant and Fellow of the ICAEW with a first-class degree in Accountancy Studies.

Number of Board meetings attended: 8 of 8

External appointments: None.



Richard Hickinbotham

Non-Executive Director (Independent)

Appointments:

Joined the Board as Non-Executive Director on 14 August 2017.

Chair of the Remuneration Committee from 1 July 2021.

Chair of the Nomination Committee from 14 August 2017-1 July 2021.

Skills and experience: £\$ IND

Richard holds a BSc in Mechanical Engineering from Imperial College and is a Chartered Accountant with over 30 years' City experience. He is currently Head of Research at Singer Capital Markets and was previously in research management roles at Cantor Fitzgerald Europe and Charles Stanley Securities. He has held several senior positions at Invested and S G Warburg & Co. (acquired by UBS). In 2013 Richard was part of the advisory team that listed the Group on AIM.

Number of Board meetings attended: 7 of 8

External appointments:

Richard is Head of Research at Singer Capital Markets and Non-Executive Interim Chair of Directa Plus Plc.



Louise Evans

Non-Executive Director (Independent)

Appointments:

Joined the Board and appointed Chair of the Audit and Risk Committee on 6 April 2020.

Chair of the ESG Committee from August 2020.

Skills and experience: £\$

A qualified Chartered Accountant, Louise was previously Group Finance Director of Williams Grand Prix Holdings plc and, most recently, Braemar Shipping Services plc.

Number of Board meetings attended: 8 of 8

External appointments:

Louise is a Non-Executive Director and Chair of the Audit Committee of Gooch & Housego plc and Non-Executive Director of the International Foundation for Aids to Navigation.

- Audit and Risk Committee
- Remuneration Committee
- Nomination Committee
- ESG Committee
- Committee Chairman
- £\$ Financial expert
- IND Industry expert
- RE Risk expert

Executive Committee

A balance of skills

The Executive Committee includes the Group CEO and CFO as well as the following business leaders. The newly formed Executive Committee (Excom) oversees the delivery of the Group's strategy, monitors the operational and financial performance of the business, allocates resources across the Group, manages risk and implements the Group's governance policies.

The members of the Committee include the Executive Directors, the Chief Operating Officer, the President Asia Pacific and North America and the Group Operational Excellence Director.

Other Directors may attend by invitation.

During the year, four Excom meetings were held.



Dr James Routh Chief Executive Officer



Sarah Matthews-DeMers Chief Financial Officer

See pages 62 and 63 for biographies.

Executive Committee continued



Stephen Brown
Chief Operating Officer
Appointments:

Joined the Group on 16 November 2020 and is a member of the Group Executive Committee.

Skills and experience:

Stephen brings significant senior leadership experience from roles in positions with responsibilities in different regions across the globe. Prior to joining the Group, Stephen led BP plc's Launchpad strategy to establish five standalone entities' business plans and implement product and technology roadmaps to maximise market penetration. Previous roles include CTO at Expleo, a global consultancy helping to harness technology change for competitive advantage, and Vice President at Romax Technology where he had global responsibility for the technical roadmap, high value projects, client product integration and applications, IP commercialisation and business model creation. Following a degree in Mechanical Engineering, Stephen began his career at Rolls-Royce where he progressed to Technical Director of the Industrial Power Group.



Andrew Ng
President Asia Pacific and North America
Appointments:

Joined the Group and appointed as President Asia Pacific on 1 October 2021 and North America on 1 October 2022 and is a member of the Group Executive Committee.

Skills and experience:

Andrew brings senior management leadership experience and significant commercial experience in APAC, North America and Europe. Prior to joining the Group, Andrew was Group Managing Director – APAC at FTSE 250 listed Diploma plc for four years, Managing Director – Australia for FTSE 250 listed Fenner plc for ten years and International Sales and Business Development at NZ50 listed Skellerup for twelve years. He delivered successful acquisitions in the APAC region and has extensive experience in automotive, mining, mineral processing, oil and gas and valve control. Andrew has a BAS in Materials Science from the University of Technology, Sydney, and an MBA from Macquarie University, Sydney, Australia.



Tom Willis Group Operational Excellence Director Appointments:

Joined the Group on 11 July 2022 and is a member of the Group Executive Committee.

Skills and experience:

Tom brings significant operational and leadership experience in operations and supply chain activities across the UK, Europe, North America and APAC. Prior to joining the Group, Tom was Programme Director at FTSE 250 listed Diploma plc for two years, Global Operations Director for Hallite Seals, a Michelin company, for three years and Supply Chain Director for UK and Ireland at CAC Mid 60 listed Rexel for 18 years. He delivered global transformation projects in moving from an existing operational state into the next stage of business evolution to drive improved customer service, improvements through global sourcing and implementation of ERP systems, and in bringing to the businesses new technologies through robotics and software that had never been seen before.

"The Executive
Committee facilitates
execution of the
Group's strategy though
running the day-today operations of
the business."

Statement of corporate compliance

Summary of compliance with the QCA Corporate Governance Code (QCA)

Principle 1: Establish a strategy and business model which promote long-term value for shareholders.	The Group has built on its existing core strategy to diversify the business and enter larger, growth-focused markets. For more details regarding this strategy please see the Strategic report on pages 1 to 58 and the Group's detailed analysis of its compliance with the QCA Code Principle 1 available on the Group's website.
Principle 2: Seek to understand and meet shareholder needs and expectations.	The Group maintains regular contact with its major shareholders and is committed to communicating openly with shareholders through announcements made on RNS and presentations to institutional shareholders, private client brokers and investment analysts. Meetings and site visits are regularly held with existing and prospective investors. For further and more detailed explanations of how the Group applies Principle 2, see our commentary on the Group's Section 172 responsibilities on pages 52 to 53 and the Statement of corporate governance on pages 68 to 76.
Principle 3: Take into account wider stakeholder and social responsibilities and their implications for long-term success.	Social engagement and the Group's responsibilities to the communities within which we operate is one of the pillars of our ESG strategy and remains key to our Group's success. We summarise the Group's community activities and general corporate social responsibilities on pages 42 to 44.
Principle 4: Embed effective risk management, considering both opportunities and threats, throughout the organisation.	The Group has implemented a risk management framework and management structure that ensure risks are identified, assessed and mitigated wherever possible. For further and more detailed explanations of how the Group applies Principle 4, see Principal risks and uncertainties on pages 56 to 58.
Principle 5: Maintain the Board as a well-functioning, balanced team led by the Chair.	During the year the Board instructed Savendie to complete Part 2 of an independent Board review and evaluation (Part 1 was completed in 2021). Part 2 addressed whether the Board is operating effectively as a team, demonstrating a balance of support and constructive challenge with a blend of skills to successfully navigate the Group's strategic challenges. For further and more detailed explanations of how the Group applies Principle 5, see the Statement of corporate governance on pages 68 to 76.
Principle 6: Ensure that between them the Directors have necessary up-to-date experience, skills and capabilities.	The composition of the Board is monitored by the Nomination Committee. The Board is satisfied that the Directors have a blend of skills, experience, knowledge and independence suited to the Group's needs and its continuing development. Information on the Directors' range of skills including details of their technical and/or financial experience and expertise can be found on pages 62 to 63.
Principle 7: Evaluate Board performance based on clear and relevant objectives, seeking continuous improvement.	The Board and its Committees review their skills, experience, independence and knowledge to enable the discharge of their duties and responsibilities effectively. This year the Board has instructed Savendie to undertake Part 2 of an independent Board review and evaluation (Part 1 was completed in 2021). For further and more detailed explanations of how the Group applies Principle 7, see our Statement of corporate governance on page 72.

Statement of corporate compliance continued

Summary of compliance with the QCA Corporate Governance Code (QCA Code) continued

Principle 8: Promote a corporate culture that is based on ethical values and behaviours.	The Board is committed to the pursuit and maintenance of very high standards of corporate governance and the promotion of ethical and sustainable values and behaviours across the Group's businesses. For further and more detailed explanations of how the Group applies Principle 8, see our Statement of corporate governance on pages 68 to 76. For more information on the Group's vision and values, refer to page 38.
Principle 9: Maintain governance structures and processes that are fit for purpose and support good decision making by the Board.	The Group operates under a centralised, head office-controlled framework and devolves responsibility for compliance within this framework to each operating division or jurisdictional management, with the aim of global harmonisation around local legislation. This is achieved via a robust business-wide delegation of authority. The Group's governance framework and the structures of the Board and its Committees are fully detailed within our Statement of corporate governance on pages 68 to 71.
Principle 10: Communicate how the Company is governed and is performing by maintaining a dialogue with shareholders and other relevant stakeholders.	Engagement with our stakeholders is key to a successful business and is an ongoing part of managing our business. We summarise why and how we engage with our six key stakeholders including our shareholders on pages 52 to 53. How the Board remains informed of this engagement and a statement summarising the effects of their consideration of stakeholder interests and the details of the principal decisions taken by the Board during the financial year can be found on page 71. For further and more detailed explanations of how the Group maintains a dialogue with its shareholders and other relevant stakeholders, refer to the Company's Section 172(1) statement on pages 52 to 53.

Further information on the Group's compliance with the QCA Code can be found on the Group's website, www.abdplc.com, on the AIM Rule 26 page.

Statement of corporate governance continued

Governance framework

Board

The Board of Directors (the 'Board') is collectively responsible to the Group's shareholders for the long-term success of the Group. This responsibility includes matters of strategy, performance, resources, standards of conduct and accountability as well as having regard for our employees, customers, suppliers and the impact of our activities on both the environment and the communities in which we operate. The Board also has ultimate responsibility for corporate governance, which it discharges either directly or through its Committees. The Board delegates certain responsibilities to the Board's Committees outlined below, whilst maintaining an appropriate level of oversight through regular reports from Committee Chairs. The matters reserved for the Board can be found on the investor relations section of the Group's website, www.abdplc.com.

The Board's role is to:

- Determine the Group's overall strategy and direction
- · Ensure appropriate adherence to health and safety requirements and promote an appropriate safety culture
- Establish and maintain controls, audit processes and risk management policies to ensure they mitigate identified risks and that the Group operates efficiently
- Approve budgets and review performance relative to those budgets and approve the financial statements
- Approve material agreements and non-recurring projects
- Approve Board appointments
- Review and approve Group-wide remuneration policies and executive remuneration
- Ensure effective communication with shareholders and other key stakeholders
- Promote a corporate culture based on sound ethical values and behaviours

Committees

Where appropriate, matters are delegated to the Board's four Committees (Nomination, Audit and Risk, Remuneration and ESG), which will consider and manage them in accordance with their terms of reference.

Nomination Committee	Audit and Risk Committee	Remuneration Committee	ESG Committee
 Board and Committee composition 	 External audit 	 Remuneration policy 	 Environmental policy
 Succession planning 	 Financial reporting 	 Remuneration principles 	 Diversity
 Board diversity 	 Risk management and internal controls 	 Incentive scheme design and 	 People and potential
 Executive and Non-Executive Board 	 Internal audit 	setting of targets	 CSR and community engagement
appointments and strategy		 Executive and senior management 	 Ethical, diverse and robust supply chains
		remuneration	•
▶ Read more on pages 77 to 78	▶ Read more on pages 79 to 80	► Read more on pages 82 to 89	► Read more on page 81

Statement of corporate governance continued

Governance framework continued

Division of responsibilities

The Group strives for a clear division of responsibilities and the table below outlines the Directors' roles and remits. The majority of the Board are independent Non-Executive Directors (the Chair being assessed as independent upon appointment). Further information on the Directors' range of skills including details of their technical and/or financial experience and expertise can be found on pages 62 to 63.

- Responsible for the leadership and overall effectiveness of the Board and for ensuring appropriate strategic focus and direction
- Provides leadership to the Board, setting the agenda, style and tone of Board discussions to promote constructive debate and challenge between the Executive and Non-Executive Directors
- Ensures that there is a good information flow to the Board, and from the Board to its key stakeholders
- Supports and advises the Chief Executive Officer, particularly on the development of strategy
- Demonstrates ethical leadership and promotes the highest standards of integrity throughout the business
- Ensures effective operation of the Board's Committees

Chief Executive Officer

- Provides the day-to-day leadership of the Group
- Responsible for developing and defining strategic proposals for recommendation to the Board and the subsequent implementation of the agreed strategy
- Accountable for business performance
- Responsible for developing an organisational structure, and establishing processes and systems to ensure that the Group has the capabilities and resources required to achieve its plans
- Maintains a dialogue with the Chair on all important matters and strategic issues facing the Group
- Ensures that there is an effective framework of internal controls, including risk management, covering all business activities
- Oversees the application of Group policies and governance procedures
- Ensures that the Board is fully informed of all key matters
- Develops and promotes effective communication with shareholders and other key stakeholders

Chief Financial Officer

- Oversees the financial delivery and performance of the Group and provides insightful financial analysis that informs key decision making
- Leads investor relations activities and communication with investors alongside the Chief Executive Officer
- Works with the Chief Executive Officer to develop budgets and medium-term plans to support the agreed strategy
- Supports the Chief Executive Officer in developing and implementing strategy, allocating resources across the Group and managing risk

Independent Non-Executive Directors

- Bring external perspectives and insight to the deliberations of the Board and its Committees
- Provide a range of knowledge and business experience from different sectors and undertakings (see their biographies on pages 62 to 63)
- Assist in the formulation and progression of the Board's agreed strategy and monitor the performance of the executive management in the implementation of this strategy
- Constructively challenge management and decisions taken at Board level
- Oversee the performance of management in meeting agreed goals
- Support the Chair and Executive Directors to instil an appropriate culture, values and behaviours in the boardroom and across the Group
- Challenge the adequacy and quality of information received prior to Board meetings

Executive Committee

The newly formed Executive Committee comprises the Group's senior leadership below Board level and assists the Executive Directors in facilitating the execution of the strategy.

Statement of corporate governance continued

Governance framework continued

Board and Committee attendance record

Member	Independence	Board ¹	AGM	Strategy Day	Audit and Risk	Remuneration	Nomination	ESG
Executive								
Dr James Routh	N	8/8	Yes	1/1	N/A	N/A	N/A	5/5
Sarah Matthews- DeMers	N	8/8	Yes	1/1	N/A	N/A	N/A	N/A
Non-Executive								
Dick Elsy CBE	Y ²	8/8	Yes	1/1	3/3	7/7	1/1	5/5
Richard								
Hickinbotham	Υ	7/8	Yes	0/13	3/3	7/7	1/1	N/A
Louise Evans	Υ	8/8	Yes	1/1	3/3	7/7	1/1	5/5

- 1. The table shows attendance at full Board meetings only. Sub-Committees were convened with the authorisation of the Board throughout the course of the year for transactional activities.
- 2. Dick Elsy was considered independent at the time of his appointment as Chair.
- 3. Richard Hickinbotham did not attend the Strategy Day due to the guidance in place in relation to COVID-19 at the date of the meeting.

Effectiveness

For the Directors to effectively perform their responsibilities as set out in the matters reserved for the Board below, the Board meets at least eight times each financial year. The Board and Committees also meet on an ad-hoc basis when required by business priorities. In addition, the Board attends a strategy day at the beginning of each calendar year to discuss in depth the Group's strategic direction. Details of the Directors' attendance at scheduled meetings can be found above.

Dick Elsy, Non-Executive Director, was considered independent on his appointment as Chair. Louise Evans and Richard Hickinbotham, as Non-Executive Directors, are independent of the Executive and are free to exercise independence of judgement. Richard Hickinbotham has the longest tenure of the Non-Executive Directors at just over five years; therefore, the Board does not believe any of our Non-Executives have formed associations with management or others that may compromise their ability to exercise independent judgement or act in the best interests of the Group. The Board is satisfied that no conflict of interest exists for any Director.

Time commitments of the Non-Executive Directors

All Non-Executive Directors have been advised of the time required to fulfil their role and remit prior to their appointment and this requirement is included in their letters of appointment. The Board is satisfied that the Chair and each of the independent Non-Executive Directors can devote sufficient time to the Group's business. The Nomination Committee reviews the time commitments of the Non-Executive Directors on an annual basis.

Matters reserved for the Board

Matters reserved for the Board include, but are not limited to:

- Strategy and management, including responsibility for the overall leadership of the Group, setting the Group's values and standards, and overview of the Group's operational management
- Structure and capital, including changes relating to the Group's capital structure and major changes to the Group's corporate structure, including acquisitions and disposals, and changes to the Group's management and control structure
- Financial reporting, including the approval of the Annual Report and Accounts, half-yearly report, trading statements, preliminary announcement for the results and dividend, treasury and accounting policies
- Internal controls, ensuring that the Group manages risk effectively by approving its risk appetite and monitoring aggregate risk exposures
- Contracts, including approval of all major capital projects and major investments
- Ensuring satisfactory communication with the Group's stakeholders, including its shareholders
- Board membership and other appointments, including changes to the structure, size and composition of the Board, and succession planning for the Board and senior management

Activities of the Board

The Group's governance framework is set out on pages 68 to 71. The core activities and calendar of the Board and its Committees are planned on an annual basis and this framework forms the structure within which the Board operates.

Governance framework continued

Activities of the Board continued

Key considerations	Key activities	In practice				
Strategy	Annual strategy day (February 2022) to discuss the future	The Board considered and agreed (in principle) to the CEO's proposals for the following:				
	strategic direction of the Group	• M&A pipeline (including the development of the business case to acquire Ansible Motion Ltd)				
	 Assessment of the Group's performance against previously agreed strategic objectives 	 Sales and marketing capability, including development of channels to market 				
	Review of the CEO's proposals for the strategic future	• Leadership requirements, including leadership in operational excellence supported by recruitment activity				
	of the Group	Organisational design and structure review				
	·	 Product and technology development, including the plan to release new products (rFpro's SIL simulation software, DRI's motorcycle ADAS target and articulating pedestrian ADAS target) 				
		Enchanced systems and processes to support the Group's growth				
Finance	 Approval of the Group's Budget for the financial year ending 31 August 2023 and 3 year plan 	The Board considered the Group's response to inflation risks, cost of living increases and pricing increases and agreed a mid-year supplementary wage increase where appropriate.				
	ERP system preparation and implementation activities	The Board debated the risks and benefits of the current dividend policy, including the options available in light				
	 Tender process to appoint Grant Thornton UK LLP as the Group's external auditor 	uncertainty. It concluded that the total dividend for the year should be 5.3p.				
	The due diligence for the acquisition of Ansible Motion Ltd	The Board were involved in the tender process and approved the selection of Grant Thornton UK LLP as the Group's external auditor following the completion of the audit process for the year ended 31 August 2022 (subject to				
		shareholder approval at the AGM on 11 January 2023).				
Risk and	Annual review of the Group's strategic risk register	The Board received information to assess and mitigate risks associated with the situation in Ukraine following				
compliance	Continuation of due diligence on third party suppliers	the start of the conflict in February 2022.				
	and agents	The Board were updated by the CEO about the Group's progress to de-risk its supply chain and improve its diversification of suppliers of its key components.				
	• Review of Group-wide policies	The Board received two whistleblowing issues through its whistleblowing platform. For further details please refer				
	• Review of Group-wide insurance coverage	to page 51.				
People	Maintenance of the Group's whistleblowing platform Professional development programme launch	The Group launched a new career development programme including a professional development programme				
and culture	Group CSR criteria review	for emerging leaders with participants invited to enrol from across the Group's business units.				
	Review of current structure of the Group	The Group revised its CSR criteria, underpinned by its corporate values, to ensure that its CSR activities enhance				
	Employee engagement surveys	the links to the Group's local communities.				
		The Group instigated a programme of employee engagement surveys with regular follow ups.				
Governance	 Engaged Vistra, a global company secretarial services provider, to assist the Group's legal and compliance activities in all regions 	The Group engaged Vistra to provide a standardised approach to legal and company regulatory matters in all the jurisdictions in which the Group operates. This allows the Group to operate a more efficient and effective				
	 Pursued growth of the Group's ESG agenda led by the ESG Committee 	governance structure to ensure all of its subsidiaries are sufficiently supported and in compliance with local regulations.				
	Reviewed and maintained a global subsidiary governance framework, to improve management oversight and governance	The Group's ESG agenda this year focused on reductions in our CO ₂ emissions, waste and water usage and data collection to accurately measure our use of these finite resources. The Group achieved an MSCI AA rating.				
	of all legal entities	Part 1 of the board evaluation was facilitated by Savendie in June 2021 and the development points highlighted				
	Stakeholder engagement	were implemented. Savendie completed Part 2 of the board evaluation in August 2022 and the Board is now				
	 Part 2 of the Board and Committee performance evaluation 	implementing Savendie's recommendations this year, please refer to page 72 for more information.				

Statement of corporate governance

Board meetings

During the period, the Board convened formally on eight occasions. The Board retains the services of a Company Secretary and receives its information on a secure platform, Board Intelligence. The routine Board and Committee papers are distributed seven days in advance of the scheduled meetings (a minority of papers may be circulated nearer to the time of a meeting on an exceptional basis).

Any Director can challenge proposals, with decisions reached after open discussions. Any Director can ask for a concern to be noted in the minutes of the meeting which are circulated to all Directors. Specific actions arising from meetings are agreed by the Board or relevant Committee and then followed up by management. The Board is supported by the Audit and Risk, Remuneration, Nomination and ESG Committees, each of which has access to information, resources and advice that it deems necessary, at the Group's cost, to enable each Committee to discharge its duties.

The Chair also meets separately with Non-Executive Directors without Executive Directors or other managers present. Debate and discussion at Board and Committee meetings is encouraged to be open, challenging and constructive.

Board composition

As at 31 August 2022, the Board comprised a Non-Executive Chairman (who was deemed independent upon appointment), two Executive Directors and two independent Non-Executive Directors. A biography of each Director in office at the end of the year is set out on pages 62 to 63.

The composition of the Board is monitored by the Nomination Committee. The Board remains satisfied that each Director, whether Executive or Non-Executive, has the necessary time to devote to effectively discharge their responsibilities and that, between them, the Directors have a blend of skills, experience, knowledge and independence suited to the Group's needs and its continuing development. The Board is also assured that it has a suitable balance between independence and knowledge of the Group to enable it to discharge its duties and responsibilities effectively. All Directors are encouraged to use their independent judgement and constructively challenge other Directors where appropriate.

Board evaluation

The Board and its Committees review their skills, experience, independence and knowledge to enable the discharge of their duties and responsibilities effectively. An external Board evaluation is conducted every three years in accordance with the Financial Reporting Council's Code of Governance (provision 21).

In the financial year ended 31 August 2022, the Board continued its work with Savendie which conducted an evaluation of Board performance in two parts over two financial years due to the changes in the Board's composition in 2021. Part 2 of Savendie's review occurred during August 2022 and considered progress of the recommendations highlighted in 2021 and explored in more detail the effectiveness of the Board operating as a team, the nature of debate and constructive challenge in Board and Committee meetings and the combination of skills required to cover strategic challenges. Overall, the report described an effective Board with an interest in continuous development and noted:

- That actions from the 2021 review had been progressed well with demonstrable improvement in Board processes
- While the combined skills of Directors are currently adequate, succession planning is in place to further develop diverse thinking and to support strategic development
- Board meetings are conducted to encourage an open sharing of information which generates debate and appropriate challenge
- That the Board should continue to develop relationships with stakeholders and develop a culture where stakeholder views routinely become part of decision making

Powers of Directors

The powers of the Directors are set out in the Group's Articles of Association (the 'Articles'), which may be amended by way of a Special Resolution of the members of the Group. The Board may exercise all powers conferred on it by the Articles, in accordance with the Companies Act 2006 and other applicable legislation. The Articles are available for inspection online at www.abdplc.com and can also be viewed at the Group's registered office.

Directors' inductions, training and development

Following appointment to the Board, all new Directors receive an induction tailored to their individual requirements. These inductions cover some or all of the following (depending on the individual Director's experience and what is appropriate for their role):

- Board and governance: including the Board's calendar, procedures, including meeting protocols, Committee activities and terms of reference, and matters reserved for the Board
- Business introduction: the nature of the Group, its business, markets and relationships; meetings with the relevant operational and functional senior management; and overviews of the business via monthly reports
- Finance: budget and forecast papers; and analyst and investor overviews
- Risk: the Group's approach to risk management
- Other: meetings with the Company's official appointed advisors including registrar, solicitor, auditor, broker and nominated adviser (NOMAD)

The Group meets the cost of appropriate training for directors, the requirement for which is kept under review by the Chairman. Directors are continually updated on the Group's businesses and the matters affecting the markets in which the Group operates. In the course of the financial year ended 31 August 2022, the Directors were briefed by the Group's legal advisor, Pinsent Masons, on key developments in legal and regulatory matters that affect the Group's businesses.

Risk management and internal controls

The Board is responsible for the Group's system of internal controls and for reviewing the effectiveness of that system. It is designed to manage, rather than eliminate, the risk of failure to achieve the Group's strategic objectives and can only provide reasonable but not absolute assurance against material damage, deficiency or loss. The control framework includes:

- Setting and approval of an annual budget
- Regular updates from all subsidiaries to the CEO and CFO
- Monthly business reviews by the CEO and CFO focused on business performance
- Quarterly reviews by Group finance focused on the quarterend balance sheet

Statement of corporate governance continued

Risk management and internal controls continued

- Six-monthly confirmations from local controllers regarding operation of internal controls, results and financial position and compliance with bank requirements
- · Automated controls and workflows built into the new ERP system
- Physical verification of inventory every six months

The principal risks which the Board has identified this year are set out in the section on Risk management on pages 54 to 58 of the Strategic report.

Delegation of authority

The Group has in place defined authorisation levels for expenditure, the placing of orders and signing authorities.

Each year on behalf of the Board, the Audit and Risk Committee reviews the effectiveness of these systems. This is achieved primarily by a comprehensive review of the risks within a business risk assessment matrix that includes both financial and nonfinancial issues with the potential to affect the Group, and from discussions with the external auditor.

Anti-corruption

The Group has a policy on anti-bribery and corruption that fully addresses the requirements of the Bribery Act 2010 and Foreign Corrupt Practices Act. This policy is circulated to every member of staff globally through the Group's HR portals or OMS systems and individuals receive online training on the core subject matter. To facilitate understanding and compliance the policy and training is available in four languages (the key languages spoken across the Group).

The Group has formalised its due diligence with the use of the Dow Jones Risk Management tool. Dow Jones Risk and Compliance is a global provider of regulatory compliance and risk management solutions; its tool allows the Group to perform comprehensive due diligence on customers, agents and suppliers which supports its anti-corruption policies and procedures. This tool was one of the means by which the Group mitigated its risks in relation to the ongoing conflict in Ukraine (and associated restrictions on trade with Russia during the financial year).

Whistleblowing

The Board aims to encourage openness and will support staff who raise genuine concerns in good faith under this policy, even if they turn out to be mistaken. The Group retains an independent and online whistleblowing hotline operated by EQS Group. The hotline enables employees to raise any concerns anonymously through a third-party tool (EQS) to an independent Director of the Group, and facilitates communications in all of the core languages of the Group.

All reports made through the hotline are investigated in line with the Group's whistleblowing policy. The Board received two whistleblowing reports during the financial year, which were resolved without further action, please refer to page 51 for further information.

Diversity and equality

The Group is proud of its Board diversity with 40% female Directors and it remains committed to strengthening its diversity beyond gender to ethnic or colour diversity, when appropriate opportunities arise. Diversity across a wide range of criteria is valued, including skills, knowledge and experience as well as sex, gender identity, ethnicity, religious beliefs and sexual orientation. It is also committed to creating equality of opportunity where people are appointed on merit, and without any form of positive or negative discrimination. Whilst the Nomination Committee reviews the structure, size, diversity, balance and composition of the Board, the principal objective of the Nomination Committee is to ensure that all candidates are suitably qualified and experienced for the role. Additional information on diversity can be found on pages 38 and 39 in our ESG strategy section.

Re-election

All Directors are subject to annual re-election by shareholders at the first Annual General Meeting following their appointment and annually thereafter.

Liability insurance

Each Director and Officer of the Group is covered by appropriate Directors' and Officers' liability insurance (D&O insurance) at the Group's expense in line with market practice.

The D&O insurance provides coverage for the Directors and Officers for the costs of defending themselves in legal proceedings taken against them in their capacity as a director and in respect of damages that may result from those proceedings. The insurance does not provide coverage where the Director or Officer has committed a deliberately fraudulent or deliberately criminal act.

Professional advice

Each Director is entitled to obtain independent professional advice at the Company's expense in furtherance of their duties as a Director of AB Dynamics plc. In addition, each Committee is authorised, through its terms of reference, to seek advice at the Company's expense. The Board retains the services of a Company Secretary who supports the operations of the Board and its Committees.

Conflicts of interest

The Group has policies and procedures to appropriately manage or resolve potential or actual conflicts of interest that may arise in the business. The policies are available in four languages and apply to the Company's Directors and personnel.

All Directors are also subject to a statutory duty under the Companies Act 2006 (the 'Companies Act') to avoid a situation where they have, or could have, a direct or indirect interest that conflicts, or possibly could conflict, with the Company's interests. Directors of public companies may authorise conflicts and potential conflicts in accordance with the Companies Act where it is appropriate to do so and where the Articles of Association (the 'Articles') contain a provision to this effect. At each scheduled Board meeting, the Chair gueries if the Directors are aware of any potential or actual conflicts of interest. It is the Board's contention that all authorisation powers are being exercised in accordance with the Companies Act and the Group's Articles.

Accountability

The Board is responsible for ensuring that the Annual Report and Accounts, taken as a whole, present a clear, fair and balanced assessment of the Group which provides the information necessary for shareholders to assess the Group's performance. strategy and business model.

The Board receives a detailed report from the Chief Financial Officer which sets out the key matters that impact or could impact the Group's Annual Report and financial statements and highlights areas of the financial statements where it has been necessary to rely upon a significant level of subjectivity.

Board Committees

Audit and Risk Committee

Chaired by Louise Evans (finance and audit expert)

Number of meetings in the year: 3

Role of the Committee

The Audit and Risk Committee is responsible for ensuring that the financial performance of the Group is properly reported and monitored, and for meeting the auditor and reviewing the reports from the auditor relating to accounts and internal control systems. The Audit and Risk Committee has discussions with the external auditor at least once a year without any Executive Directors being present. The Committee is also responsible for the review and management of the Group's risk management framework.

Nomination Committee

Chaired by Dick Elsy (industry expert)

Number of meetings in the year: 1

Role of the Committee

The Nomination Committee is responsible for recommendations to the Board for the appointment of additional Directors or replacement of current Directors and for succession planning for the Group.

Remuneration Committee

Chaired by Richard Hickinbotham (industry and finance expert)

Number of meetings in the year: 7

Role of the Committee

The Remuneration Committee reviews the performance of the Executive Directors and sets and reviews the scale and structure of their remuneration and the terms of their service agreements with due regard to the interests of the shareholders. In determining the remuneration of Executive Directors, the Remuneration Committee seeks to enable the Group to attract and retain Executives of high calibre. No Director is permitted to participate in discussions or decisions concerning his or her own remuneration. The Remuneration Committee meets as and when necessary. This year the Remuneration Committee has appointed FIT to review the Group's Executive Remuneration Policy, overseen the award of Executive bonuses (and the allocation of 20% of these bonuses to be awarded as shares), and authorised the award of an LTIP to the Executive and senior leadership of the organisation. The Executive LTIP is subject to malus and clawback provisions.

ESG Committee

Chaired by Louise Evans (finance expert)

Number of meetings in the year: 5

Role of the Committee

The aim of the Committee is to further the sustainability of the Group, promote the continuous improvement of the Group's ESG management and performance, promote and enhance the Group's ESG work to ensure it receives due attention and acknowledgement, enabling the Group to become an ESG leader in our selected industries. This year the ESG Committee has appointed CEN-ESG to lead an external review of the Group's ESG activities and to identify areas of improvement for the Group to enhance the Group's development.

Board Committees continued

The Board also has access to all relevant information and reviews other periodic management information and RNS announcements. The draft Annual Report and Accounts are circulated to each member of the Board in sufficient time to allow challenge of the disclosures where necessary. The Statement of Directors' responsibilities is set out on page 93 (within the Directors' report).

Stakeholder engagement

Consideration of all our stakeholders

See our report on Section 172 stakeholder engagement on pages 52 to 53 for details of how the Group engages with its stakeholders.

Our Stakeholders	How the Board and Committees are kept informed
Customers	• The Board reviews the Group's engagement with significant customers and regularly discusses the contractual requirements of the larger or more complex contracts
Industry bodies	• The ESG Committee receives information regarding industry bodies with whom our subsidiaries are engaged. This year the Committee intends to formalise this review to be able to give further direction to the business regarding with whom they should engage and at what level
Investors	• The Chief Executive Officer and Chief Financial Officer engage with major shareholders and potential investors directly and indirectly throughout the year, and provide regular and detailed feedback to the Board after each consultation
	• The Company's Executives and Non-Executive Directors are given regular updates as to the views of institutional shareholders and changes to significant shareholdings through research carried out quarterly by the Group's broker and advisor
	• The Company's AGM is an opportunity for all shareholders to meet and question the Directors. Please refer to the Notice of the AGM 2023 on pages 129 to 133
	• The Board receives feedback from investors after the full and half-year results announcements from the Executive team
Employees	The ESG Committee receives updates from the Human Resources Director regarding employee engagement
	• The results from any Employee Engagement Surveys are shared with the Board
	• The Chairman and Non-Executive Directors have engaged directly with employees at several levels of seniority providing an opportunity to receive direct feedback
Supply chains	• The Board receives reports from the businesses to update on performance of major suppliers, highlighting risks (and their proposed mitigations)
Communities	The Company's engagement with the communities is reviewed annually by the ESG Committee
	CSR criteria reviewed annually by ESG Committee
	• The Board receives updates on CSR initiatives

Stakeholder engagement continued

Consideration of all our stakeholders continued

We consider all stakeholders when formulating the Group's strategy and business model. More information on how stakeholder interests have influenced the Board's decision making this year is included below.

Key decisions and discussions Stakeholders		How the Board considered stakeholders during the year	Annual Report sections
CSR criteria review	EmployeesCustomers	Led by the ESG Committee, the Group's HR team and the emerging leaders from across the business, revised and updated the Group's CSR criteria to strengthen and deepen the Group's relationships with the communities it serves.	For more information on the Group's CSR criteria, refer to pages 42 to 43 of the ESG report.
EmployeesCustomersSociety		This year the Board reviewed the business case for the purchase of Ansible Motion Ltd which was acquired shortly after the year end. An acquisition of this type impacts on a number of our stakeholders. The strengthening of our simulation business is seen as beneficial to our shareholders as we increase our market presence. We welcome new employees to our Group and offer our existing employees the opportunity to exchange best practices with Ansible Motion Ltd. Our range of simulation products has expanded, which offers our customers more choice from our Group.	
Growth of an ESG agenda led by an ESG Committee	SocietyCustomersEmployeesShareholders	The ESG Committee has continued to progress the Group's ESG agenda. In its second year of operation, the ESG Committee has focused on reductions in our CO ₂ emissions, waste and water usage and data collection to accurately measure our use of resources. The Group achieved an MSCI AA rating in the financial year ended 31 August 2022. For more information, please refer to our ESG report on pages 34 to 51.	See page 81 for more information regarding the activities of the ESG Committee
Group-wide pay rise for eligible employees	• Employees	Our Board identified that some of our employees may be more at risk from the financial pressure of cost of living increases, including inflation and interest rates. The Board decided to enact a Group-wide pay increase for eligible employees to help support them during this period of heightened economic uncertainty.	

Nomination Committee report

Maintaining an appropriate balance of skills and experience



Meetings

1

Nomination Committee members

- Dick Elsv (Chair)
- · Richard Hickinbotham
- Louise Evans

Key activities for the year

- Part 2 of our external evaluation found a Board that is collaborative, open to challenge and focused on continuing development
- Succession planning was reviewed and updated during the year
- The composition of the Board and its Committees was reviewed and considered appropriate

Dear shareholders,

I am pleased to present the Nomination Committee's report for the year ended 31 August 2022.

Membership of the Committee

The Nomination Committee's key role is to ensure that the Board has the appropriate skills, knowledge and experience to operate effectively and deliver the Group's strategy. There were no changes in the membership of the Committee during the last twelve months and all members are considered to be independent Non-Executive Directors. I chair the Committee but will not do so where the Committee is dealing with my own re-appointment or my replacement as Chair of the Board. The Company Secretary acts as secretary to the Committee. Details of attendance of members of the Committee at the one meeting held during the year are shown on page 70.

Meetings of the Committee are attended, at the invitation of the Chairman by the Chief Executive Officer and the Chief Financial Officer when considered appropriate. Members of the Committee do not participate in any discussions relating to their own appointment or replacement.

Responsibilities

The Nomination Committee's terms of reference were reviewed and updated during the year. The Committee's key responsibilities are:

- To review the size, structure, composition and independence of the Board and its Committees
- To make recommendations to the Board for the appointment of new Executive and Non-Executive Directors and their re-appointment following retirement by rotation
- To manage the search for and selection of suitable candidates for the appointment or replacement of Directors
- To consider succession planning for all Group Directors taking into account the challenges and opportunities facing the Group

- To keep under review the time commitment of Non-Executive Directors and external appointments of Board members
- To implement, review and respond to the results of Board evaluation processes

The Committee remains focused on ensuring the Group benefits from strong leadership and that the Board continues to operate in an open and transparent manner. In considering changes to the Board and its Committees, the Nomination Committee is focused on the recruitment of the best available talent based on merit and assessed against a set of objective criteria of skills, knowledge and experience. Diversity and gender inclusiveness span the whole Group and are important and enduring considerations in the search for and selection of new Board members.

Board composition

The Committee regularly reviews the composition and balance of the Board and its Committees, and considers Non-Executive Directors' independence, whether the balance between Non-Executive and Executive Directors remains appropriate, and whether the Board has the requisite skills and experience to oversee the delivery of the agreed strategy for the Group.

The Committee remains comfortable with the balance of two Executive and three Non-Executive Directors but will continue to keep this under review and will consider the appointment of additional Directors at an appropriate time having regard to the growing scale and complexity of the Group's activities and the collective skills, knowledge and experience available to the business.

Nomination Committee report continued

Board evaluation

The skills and experience of Board members are set out in their biographies on pages 62 to 63 of this Annual Report.

On the recommendation of the Nomination Committee, the Board instructed Savendie to undertake an independent Board review and evaluation that was performed in two phases. The first phase conducted in July and August 2021 focused on a review of Board materials and individual interviews with Directors to assess whether the Board is spending its time together effectively, considering and discussing the correct matters and with good quality information. Part 2 was completed in August 2022 and focused on whether the Board is operating effectively with a good balance of support and constructive challenge, and has the combined skills to realise its growth ambitions and to cover the strategic challenges that the Group faces.

Part 2 of the evaluation found a collaborative board with good constructive challenge and an open sharing of viewpoints. The evaluation found that all the Directors are aware of both the Group's achievements and challenges and are pulling in the same direction for the benefit of the Group which is a sound basis for good decision making. The evaluation found that there is evidence of significant progress with the actions identified in the 2021 report particularly regarding improvements with Board processes, agenda planning, and quality of Board papers and minutes. Overall, the Board is operating effectively with the Directors engaged in continuous development to avoid complacency noting the need for the Board to change and develop when required by business strategy.

Diversity, equality and inclusion

The Committee recognises the importance of diversity, equality and inclusion to the effective performance of the Board, and to our wider business operations. We are committed to promoting diversity across the Group in all forms, including diversity of gender identity, ethnicity, age, disability, neurodiversity, sexual orientation, social and cultural background and belief.

The Committee is cognisant of the voluntary targets set out in the Hampton-Alexander Review that at least 33% of Board and Executive Committee members, and their direct reports, should be female. We have met this target from a Board perspective and we continue to aspire to further improve female representation across the broader senior leadership team over

the next few years. The Committee will also have regard to the recommendations set out in the Parker Review on ethnic diversity when recommending future appointments to the Board.

Succession planning

The Committee is responsible for promoting effective succession planning for the Board and the Executive Committee, to ensure that the leadership of the business remains aligned to the Group's strategy. The Committee reviewed the succession plan for individuals in key leadership roles at the Group level. The Committee is satisfied that an appropriate succession plan is in place for the Board and key members of the Executive Committee, including emergency replacements. Over the longer term, appointments will be considered on a case-by-case basis, including internal candidates where available or external recruitment where deemed more appropriate.

With the receipt of Part 2 of Savendie's Board evaluation, the Committee will continue to build on its current practices and enhance elements of its activities in line with the Group's continued growth. The Directors will guard against any complacency to ensure the Board continues to operate in an open and transparent manner supported by high quality debate and constructive challenge.

Richard Elsy CBE

Nomination Committee Chair 23 November 2022

"This year the Board has undertaken an independent board review and evaluation. The evaluation found a collaborative Board with good constructive challenge and an open sharing of viewpoints."

Audit and Risk Committee report

Monitoring all aspects of financial reporting and risk



Meetings

Audit and Risk Committee members

- Louise Evans (Chair)
- Richard Hickinbotham

Key activities for the year

- Approval of the 2022 Annual Report and Accounts and 2022 Half year report
- Tender process to recommend Grant Thornton UK LLP as external auditor to shareholders at the AGM 2023
- Review of the Group's risk and internal control framework

Dear shareholders.

I am pleased to present my report as Chair of the Audit and Risk Committee.

The Audit and Risk Committee continues to play a very important role in the governance of the Group's financial affairs, both through monitoring the integrity of the Group's financial reporting and reviewing material financial reporting judgements. During the early part of the financial year, the Committee was focused on matters relating to the 2021 financial statements, which were covered in detail in last year's report. This report therefore focuses on the Committee's activities in relation to the 2022 half year and full year results, and the external and internal audit activity during 2022.

Membership of the Audit and Risk Committee

The Audit and Risk Committee has been established by the Board and is responsible for monitoring the integrity of the Group's financial statements and the effectiveness of the internal and external audit process. Both members of the Committee are independent Non-Executive Directors, and each brings a broad range of financial and business expertise. I have previously served as the Finance Director of public companies and currently serve as an Audit Committee Chair in an additional listed company. Therefore, I possess recent and relevant financial experience. The Board considers that the Committee members possess an appropriate level of independence and offer a depth of financial and commercial experience across various industries. The qualifications and experience of the members of the Committee can be found on pages 62 to 63.

Operation of the Committee

Meetings of the Committee are attended, at the invitation of the Chair, by the external auditor, the Chair of the Board, the Chief Executive Officer, the Chief Financial Officer and representatives of the Group finance function. The Committee meets with the external auditor at least once per year without the Executive Directors being present. The Company Secretary acts as secretary to the Committee. A verbal report on key issues discussed by the Committee is provided to the Board after every meeting.

The Chair of the Committee meets regularly with both the Chief Financial Officer and the external audit lead partner outside of scheduled meetings.

The Committee is authorised to obtain any external legal or other professional advice it requires at the Group's expense.

The Committee relies on regular reports from the Executive Directors, the wider management team, and the external and internal auditors in order to discharge its responsibilities. The Committee is satisfied that it received, timely, sufficient and reliable information to enable it to fulfil its obligations during the year.

Audit and Risk Committee activities

The Committee's responsibilities are set out in its terms of reference which are available on the Group's website. The Committee reviews its terms of reference annually and recommends to the Board any changes required as a result of its review.

The key roles and responsibilities of the Committee are as follows:

- To review the Group's risk management framework, assist the Board in conducting a robust assessment of the Group's principal risks and ensure adherence to policies and effectiveness of mitigating actions
- To review the published half year and annual financial reports and advise the Board on whether such information represents a fair, balanced and understandable assessment of the Group's position and prospects; monitor compliance with relevant statutory reporting requirements; review and consider any changes in accounting standards; and considering the suitability of, and any changes to, accounting policies used by the Group, including the use of estimates and judgements
- To manage the appointment of the Group's external auditor, agreeing the nature and scope of the external audit as well as the terms of remuneration, and assess the effectiveness of the audit and auditor independence including approval of any non-audit services undertaken together with the level of non-audit fees

Audit and Risk Committee report continued

Audit and Risk Committee activities continued

- To review the internal control environment and consider the need for an internal audit function
- To review the adequacy of the Group's procedures for employees to report wrongdoing or raise concerns and review the systems in place to detect and prevent bribery, fraud and money laundering
- To monitor compliance with the UK corporate governance guidelines contained in the Ouoted Companies Alliance (OCA) Code in respect of audit and risk committees

Review of financial statements

The Committee monitors the integrity of the Group's financial statements and has reviewed the presentation and content of the Group's interim and preliminary results announcements and the Annual Report. It considered whether the Annual Report was fair, balanced and understandable, as well as the appropriateness and disclosure of accounting policies, key judgements and key estimates. As part of this review, it considered matters raised by the CFO together with reports presented by the external auditor summarising the findings of its annual audit.

The significant accounting judgements considered for the year ended 31 August 2022 were:

- Review of the valuation and recoverability of goodwill and other intangible assets: the Committee considered the carrying value of goodwill and intangible assets in relation to VadoTech, rFpro and DRI against the latest forecasts for the businesses concerned and the future strategic plan for the Group. The Committee was satisfied that the valuation is appropriate and that no impairment is required
- Review of revenue recognition on long-term contracts: the Group has established processes in relation to estimating the stage of completion, milestones and expected profitability of long-term contracts. The Committee reviewed these assumptions and was satisfied that they are appropriate
- Review of inventory provisions: the Committee considered the level of the inventory provisions and was satisfied that the valuation of inventory is appropriate
- Review of the going concern assumption: the Group has substantial cash resources and a £15m undrawn revolving credit facility at year end. In the current environment. particular emphasis was placed on the review of the going

- concern assessment and viability statement, particularly with regard to the impact of the inflationary cost pressures and macro economic environment
- The Committee reviewed the adequacy of the Group's financial resources to ensure there is sufficient headroom to enable the Group to continue trading for the foreseeable future. The Group's future funding requirements were also considered. Based on its review of the Group's forecasts and discussions with the external auditor, the Committee recommended to the Board the adoption of the going concern basis for the preparation of the interim and full year results

The Committee reviewed the form and content of the 2022 Annual Report and confirmed to the Board that, taken as a whole, the Annual Report is fair, balanced and understandable. The Committee also concluded that the Annual Report provides the information necessary to assess the Group's position and performance, business model and strategy.

External audit

Crowe U.K. LLP was re-appointed as external auditor at the 2022 AGM, completed the audit for the year ended 31 August 2022 and provided the Independent auditor's report on pages 94 to 97.

The Audit and Risk Committee reviewed the audit plan including scope and materiality thresholds. It also considered the independence and objectivity of the external auditor, and reviewed the effectiveness of the audit process through inviting feedback from people involved with the external auditor's work across the business, and additional meetings between the Chair of the Committee and the audit partner. The Committee received confirmation from the auditor that it had complied with independence rules and with the Ethical Standards for Auditors. Having reviewed the audit plan, audit findings report and enquiries of management, the Committee concluded that audit effectiveness was satisfactory.

The Committee also reviewed the nature, extent, impact on objectivity and cost of non-audit services provided by the auditor. During the year, Crowe provided no non-audit services. The Committee concluded that the external auditor was independent during the financial year.

The auditor independence policy, which was reviewed by the Committee during the year, prohibits the provision of certain non-audit services by the external auditor, in line with

regulatory requirements and UK ethical guidance. It requires the Committee's prior approval of any individual non-audit services with a fee above £25,000, or £50,000 in any aggregate in any financial year.

In response to feedback from investors following the publication of the Group's Annual Report 2021, the Group undertook a tender process for its external auditor this year as Crowe U.K. LLP has provided audit services to the Group for more than nine years. Crowe U.K. LLP was invited to participate in the tender process. The Audit and Risk Committee, assisted by the Chair of the Board. Chief Executive Officer, Chief Financial Officer and members of the finance function, conducted a detailed tender process and as a result recommend the appointment of Grant Thornton UK LLP. A resolution will be proposed at the AGM to be held on 11 January 2023 (please see the Notice of the AGM on pages 129 to 133) to appoint Grant Thornton UK LLP and to authorise the Directors to determine the external auditor's remuneration.

Risk and internal control framework

During the year, the Committee reviewed the Group's risk, compliance and internal control framework.

This included:

- Reviewing and updating the Group's delegation of authority framework, in order to ensure appropriate controls are in place for the approval of certain matters and actions relating to expenditure, contractual exposure and other potential liability for the Group
- Reviewing the effectiveness of the Group's internal control environment and how this has been strengthened through the design and implementation of the new ERP system
- Reviewing the provision of internal oversight and the development of internal audit
- Reviewing the ongoing development of the Group's risk management framework, including assessing the Group's emerging and principal risks and mitigating actions, more information on which can be found on pages 56 to 58
- Reviewing the Group's insurance coverage

Louise Evans

Audit and Risk Committee Chair 23 November 2022

ESG Committee report

Embedding sustainability across all aspects of our business



Meetings

5

ESG Committee members

- Louise Evans (Chair)
- Dick Elsy
- James Routh

Key activities for the year

- Promoting the Group's contribution to road safety and the associated reduction in road accidents and fatalities
- Promoting the Group's sustainability objectives by assisting in the roll-out of electric vehicles and other lower carbon transport technologies
- Growth of the Group's ESG strategy
- Reviewing the Group's ESG policies, programmes, targets and initiatives

Dear shareholders,

I am delighted to present my second report as Chair of our ESG Committee.

ESG is an intrinsic part of our core purpose to accelerate our customers' drive towards net zero emissions and to improve road safety and the automation of vehicle applications through leadership and innovation in engineering and technology.

The ESG Committee has continued to set the overall ESG strategy for the Group and provide Board level oversight of the various ESG activities which are embedded throughout our business.

Role and activities

The role of the Committee includes:

- Promoting the Group's contribution to road safety and the associated reduction in road accidents and fatalities
- Promoting the Group's sustainability objectives by assisting in the roll-out of electric vehicles and other lower carbon transport technologies
- Setting the ESG strategy
- Reviewing the Group's ESG policies, programmes, targets and initiatives

"We are committed to embedding ESG principles throughout everything we do."

Activities during the year

The Committee met five times during the year to set out the Committee's role, develop the ESG strategy and bring together the current activities under coherent policies and procedures.

We have set our environmental goal to be carbon neutral by 2030 and are already making good progress against this objective.

Employee health, safety and wellbeing are of paramount importance and this year the Group launched its employee engagement programme and developed the Code of Conduct. We embedded our Vision and Values programme, an initiative developed and led by a group of our emerging leaders from across the business units.

Building on the already well-established governance programme, a continuous improvement approach has been adopted to formalise ESG policies and procedures.

We have appointed CEN-ESG to advise us on optimising our ESG performance and improving our communication to our stakeholders.

Looking forward

In the coming year we plan to continue with the implementation of our strategy and refine our ESG performance delivery.

Louise Evans

ESG Committee Chair 23 November 2022

Remuneration Committee report

Our remuneration policy reflects market best practice



Meetings

7

Remuneration Committee members

- Richard Hickinbotham (Chair)
- Dick Elsy
- Louise Evans

Key activities for the year

During the year, the Committee considered:

- Salary reviews for the Executive Directors and senior management
- The 2022 annual bonus plan outturn
- Approval of the 2023 annual bonus plan financial targets and personal objectives for the Executive Directors
- Approval of 2022 LTIP awards and performance conditions
- Review of the Directors' remuneration report

Dear shareholders,

Foreward

I am pleased to present the Directors' remuneration report for the year ended 31 August 2022. As a Group listed on the Alternative Investment Market, we are required to comply with AIM Rule 19 in respect of remuneration disclosures. However, the Committee has chosen to provide additional disclosures in line with AIM best practice to enable shareholders to better understand and consider our remuneration arrangements. The report is divided into three sections, being:

- My Annual report, which summarises the Committee and its work, remuneration outcomes in respect of the year just ended and how the remuneration policy will be operated for the forthcoming financial year
- The Remuneration policy report, which summarises the Group's remuneration policy
- The Annual report on remuneration, which discloses how the remuneration policy was implemented in the year ended 31 August 2022 in detail

Consistent with AIM best practice, this Remuneration Committee report will be put to an advisory vote at the AGM in January 2023.

Remuneration policy

The Committee is conscious of the need to demonstrate good governance. Whilst we recognise our status as an AIM quoted company, the Committee has adopted remuneration structures which reflect good practice. In particular, I would highlight the following:

- The annual bonus for Executive Directors is based on delivering against key financial and strategic performance metrics which are aligned to our business strategy
- 20% of any bonus earned is deferred into shares for a period of three years
- Awards made under the long-term incentive plan (LTIP)
 vest based on sliding scale, three-year performance metrics
 measured over a three-year performance period with a further
 two-year holding period
- LTIP awards are subject to malus and clawback provisions
- Shareholding guidelines operate for the Executive Directors

In addition, the Remuneration Committee will continue to keep abreast of corporate governance and regulatory developments to ensure the continued application of best practice and transparency.

Performance outcomes

The Group delivered very positive strategic performance and a strong set of financial results during the year, with record levels of order intake, revenue, EBITDA and cash generation, despite the headwinds of global inflation and supply chain constraints. Revenue increased by 23% to £80.3m while operating profit grew by 18% to £12.7m.

Further developments against the Group's strategic priorities included the launch of several new products, development of our service offering to drive recurring revenues, and delivering on our diversification plans through ABD Solutions. We also established a new market facing simulation business, AB Simulation, and further expanded our presence in this market through the acquisition of Ansible Motion which completed shortly after the financial year-end.

Implementation of the policy for the year ended 31 August 2022

In respect of implementing the remuneration policy for the year ended 31 August 2022:

- As detailed in last year's Directors' remuneration report, Executive Director base salary levels were market aligned from 1 September 2021
- Pension provision continued to be aligned to the Company's UK workforce at 10% of salary
- As a result of the Company's performance against the financial and strategic/operational performance targets, the annual bonus paid out at 86% of the maximum for the CEO and 86% of the maximum for the CFO. 20% of the bonus award will be deferred into shares for three years. Details of the performance targets set, and performance against them, are set out in the Annual report on remuneration
- The Committee consulted major shareholders at the start
 of 2022 in respect of a proposal to change the approach
 to long-term incentive provision in 2022 which included a
 combination of performance and restricted shares. However,
 following the consideration of shareholder feedback, the
 Committee reverted to a more conventional, market aligned
 and performance based approach for the 2022 LTIP awards.
 Details of the 2022 LTIP grants are set out in the Annual report
 on remuneration
- As a result of the threshold EPS and total shareholder return targets not being met, the LTIP awards granted in 2020, with performance targets measured up to 31 August 2022, will lapse in full

Implementation of the Policy for the year ending 31 August 2023

In respect of implementing the remuneration policy for the year ending 31 August 2023:

- Executive Director base salary levels will be increased from 1 January 2023 in line with the general workforce in respect of both quantum and timing (noting that this is later than the normal 1 September 2022 review date for Executive Directors)
- Pension provision will continue to be aligned to the Group's UK workforce at 10% of salary
- Annual bonus will continue to be capped at 125% of salary for the CEO. Reflecting her performance and increasing experience in the role and noting that her package was set below market levels at recruitment, the CFO's bonus potential will be aligned to the CEO's for the year ending 31 August 2023. Performance metrics for both the CEO and CFO will be based on adjusted EBIT, order intake, cash conversion, gross margin, strategic and ESG
- LTIP awards will be granted over shares equal to no more than 125% of salary (a reduction from the 150% of salary awarded in 2022). In addition to sliding scale earnings per share and relative total shareholder return targets, a three-year cash based target will be introduced given the importance of this metric. The targets for the 2022/23 LTIP award will be set out in an RNS to be announced to the market following their consideration by the Committee in December.

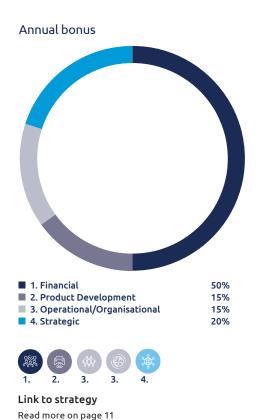
The Committee continues to welcome feedback from shareholders and I hope that we receive your support in future remuneration related votes at our forthcoming AGM.

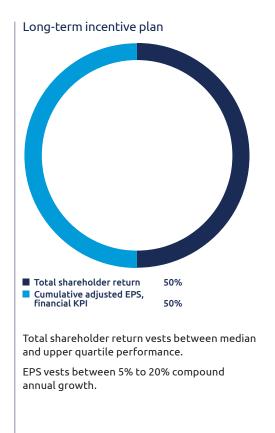
"Our remuneration policy accords with the long-term interests of our shareholders."

Remuneration at a glance

This section provides an overview of our remuneration policy and outcomes for the year.

Strategic alignment of remuneration with FY 2022 KPIs





Remuneration policy and FY 2022 outturn

James Routh

Actual	£386k	£376	5k
Minimum	£386k		
On target	£386k	£219k £	219k
Maximum	£386k	£	438k £438k

Sarah Matthews-DeMers

Actual	£290k	£226k	
Minimum	£290k		
On target	£290k	£131k £131k	
Maximum	£290k	£263k	£263k

■ Fixed pay ■ Annual bonus ■ LTIP

The long-term incentive plan was first implemented in FY 2019 and includes annual LTIP awards in accordance with our remuneration policy.

On target assumes the annual bonus and LTIP vest at 50% of maximum for FY 2022. No share price appreciation is included.

Remuneration policy report

Executive Director	Purpose	Operation	Maximum opportunity	Performance metrics
Base salary	To attract and retain Executive Directors with the required skills and experience to deliver ABD's continued growth strategy	Base salaries are normally reviewed on an annual basis with any changes normally effective 1 January each year	There is no maximum salary although salary levels are set to progressively move towards median levels for companies of similar size and operational and geographic complexity	Base salary levels and corresponding increases are based on individual experience, skills and Group performance
Benefits	To provide market competitive benefits	Benefits may include medical cover, critical life and death in service insurance. Other benefits may be awarded as appropriate and include relocation	Benefits may vary by role and individual circumstances and are periodically reviewed	Not performance related
Pensions	Competitive to market to reward sustained contribution by Executive Directors	Contributions to a Director's pension as appropriate. This may include contribution to a money purchase scheme or payment of a cash allowance where appropriate	Aligned to the pension available to ABD's UK workforce	No performance metrics applicable
Annual performance related bonus	To reward and incentivise based on the achievement of the budget and other business related objectives	Financial and non-financial performance targets are set and reviewed by the Remuneration Committee	Maximum of 125% of base salary	Sliding scale financial and/or personal/ strategic targets
		20% of any bonus earned is normally deferred into shares for three years		
Long-term incentive plan (LTIP)	To align Executive Directors to the delivery of the long-term strategy of the Group and provide long-term value for shareholders	Performance is assessed against rolling three-year performance periods. Awards normally vest at the end of the three-year performance period with 60% released after year three and 20% in each of the following two years	Maximum of 150% of base salary although normal awards will be set at 125% of salary	Performance metrics will be linked to financial and/or share price and/or strategic performance
		LTIP awards are subject to malus and clawback provisions		
Shareholding guidelines	To align Executive Directors with shareholder interests	Shareholding guidelines require a minimum shareholding (normally within five years)	150% of salary	Not performance related
Non- Executive D	irectors			
Chairman and	To attract and retain a Chairman and	Paid monthly in arrears and reviewed each	The Chairman's and Non-Executive	Annual review by the Board
Non-Executive Directors' fees	independent Non-Executive Directors with the required skills and experience	year. Any reasonable business related expenses can be reimbursed	Directors' fees are determined by relevant benchmark data	

Remuneration policy report continued

Discretion

The Committee has discretion to adjust:

- Formulaic bonus outcomes to ensure alignment of pay with the underlying performance of the business over the financial year and to take account of personal performance over the course of the year
- Formulaic LTIP outcomes to ensure alignment of pay with performance and to ensure the outcome is a true reflection of the performance of the Company

Recruitment policy

Upon recruitment of an Executive Director, the remuneration package will be in line with the remuneration policy, subject to the Committee having discretion that buy-out awards (or any other means in order to facilitate the recruitment of an Executive Director) are reasonably necessary.

Annual report on remuneration

This section sets out how the remuneration policy was applied for the year ended 31 August 2022 (and the prior year).

Single figure table for Executive Directors

		Routh	Sarah Matthews-DeMers	
Pay element	2022 £'000	2021 £'000	2022 £'000	2021 £'000
Base salary ¹	350	316	263	240
Taxable benefits	1	1	1	1
Pensions	35	32	26	24
Annual bonus	376	254	226	154
LTIP ²	_	_	_	_
Gain on exercise of share options	_	267	_	_
Total	762	870	516	419
Of which:				
Fixed remuneration	386	349	290	265
Variable remuneration	376	521	226	154

^{1.} As disclosed in last year's Directors' remuneration report, James Routh and Sarah Matthews-DeMers received base salary increases of 9.7% and 8.4% respectively from 1 September 2021 which reflected: (i) that both Directors were hired well below the market median; and (ii) strong performance of both individuals and the Company.

^{2.} As a result of threshold EPS and total shareholder return targets not being met, the LTIP awards granted in January 2020, with performance targets measured up to 31 August 2022, will lapse in full.

Annual report on remuneration continued

Annual bonus

As a result of the Group's performance against the financial and strategic/operational performance targets, the annual bonus paid out at 86% of the maximum for both the CEO and CFO. 20% of the bonus award will be deferred into shares for three years. Details of the performance against the targets are as follows:

	Outcome	Outcome/ CEO weighting	Outcome/ CFO weighting
EBIT	Between budget and stretch	24%/30%	24%/30%
Order intake	Between budget and stretch	14%/15%	9%/10%
Cash conversion	Above stretch	5%/5%	10%/10%
Strategic	Substantially met – the Committee was encouraged to see the progress made on the Company's ESG strategy, the synergistic benefits delivered from recent acquisitions, the establishment of AB Simulation and regional sales platforms and implementation of new Group IT policies	19%/20%	19%/20%
Organisation/operations	Substantially met - the Committee was pleased to see the VadoTech integration plan delivered successfully, a new Executive Committee structure implemented, a new ERP rolled out on time and to plan, the DRI reorganisation plan completed and a new talent development plan launched	12%/15%	12%/15%
Product development	Substantially met – the Committee noted the progress made in respect of ABD Solutions in addition to a number of other important projects that were completed on schedule	12%/15%	12%/15%
Total (% of max)		86%/100%	86%/100%
Total (% of salary)		107.5% of salary/ 125% of salary	86% of salary/ 100% of salary

LTIPs granted in the year

The Committee consulted major shareholders at the start of 2022 in respect of a proposal to change the approach to long-term incentive provision in 2022 which included a combination of performance and restricted shares. However, following the consideration of shareholder feedback, the Committee reverted to a more conventional, market aligned and performance based approach for the 2022 LTIP awards. Details of the award levels, which were set at 150% of salary for both the CEO and CFO following a review of feedback from major shareholders, are as follows:

Executive Director	Awards granted	Award basis (% of salary)	Grant date	Face value of award at maximum vesting (£)	Vesting date	Performance conditions
James Routh	51,220	150%	11 March 2022	£525,005	2 December 2024	See below
Sarah Matthews-DeMers	38,415	150%	11 March 2022	£393,754	2 December 2024	See below

50% of awards vest based on EPS growth. 25% of this part of awards vest for EPS growth of 5% p.a. increasing on a straight-line basis to 100% of this part of awards vesting for EPS growth of 15% p.a.

50% of awards vest based on relative TSR versus the constituents of the AIM 100. 25% of this part of awards vest for median TSR increasing on a straight-line basis to 100% of this part of awards vesting for upper quartile TSR.

Directors' interests in shares

Directors' interests in the shares of the Company, including related parties, were as follows:

Directors	Ordinary shares of 1p each	Shareholding guidelines¹	Shareholding guidelines met
James Routh	16,776	150%	No
Sarah Matthews-DeMers	1,281	150%	No

^{1.} Shareholdings of 150% of salary to be built up within five years of appointment.

Directors' interest in long-term incentive awards

Director	Award	Date of grant	Notes	Exercise price	1 September 2021	Awarded during the year	Exercised during the year	31 August 2022
James Routh	Legacy options	12 October 2018	1	£12.30	33,334	_	_	33,334
	LTIP	17 January 2020	3	£0	18,278	_	_	18,278
	LTIP	2 December 2020	4	£0	21,917	_	_	21,917
	LTIP	11 March 2022	5	£0	_	51,220	_	51,220
Sarah Matthews-DeMers	Legacy options	5 December 2019	2	£21.40	60,000	_	_	60,000
	LTIP	17 January 2020	3	£0	11,085	_	_	11,085
	LTIP	2 December 2020	4	£0	13,292	_	_	13,292
	LTIP	11 March 2022	5	£0	_	38,415	_	38,415

^{1.} Recruitment related grant of market value options. One-third vested on 12 October 2019 and on each subsequent anniversary.

 $^{2. \ \} Recruitment \ related \ grant \ of \ market \ value \ options. \ One-half \ vested \ on \ 4 \ December \ 2020 \ and \ the \ remainder \ vested \ on \ the \ second \ anniversary \ of \ grant.$

^{3. 50%} based on EPS growth, 50% based on relative TSR versus the AIM 100 (median to upper quartile).

^{4. 50%} based on EPS growth, 50% based on relative TSR versus the AIM 100 (median to upper quartile).

^{5.} See performance conditions detailed in the LTIPs granted in the year section above.

CEO pay ratio

The Group has a range of policies and practices to ensure that all employees are fairly rewarded for the work they undertake. For all employees we offer a total reward package that includes market competitive salaries and a bonus scheme which allows employees to share in the success of the Group. The senior management team is also eligible for awards under the long-term incentive plan which provides closer alignment to the shareholder experience.

The table below shows our CEO's and average employee's total remuneration for 2021 and 2022. The CEO pay ratio has decreased during the year due to lower gains on exercise of share options. The average pay per employee has increased by 8% due to pay increases and bonus awards.

We are satisfied that the pay ratio is consistent with the pay, reward and progression policies for our employees.

	Total remu		
FY	James Routh	Average employee	Ratio
2022	£762,000	£69,000	11:1
2021	£870,000	£64,000	14:1

Directors' contracts

The Executive Directors have rolling service contracts that are subject to twelve months' notice. The Chair and Non-Executive Directors do not have contracts of service.

Single figure table for Non-Executive Directors

	Dick Elsy		Richard Hid	kinbotham	Louise Evans		
	2022	2021	2022	2021	2022	2021	
Pay element	£'000	£'000	£'000	£'000	£'000	£'000	
Fees	95	50 ¹	55	45	55	45	

^{1.} Dick Elsy was appointed as Non-Executive Chairman on 1 July 2021.

Advisers

FIT Remuneration Consultants LLP provided independent advice to the Committee for the year ended 31 August 2022.

Payments to past Directors

On 1 July 2021 Anthony Best retired from the Board and was appointed as a special adviser to the Group on a retainer of £1,000 per month.

Loss of office

There were no loss of office payments made during the year.

Richard Hickinbotham

Remuneration Committee Chair 23 November 2022

Directors' report

Index to principal Directors' report and other required governance and compliance disclosures

This section contains information which the Directors are required by law and regulation to include within the Annual Report and Accounts. Where relevant information (required to be disclosed in the Directors' report) is located in more detail elsewhere in this document, please refer to the table below:

Information	Section in Annual Report	Pages
Business review	Strategic report	1 to 58
Principal risks and uncertainties	Strategic report	56 to 58
Risk management and internal controls	Risk management	54 to 55
Disclosure of information to auditor	Directors' report	92
Dividend recommendation for the year	Strategic report – Chairman's statement	7
Strategy and future developments of the Company	Strategic report	8 to 15
Directors who held office during the year	Governance – Board of Directors	62 to 63
Directors' and Officers' liability insurance in place	Governance – Directors' report, Statement of corporate governance	73
Director skills, experience and independence	Governance – Board of Directors	62 to 63
Rules governing the appointment of Directors	Governance	68
Powers of Directors	Governance	72
Structure of share capital, including restrictions and the transfer of securities, voting rights and significant shareholders	Directors' report	91 to 92
Non-financial information statement	Strategic report	1 to 58
Articles of Association and the rules governing changes to them	Directors' report	91
Company's energy usage and greenhouse gas emissions	Strategic report – ESG strategy	46 to 48
Research and development	Strategic report	27
Director remuneration details	Remuneration Committee report	82 to 89
Corporate social responsibility	Strategic report – ESG strategy	42 and 43
Employee engagement	Strategic report – ESG strategy	38
Employment policies	Strategic report – ESG strategy	51
The Company's S172(1) statement	Strategic report – ESG strategy	52 and 53
Stakeholder engagement	Strategic report – ESG strategy	52 and 53
Principal decisions taken by the Company arising from or influenced by stakeholder engagement	Statement of corporate governance	71
Accounting standards applied	Directors' report, note 1 of financial statements	102
Performance evaluation	Nomination Committee report	78

Directors' report continued

Company information

Articles of Association

The Company's Articles of Association may be amended by special resolution of the Company's shareholders.

Strategic report

The Strategic report is set out on pages 1 to 58 and was approved by the Board on 23 November 2022. It is signed on behalf of the Board by James Routh, Chief Executive Officer.

Cautionary statement

The review of the business and its future development in the Annual Report has been prepared solely to provide additional information to shareholders to allow individual shareholders to consider the Group's strategies and make their own assessment of the potential for these strategies to succeed. It should not be relied on by any other party for any other purpose. The review contains forward-looking statements which are made by the Directors in good faith based on information available to them up to the time of the approval of these reports; as such they should be treated with caution due to inherent uncertainties associated with such statements.

Employees

The average number of persons, including Directors, employed by the Group including its overseas subsidiaries and their remuneration set out on pages 82 to 89 and in note 7 to the financial statements. Other information about the Group's employee engagement, diversity and inclusion policies is set out in the Our People section of ESG strategy on page 38, and Corporate Social Responsibility section starting on page 42. The Group-wide gender diversity split as at 1 September 2022 was 18% female and 82% male.

Greenhouse gas emissions (GHG)

The Group recognises and strives to minimise its impact on the environment. This year our main environmental focus has been on clean inputs and responsible consumption. Further information including the Group's carbon emissions and energy consumption data can be found on pages 46 to 48.

Shareholder information

Incorporation and principal activity

AB Dynamics plc is domiciled in England and registered in England and Wales under company number 8393914. At the date of this report there were 22,885,261 ordinary shares of 1p each in issue, all of which are fully paid up and quoted on the London Stock Exchange's AIM market. The principal activity of the Group is the design, manufacture and supply to the global automotive and mobility sectors of advanced testing systems, simulation products and testing services. A description and review of the activities of the Group during the financial year and an indication of future developments set out on pages 1 to 58.

Annual General Meeting

The Annual General Meeting (AGM) will be held at 11am on Wednesday 11 January 2023 at Tulchan Communications, 2nd Floor, 85 Fleet Street London EC4Y 1AE. The Notice of the AGM 2022 can be found at pages 129 to 133 and will be published on the AB Dynamics plc website.

Substantial shareholdings

At 20 October 2022, the Company had been notified of the following interests amounting to 3% or more of the voting rights in its ordinary share capital:

	Percentage of ordinary share capital
Anthony Best	19.3
Sandford DeLand Asset Management Ltd	9.8
Octopus Investments	6.8
Naemi Best	6.2
Canaccord Genuity	5.0
Liontrust Asset Management	4.1

As far as the Directors are aware, there were no other interests above 3% of the issued ordinary share capital.

Share capital

The rights attaching to the Company's ordinary shares, as well as the powers of the Company's Directors, are set out in the Company's Articles of Association, copies of which can be obtained from the Company Secretary and are available on the Company's website. The Company is not aware of any agreements between shareholders that may result in restrictions on the transfers of securities and/or voting rights. No person holds securities in the Company carrying special rights with regard to control of the Company.

Employee share plans

Details of the Company Share Option Plan, under which 138,872 non-transferable options were granted to employees in October 2019, and the Group's ongoing Long-term incentive plan, the conditional arrangement under which contingent share awards can be made to selected senior management, including the Executive Directors, are set out in the Remuneration Committee report and in note 24 of the Accounts.

Restrictions on transfer of shares

The Board may in its absolute discretion refuse to register a transfer of a certificated share that is not fully paid, provided that the refusal does not prevent dealings in shares in the Company from taking place on an open and proper basis. The Board may also refuse to register a transfer of a certificated share, unless the instrument of transfer is:

- (i) Duly stamped or duly certified or otherwise shown to the satisfaction of the Board to be exempt from stamp duty, lodged at the Transfer Office or at such other place as the Board may appoint and (save in the case of a transfer by a person to whom no certificate was issued in respect of the shares in question) accompanied by the certificate for the shares to which it relates, and such other evidence as the Board may reasonably require to show the right of the transferor to make the transfer and, if the instrument of transfer is executed by some other person on his behalf, the authority of that person so to do
- (ii) In respect of only one class of shares
- (iii) In favour of not more than four persons jointly

Directors' report continued

Governance

Shareholder information continued

Restrictions on transfer of shares continued

There are no other restrictions on the transfer of ordinary shares in the Company except certain restrictions which may from time to time be imposed by laws and regulations (for example insider trading laws); or where a shareholder with at least a 0.25% interest in the Company's certificated shares has been served with a disclosure notice and has failed to provide the Company with information concerning interests in those shares.

Related party disclosures (AIM Rule 19)

There is no information to be disclosed by the Company in respect of related party transactions, except for:

- Share options and long-term incentive schemes awarded to Executive Directors (see the Remuneration Committee report)
- Provision of services by controlling shareholder (see the Remuneration Committee report)
- Agreements with controlling shareholders (see related party note 25 of the financial statements)

Mr A Best, former Chairman of the Company, is a trustee and beneficiary of the Best Middleton Trust, Rental payments of Enil (2021: £44,000) were made in the year to the Trust. In July 2021 the lease was terminated and therefore all agreements with a controlling shareholder have now ceased.

Financial information

Results and dividends

The profit for the financial year attributable to shareholders was £3.909.000 (2021: £2.985.000). The Directors recommend a final dividend of 3.54p per ordinary share (2021: 3.24p), to be paid, if approved, on 27 January 2023. The results are shown more fully in the consolidated financial statements on pages 98 to 101 and summarised in the Chief Financial Officer's review on pages 26 to 29.

Independent auditor

A resolution to appoint Grant Thornton UK LLP (Grant Thornton) as the Group's external auditor will be proposed at the forthcoming AGM, in accordance with Section 489 of the Companies Act 2006.

Disclosure of information to auditor

Each person who is a Director at the date of approval of this Directors' report confirms that:

- So far as that Director is aware, there is no relevant audit information of which the Company's auditor is unaware
- That Director has taken all the steps that ought to have been taken as a Director in order to be aware of any information needed by the Company's auditor in connection with preparing its report and to establish that the Company's auditor is aware of the information

This confirmation is given and should be interpreted in accordance with the provisions of Section 418 of the Companies Act 2006.

Directors' assessment of going concern

At 31 August 2022 the Company had net current assets of £18.549.000 (2021: £25.492.000) with the main current asset being amounts owed from its subsidiary Anthony Best Dynamics Limited, amounting to £13,951,000 (2021: £17,630,000).

Going concern

The Directors have assessed the principal risks discussed on pages 56 to 58, including by modelling a severe but plausible downside scenario, whereby the Group experiences:

- A reduction in demand of 25% over the next two financial years
- A 10% increase in operating costs from supply chain disruption
- An increase in cash collection cycle
- Increase in input costs resulting in reduction in gross margin to 45%

At 31 August 2022 the Group had £30.1m of cash and £15.0m undrawn revolving credit facility. Even after the post-year-end acquisition of Ansible Motion for £16.0m of cash, in this severe downside scenario, the Group has sufficient headroom to be able to continue to operate for the foreseeable future. The Directors believe that the Group is well placed to manage its financing and other business risks satisfactorily and have a reasonable expectation that the Group will have adequate resources to continue in operation for at least twelve months from the signing date of the financial statements. They therefore consider it appropriate to adopt the going concern basis of accounting in preparing the financial statements.

Directors' insurance

The Group has in place a Directors' and Officers' Liability Insurance Policy which provides cover for the personal liability which the Company's Directors and Officers may face. This remains in force at the date of this report.

Approved for and on behalf of the Board.

Dr James Routh Chief Executive Officer Richard Elsv CBE Non-Executive Chairman

AB Dynamics plc

Company number: 8393914

23 November 2022

Statement of Directors' responsibilities

The Directors are responsible for preparing the Annual Report and the financial statements in accordance with applicable law and regulations.

Company law requires the Directors to prepare such financial statements for each financial year. Under that law, they have elected to prepare the Group financial statements in accordance with in accordance with UK-adopted international accounting standards and applicable law and have elected to prepare the Parent Company financial statements in accordance with UK Accounting Standards and applicable law (UK Generally Accepted Accounting Practice).

Under company law, the Directors must not approve the financial statements unless they are satisfied that they give a true and fair view of the state of affairs of the Group and Parent Company and of their profit or loss for that year. In preparing each of the Group and Parent Company financial statements, the Directors are required to:

- Select suitable accounting policies and apply them consistently
- Make judgements and accounting estimates that are reasonable and prudent
- State whether applicable accounting standards have been followed, subject to any material departures disclosed and explained in the financial statements
- Prepare the financial statements on the going concern basis unless it is inappropriate to presume that the Group and the Parent Company will continue in business

The Directors are responsible for keeping adequate accounting records that are sufficient to show and explain the Parent Company's transactions and disclose with reasonable accuracy at any time the financial position of the Parent Company and enable them to ensure that the financial statements comply with the Companies Act 2006. They are also responsible for safeguarding the assets of the Parent Company and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

They are further responsible for ensuring that the Strategic report and the Directors' report and other information included in the Annual Report and Accounts are prepared in accordance with applicable law in the United Kingdom.

The maintenance and integrity of the AB Dynamics plc website is the responsibility of the Directors; the work carried out by the auditor does not involve the consideration of these matters and, accordingly, the auditor accepts no responsibility for any changes that may have occurred in the accounts since they were initially presented on the website.

Legislation in the United Kingdom governing the preparation and dissemination of the accounts and the other information included in Annual Reports may differ from legislation in other jurisdictions.

Directors' responsibility statement

We confirm that to the best of our knowledge:

- The financial statements, prepared in accordance with the relevant financial reporting framework, give a true and fair view of the assets, liabilities, financial position and profit or loss of the Company and the undertakings included in the consolidation taken as a whole
- The Strategic report includes a fair review of the development and performance of the business and the position of the Company and the undertakings included in the consolidation taken as a whole, together with a description of the principal risks and uncertainties that they face
- The Annual Report and Accounts, taken as a whole, are fair, balanced and understandable and provide the information necessary for shareholders to assess the Company's position and performance, business model and strategy

This responsibility statement was approved by the Board of Directors on 23 November 2022 and is signed on its behalf by:

Dr James Routh Richard Elsy CBE

Chief Executive Officer Non-Executive Chairman

Registered office: Middleton Drive, Bradford on Avon, Wiltshire BA15 1GB

Independent auditor's report

To the members of AB Dynamics plc

Opinion

We have audited the financial statements of AB Dynamics plc (the "Parent Company") and its subsidiaries (the "Group") for the year ended 31 August 2022, which comprise:

- the Group statement of comprehensive income for the year ended 31 August 2022;
- the Group and parent company statements of financial position as at 31 August 2022;
- the Group and parent company statements of changes in equity for the year then ended 31 August 2022;
- the Group statement of cash flows for the year then ended 31 August 2022; and
- the notes to the financial statements, including a summary of significant accounting policies.

The financial reporting framework that has been applied in the preparation of the Group financial statements is applicable law and UK adopted International Accounting Standards. The financial reporting framework that has been applied in the preparation of the parent company financial statements is applicable law and United Kingdom Accounting Standards, including Financial Reporting Standard 102 The Financial Reporting Standard applicable in the UK and Republic of Ireland (United Kingdom Generally Accepted Accounting Practice).

In our opinion:

- the financial statements give a true and fair view of the state of the Group's and of the Parent Company's affairs as at 31 August 2022 and of the Group's profit for the period then ended;
- the group financial statements have been properly prepared in accordance with UK adopted International Accounting Standards;
- the parent company financial statements have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice; and
- the financial statements have been prepared in accordance with the requirements of the Companies Act 2006.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) (ISAs (UK)) and applicable law. Our responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the financial statements section of our report. We are independent of the Group in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, including the FRC's Ethical Standard as applied to listed entities, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Conclusions relating to going concern

In auditing the financial statements, we have concluded that the directors' use of the going concern basis of accounting in the preparation of the financial statements is appropriate. Our evaluation of the directors assessment of the group's and parent company's ability to continue to adopt the going concern basis of accounting included:

- Reviewing management's financial projections for the Group and parent company for a period of at least 12 months from the date of approval of the financial statements.
- Checking the numerical accuracy of management's financial projections.
- Challenging management on the assumptions underlying those projections and sensitised them to reduce anticipated net cash inflows from future trading activities.
- Obtained the latest management results post year end 31 August 2022 to review how the Group and parent company are trending toward achieving the forecast.
- Performed sensitivity analysis on key inputs of the forecast by calculating the impact of various scenarios and considering the impact on the group and parent Company's ability to continue as a going concern in the event that a downward scenario occurs.
- Assessing the completeness and accuracy of the matters described in the going concern disclosure within the significant accounting policies as set out in Note 2 (a).

Based on the work we have performed, we have not identified any material uncertainties relating to events or conditions that, individually or collectively, may cast significant doubt on the group's and parent company's ability to continue as a going concern for a period of at least twelve months from when the financial statements are authorised for issue.

Our responsibilities and the responsibilities of the directors with respect to going concern are described in the relevant sections of this report.

Overview of our audit approach Materiality

In planning and performing our audit we applied the concept of materiality. An item is considered material if it could reasonably be expected to change the economic decisions of a user of the financial statements.

We used the concept of materiality to both focus our testing and to evaluate the impact of misstatements identified.

Based on our professional judgement, we determined overall materiality for the Group financial statements as a whole to be £600,000 (2021 £500,000), based on 5% of normalised Group profit before tax. Materiality for the parent company financial statements was set at £210,000 (2021: £115,000) based on a percentage of net assets.

We use a different level of materiality ('performance materiality') to determine the extent of our testing for the audit of the financial statements. Performance materiality is set based on the audit materiality as adjusted for the judgements made as to the entity risk and our evaluation of the specific risk of each audit area having regard to the internal control environment. We determined performance materiality for the Group financial statements as a whole to be £420,000 (2021:£350,000). Performance materiality for the parent company financial statements was set at £147,500 (2021:£80,500).

Where considered appropriate performance materiality may be reduced to a lower level, such as, for related party transactions and directors' remuneration.

We agreed with the audit committee to report to it all identified errors in excess of £30,000 (2021: £17,500). Errors below that threshold would also be reported to it if, in our opinion as auditor, disclosure was required on qualitative grounds.

Independent auditor's report continued

To the members of AB Dynamics plc

Overview of our audit approach continued

Overview of the scope of our audit

The main trading Group and its principal subsidiary are accounted for from one central location, the Group's registered office.

The Group has a significant component in the United Kingdom, rFpro Limited, who's accounting records are currently held at the location of this business in Southampton. Our audit of this entity was completed on site.

The Group also has a significant component based in Singapore, being the Vadotech business acquired on 4 March 2021. A local audit firm was engaged to perform procedures locally under our direction and review.

The Group also has a material component based in the United States of America, being the DRI business acquired on 30 August 2019. A member of the Crowe Global international network was engaged to perform procedures locally under our direction and review.

Key Audit Matters

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the financial statements of the current period and include the most significant assessed risks of material misstatement (whether or not due to fraud) that we identified. These matters included those which had the greatest effect on: the overall audit strategy, the allocation of resources in the audit; and directing the efforts of the engagement team. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

This is not a complete list of all risks identified by our audit.

Key audit matter

Revenue recognition and accounting for long-term contracts

The Group has recognised revenues totalling £80.3m (2021: £65.3m).

See notes 2(c) and 3 to the financial statements.

Revenue is recognised in accordance with the accounting policy set out in the financial statements. The accounting policy contains a number of judgements, particularly in recognising when the performance obligations are satisfied. This is determined with reference to the underlying contract with the customer.

For certain projects the Company recognises revenue over the period of the contract.

The Group uses the percentage of completion method to determine the appropriate amount of revenue to recognise in a given period. This is measured by the proportion that contract costs incurred for work performed to date bear to the estimated total contract costs. A number of judgements are made by management in making its assessment of estimated costs and profitability.

Due to the estimation uncertainty over percentage completion we have identified revenue recognition and accounting for long term contracts as a key audit matter.

How the scope of our audit addressed the key audit matter

- We assessed that the accounting policy conformed with the requirements of IFRS15 and then tested its application to a sample of contracts.
- · We performed cut off testing to ensure revenue is being recorded in the correct period.
- Our work on long-term contracts focused on validating that estimated contract costs which include staff
 costs, overheads and material costs are appropriate and accurately estimated and also ensuring that the use
 of costs as a measure of progress is appropriate.
- We tested a sample of costs incurred to date to supporting documentation.
- We assessed whether cut off has been correctly applied and that any resulting work in progress and other entries are appropriate.
- We considered the original budget for the contract and compared this to actual costs to validate how the contract has performed and enquired into any events which could change this assessment.

Recoverability of goodwill and acquired intangible assets

The Group recognises goodwill and acquired intangible balances totalling £47.5m (2021: £50.5m) arising from a number of acquisitions.

See notes 11 and 12 to the financial statements.

The Group's intangible assets comprise of goodwill arising on acquisition of businesses, customer relationships, brand and technology assets.

- We evaluated, in comparison to the requirements set out in IAS 36, management's assessment (using discounted cash flow models) as to whether goodwill and/or other intangible assets were impaired.
 We considered management's assessment of the different CGUs of the business with reference to the different revenue streams.
- We challenged, reviewed and considered by reference to evidence, management's impairment and fair value models as appropriate and their key estimates, including the discount rate. We reviewed the appropriateness and consistency of the process for making such estimates.

Independent auditor's report continued

To the members of AB Dynamics plc

Overview of our audit approach continued

Kev Audit Matters continued

Kev audit matter

Recoverability of goodwill and acquired intangible assets continued

When assessing the carrying value of goodwill and intangible assets, management makes iudgements regarding the appropriate cash generating unit, strategy, future trading and profitability and the assumptions underlying these. We considered the risk that goodwill and/or other intangible assets were impaired.

Due to the significant assumptions that underpin the recoverable amount of these assets, the recoverability of goodwill and acquired intangible assets has been identified as a key audit matter.

How the scope of our audit addressed the key audit matter

- We obtained management's discounted cash flow models supporting the intangible asset valuation. We challenged the key assumptions into the model, including the forecast revenue and gross margin, discount rates and growth rates.
- We compared cash flow forecasts used in the impairment review to historical performance, and challenged where forecasts indicated performance that deviated significantly from historical performance, in the absence of significant changes in the business or market environment.
- Discount rates and terminal growth rates were benchmarked to externally derived data and our knowledge of competitor performance, to evaluate the reasonableness of these assumptions. In addition we used an internal specialist to recalculate the discount rate.
- Sensitivity analysis was performed by management on the key assumptions such as growth, margin and discount rates to identify those assumptions to which that the goodwill or intangible asset valuation was highly sensitive. We have applied further sensitivity to create a worst case scenario and challenged management on the likelihood of such a scenario occurring, and on what remedial actions would be taken.

Valuation of inventory

The Group records inventory of £13.6m (2021: £6.8m). This amount is net of an inventory provision of £1.5m (2021: £1.5m).

See note 2 to the financial statements for management's assessment of the key judgements.

There is significant estimation involved in the calculation of inventory provisions to ensure that inventory is held at the lower of cost and net realisable value. This involves consideration of expected future losses on sale of inventory including assessing the likely impacts of macro-economic factors, inventory obsolescence and the additional costs to sell which need to be included in calculating the net realisable value of inventory.

Due to the factors explained above, we have identified the valuation of inventory as a key audit matter.

- · We assessed the appropriateness of management's inventory provision calculations, including testing the accuracy and completeness of the data used and the mathematical accuracy of the provisioning model.
- We independently developed our own point estimate of the ageing profile of inventory using sampled items from historic purchase data. We then calculated our own point estimate and evaluated whether management's inventory provision was within an acceptable range.
- We performance sensitivity testing over the obsolescence provision percentages used to evaluate the appropriateness of management's estimates.
- We performed a retrospective review of previous years provisioning with reference to actual inventory write offs in the year.

Our audit procedures in relation to these matters were designed in the context of our audit opinion as a whole. They were not designed to enable us to express an opinion on these matters individually and we express no such opinion.

Other information

The directors are responsible for the other information. The other information comprises the information included in the annual report, other than the financial statements and our auditor's report thereon. Our opinion on the financial statements does not cover the other information and, except to the extent otherwise explicitly stated in our report, we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If we identify such material inconsistencies or apparent material misstatements, we are required to determine whether there is a material misstatement in the financial statements or a material misstatement of the other information. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact.

We have nothing to report in this regard.

Independent auditor's report continued

To the members of AB Dynamics plc

Opinion on other matter prescribed by the Companies Act 2006

In our opinion based on the work undertaken in the course of our audit

- the information given in the strategic report and the directors' report for the financial year for which the financial statements are prepared is consistent with the financial statements; and
- the strategic report and directors' report have been prepared in accordance with applicable legal requirements.

Matters on which we are required to report by exception

In light of the knowledge and understanding of the group and the parent company and their environment obtained in the course of the audit, we have not identified material misstatements in the strategic report or the directors' report.

We have nothing to report in respect of the following matters where the Companies Act 2006 requires us to report to you if, in our opinion:

- adequate accounting records have not been kept by the parent company, or returns adequate for our audit have not been received from branches not visited by us: or
- the parent company financial statements are not in agreement with the accounting records and returns: or
- certain disclosures of directors' remuneration specified by law are not made: or
- we have not received all the information and explanations we require for our audit.

Responsibilities of the directors for the financial statements

As explained more fully in the directors' responsibilities statement set out on page 65, the directors are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view, and for such internal control as the directors determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

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

Auditor's responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a quarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

Explanation as to what extent the audit was considered capable of detecting irregularities, including fraud

Irregularities, including fraud, are instances of non-compliance with laws and regulations. We design procedures in line with our responsibilities, outlined above, to detect material misstatements in respect of irregularities, including fraud. The extent to which our procedures are capable of detecting irregularities, including fraud, is detailed below however the primary responsibility for the prevention and detection of fraud lies with management and those charged with governance of the Company.

- We obtained an understanding of the legal and regulatory frameworks that are applicable to the Group and the procedures in place for ensuring compliance. The most significant identified were the Companies Act 2006 and the QCA Corporate Governance Code. Our work included direct enquiry of the Company Secretary who oversees all legal proceedings, reviewing Board and relevant committee minutes and inspection of correspondence.
- As part of our audit planning process we assessed the different areas of the financial statements, including disclosures, for the risk of material misstatement. This included considering the risk of fraud where direct enquiries were made of management and those charged with governance concerning both whether they had any knowledge of actual or suspected fraud and their

- assessment of the susceptibility of fraud. We considered the risk was greater in areas that involve significant management estimate or judgement. Based on this assessment we designed audit procedures to focus on the key areas of estimate or judgement, this included specific testing of journal transactions, both at the year end and throughout the year.
- We used data analytic techniques to identify any unusual transactions or unexpected relationships, including considering the risk of undisclosed related party transactions.

Owing to the inherent limitations of an audit, there is an unavoidable risk that some material misstatements of the financial statements may not be detected, even though the audit is properly planned and performed in accordance with the ISAs (UK).

The potential effects of inherent limitations are particularly significant in the case of misstatement resulting from fraud because fraud may involve sophisticated and carefully organised schemes designed to conceal it, including deliberate failure to record transactions, collusion or intentional misrepresentations being made to us.

A further description of our responsibilities for the audit of the financial statements is located on the Financial Reporting Council's website at: www.frc.org.uk/auditorsresponsibilities. This description forms part of our auditor's report.

Use of our report

This report is made solely to the company's members, as a body, in accordance with Chapter 3 of Part 16 of the Companies Act 2006. Our audit work has been undertaken so that we might state to the company's members those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the company and the company's members as a body, for our audit work, for this report, or for the opinions we have formed.

Matthew Stallabrass

Senior Statutory Auditor for and on behalf of Crowe U.K. LLP Statutory Auditor London 22 November 2022

Consolidated statement of comprehensive income

For the year ended 31 August 2022

		2022			2021		
N ₁	ote	Adjusted £'000	Adjustments £'000	Statutory £'000	Adjusted £'000	Adjustments £'000	Statutory £'000
Revenue	3	80,305	_	80,305	65,380	_	65,380
Cost of sales		(34,089)	_	(34,089)	(28,269)	_	(28,269)
Gross profit		46,216	_	46,216	37,111	_	37,111
General and administrative expenses		(33,473)	(7,514)	(40,987)	(26,288)	(6,630)	(32,918)
Operating profit		12,743	(7,514)	5,229	10,823	(6,630)	4,193
Operating profit is analysed as:							
Before depreciation and amortisation		16,363	(1,998)	14,365	13,500	(2,198)	11,302
Depreciation and amortisation		(3,620)	(5,516)	(9,136)	(2,677)	(4,432)	(7,109)
Operating profit		12,743	(7,514)	5,229	10,823	(6,630)	4,193
Finance expense		(159)	_	(159)	(76)	_	(76)
Other finance expense		(215)	_	(215)	(332)	_	(332)
Profit before tax	6	12,369	(7,514)	4,855	10,415	(6,630)	3,785
Tax expense	8	(2,182)	1,236	(946)	(1,895)	1,095	(800)
Profit for the year		10,187	(6,278)	3,909	8,520	(5,535)	2,985
Other comprehensive income/(expense)							
Items that may be reclassified to consolidated income statement:							
Cash flow hedges		(93)	_	(93)	(31)	_	(31)
Exchange gain/(loss) on foreign currency net investments		3,574	_	3,574	(614)	_	(614)
Total comprehensive income for the year		13,668	(6,278)	7,390	7,875	(5,535)	2,340
Earnings per share – basic	10	45.0p	(27.7p)	17.3p	37.7p	(24.5p)	13.2p
Earnings per share – diluted	10	44.5p	(27.4p)	17.1p	37.4p	(24.3p)	13.1p

Consolidated statement of financial position

As at 31 August 2022

	Note	2022 £'000	2021 £'000
ASSETS			
Non-current assets			
Goodwill	11	23,818	22,221
Acquired intangible assets	12	23,665	28,282
Other intangible assets	12	2,971	1,577
Property, plant and equipment	13	25,708	25,815
Right-of-use assets	14	876	913
		77,038	78,808
Current assets			
Inventories	15	13,611	6,771
Trade and other receivables	16	13,782	15,500
Contract assets	5	3,917	4,269
Taxation		882	1,443
Cash and cash equivalents	17	30,141	23,282
		62,333	51,265
Assets held for sale	18	1,893	1,893
LIABILITIES			
Current liabilities			
Trade and other payables	19	16,053	10,933
Contract liabilities	5	5,787	3,568
Derivative financial instruments	20	123	31
Short-term lease liabilities	14	628	456
Deferred consideration		_	4,929
		22,591	19,917

	2022	2021
Note	£'000	£'000
Non-current liabilities		
Deferred tax liabilities 21	6,397	6,552
Long-term lease liabilities 14	315	511
	6,712	7,063
Net assets	111,961	104,986
SHAREHOLDERS' EQUITY		
Share capital 22	226	226
Share premium 22	62,260	62,210
Other reserves 23	1,142	(2,339)
Retained earnings	48,333	44,889
Total equity	111,961	104,986

The financial statements were approved by the Board of Directors and authorised for issue on 23 November 2022 and are signed on its behalf by:

Sarah Matthews-DeMers Dr James Routh

Director Director

Company registration number: 08393914

Consolidated statement of changes in equity

For the year ended 31 August 2022

	Note	Share capital £'000	Share premium £'000	Other reserves £'000	Retained earnings £'000	Total equity £'000
At 1 September 2020		226	61,736	(1,694)	41,956	102,224
Share based payments		_	_	_	1,139	1,139
Total comprehensive income		_	_	(645)	2,985	2,340
Deferred tax on share based payments		_	_	_	165	165
Dividend paid	9	_	_	_	(1,356)	(1,356)
Issue of shares	22	_	474	_	_	474
At 31 August 2021		226	62,210	(2,339)	44,889	104,986
Share based payments		_	_	_	750	750
Total comprehensive income		_	_	3,481	3,909	7,390
Deferred tax on share based payments		_	_	_	(84)	(84)
Dividend paid	9	_	_	_	(1,131)	(1,131)
Issue of shares	22	_	50	_	_	50
At 31 August 2022		226	62,260	1,142	48,333	111,961

The share premium account is a non-distributable reserve representing the difference between the nominal value of shares in issue and the amounts subscribed for those shares.

Retained earnings represent the cumulative value of the profits not distributed to shareholders but retained to finance the future capital requirements of the Group.

The items included in the consolidated statement of changes in equity that relate to transactions with owners are share based payments, dividends paid and issues of shares.

Consolidated cash flow statement

For the year ended 31 August 2022

	2022	2021
	£'000	£'000
Profit before tax	4,855	3,785
Depreciation and amortisation	9,136	7,109
Finance expense	374	408
Share based payment	795	1,240
Acquisition costs	290	304
Operating cash flows before changes in working capital	15,450	12,846
(Increase)/decrease in inventories	(6,889)	2,409
Decrease/(increase) in trade and other receivables	1,981	(3,913)
Increase in trade and other payables	8,140	2,956
Cash flows from operations	18,682	14,298
Cash flows from operations are analysed as:		
Adjusted cash flows from operations	20,652	15,961
Cash impact of adjusting items	(1,970)	(1,663)
Cash flows from operations	18,682	14,298
Finance costs paid	(90)	(139)
Income tax (paid)/received	(684)	1,062
Net cash flows from operating activities	17,908	15,221
Cash flows used in investing activities		
Acquisition of businesses	(5,114)	(14,329)
Purchase of property, plant and equipment	(2,098)	(5,536)
Capitalised development costs and purchased software	(1,711)	(1,104)
Net cash used in investing activities	(8,923)	(20,969)

	2022 £'000	2021 £'000
Cash flows (used in)/from financing activities		
Net movements in loans	_	(493)
Maturity of fixed term deposits	_	5,000
Dividends paid	(1,131)	(1,356)
Proceeds from issue of share capital	50	474
Repayment of lease liabilities	(964)	(656)
Net cash (used in)/from financing activities	(2,045)	2,969
Net increase/(decrease) in cash, cash equivalents and bank		
overdrafts	6,940	(2,779)
Cash, cash equivalents and bank overdrafts at beginning of the year	23,282	26,183
Effects of exchange rate changes	(81)	(122)
Cash, cash equivalents and bank overdrafts at end of the year	30,141	23,282

For the year ended 31 August 2022

1. General information

AB Dynamics plc is a public company limited by shares and registered in England and Wales with company number 08393914. The Company is domiciled in the United Kingdom and the registered office and principal place of business is Middleton Drive, Bradford on Avon, Wiltshire BA15 1GB. The consolidated financial statements comprise the Company and its subsidiaries (together referred to as the 'Group').

The principal activity of the Group is the design, manufacture and supply of advanced testing, simulation and measurement products to the global transport market. The Group's products and services are used primarily for the development of road vehicles, particularly in the areas of active safety and autonomous systems, as well as automation of vehicles used for other applications, such as mining and defence.

Basis of preparation

The consolidated financial statements are measured and presented in Sterling which is the currency of the primary economic environment in which the Group operates. They have been prepared under the historical cost convention, except for financial instruments that have been measured at fair value through profit or loss.

The consolidated financial statements have been prepared in accordance with UK-adopted International Accounting Standards in conformity with the requirements of the Companies Act 2006. These statements have been prepared on the going concern basis, which assumes that the Group will continue to be able to meet its liabilities as they fall due for the foreseeable future.

New accounting standards and interpretations

A number of amended standards became applicable for the current reporting period. The application of these amendments has not had any material impact on the disclosures, net assets or results of the Group.

Standards, amendments and interpretations to published standards not yet effective

The Directors have considered those standards and interpretations, which have not been applied in the financial statements but are relevant to the Group's operations, that are in issue but not yet effective and do not consider that they will have a material impact on the future results of the Group.

2. Summary of significant accounting policies

(a) Going concern

The Group's activities and an outline of the developments taking place in relation to its products. services and marketplace are considered in the Chief Executive's review. The principal risks and uncertainties and mitigations are included in the Strategic Report.

Note 20 to the consolidated financial statements sets out the Group's financial risks and the management of capital risks.

The Directors have assessed the principal risks, including by modelling a severe but plausible downside scenario, whereby the Group experiences:

- A reduction in demand of 25% over the next two financial years
- A 10% increase in operating costs from supply chain disruption
- An increase in cash collection cycle
- An increase in input costs resulting in reduction in gross margins to 45%

At 31 August 2022 the Group had £30.1m of cash and £15.0m undrawn revolving credit facility. Even after the post-year-end acquisition of Ansible Motion for £16.0m of cash, in this severe downside scenario, the Group has sufficient headroom to be able to continue to operate for the foreseeable future. The Directors believe that the Group is well placed to manage its financing and other business risks satisfactorily and have a reasonable expectation that the Group will have adequate resources to continue in operation for at least twelve months from the signing date of the financial statements. They therefore consider it appropriate to adopt the going concern basis of accounting in preparing the financial statements.

(b) Accounting judgements and sources of estimation uncertainty

Estimates and judgements are continually evaluated by the Directors and management and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances.

The key assumptions concerning the future and other key sources of estimation uncertainty at the statement of financial position date, that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial period, are as stated below:

For the year ended 31 August 2022

2. Summary of significant accounting policies continued

(b) Accounting judgements and sources of estimation uncertainty continued

Accounting judgements

Assessment of the percentage of completion of construction projects (laboratory testing and simulation)

Management judgements are required in determining the profitability and stage of completion of contracts where revenue is recognised over time, specifically where the Group manufactures custom-built laboratory and simulator equipment. This involves regular review by management of project milestones, actual costs incurred against budgeted costs, and forecast costs to complete as well as other pertinent information.

The above estimates are made internally by the Group and any changes of these estimates will result in a corresponding change in revenue and profit. Any potential losses on contracts are considered and appropriately recognised immediately upon occurrence, while contract revenue which cannot be estimated reliably is recognised only after confirmed by written agreement.

Key sources of estimation uncertainty

Acquisition accounting

When the Group makes an acquisition, it recognises the identifiable assets and liabilities, including intangible assets, at fair value with the difference between the fair value of net assets acquired and the fair value of consideration paid comprising goodwill. The key assumptions and estimates used to determine the valuation of intangible assets acquired are the forecast cash flows, the discount rate and customer/supplier attrition. Customer and supplier relationships are valued using a discounted cash flow model. Goodwill and intangible assets are tested for impairment annually. Details of the review performed in the current year are disclosed in note 11.

Acquisitions often comprise an element of deferred consideration. Deferred consideration is fair valued based on the Directors' estimate of future performance of the acquired entity. The Group's growth strategy is underpinned by the successful execution of acquisitions. This results in material amounts of goodwill and intangible assets being recognised in the consolidated statement of financial position.

Inventory

At each balance sheet date, each subsidiary evaluates the recoverability of inventories and records a provision based on an assessment of net realisable value, taking into account the aging profile of inventory on hand. The actual net realisable value of inventory may differ from the estimated realisable value, which could impact on operating results.

(c) Revenue and long-term contracts

The Group principally earns revenue through the sale of manufactured test products for automotive applications and the provision of test and consultancy services and recognises revenue based on the satisfaction of the performance obligations in contracts with customers. A contract with a customer is confirmed and exists when a sales contract has been signed by both parties, where the terms and conditions of the sale have been agreed by both parties and it is expected that the entity will be paid by the customer upon completion of the distinct performance obligations in the contract. Goods and services are distinct and accounted for as separate performance obligations

if they are separately identifiable in the contract and the customer can benefit from the goods and services either on their own or together with other readily available resources available to the customer. Revenue is recognised in the amount the entity expects to receive for the performance of its obligations to the customer and net of sales taxes. Where contract modifications do occur and the remaining goods and services are not distinct from those already provided then the transaction price is updated, and where necessary a cumulative adjustment is made. This occurs infrequently where insignificant adjustments are made to the equipment supplied or services rendered.

The Group determines the transaction price for each individual contract with the customer by reference to the stand-alone selling prices of the Group's goods and services. Transaction prices are set in the contract and are thus fixed upon agreeing to enter into a contract with a customer. The Group does not recognise variable consideration and does not estimate any other revenue other than that agreed upon in the contract which is not subject to estimation. Rights of return are present in some contracts, yet these are only triggered by non-performance of the obligations under the contract and after the Group's right to repair lapses. There have been no instances of any right of return clause being invoked for the Group, and correspondingly no return assets or refund liabilities are recognised.

Where there are multiple performance obligations under a single contract, the Group allocates the transaction price in relation to the stand-alone selling prices for the performance obligations in the contract. Where only one performance obligation is identified in the contract the transaction price is allocated in full. In instances where specific elements are not separated on a contract and invoice. such as training and initial support, these revenue elements are recognised independently with reference to the stand-alone selling prices of these services as if they were provided independently.

Revenue is recognised as the performance obligations in the contract are satisfied and control of the goods and services has transferred to the customer. For each performance obligation the Group determines if the obligation has been settled over time or at a point in time. Performance obligations are satisfied over time if the performance obligation creates an asset with no alternative use for the Group and there is an enforceable right to payment for performance completed to date, or if the customer can simultaneously receive and consume the benefits provided by the Group. When revenue is recognised over time the Group measures progress towards satisfaction of the performance obligations on an input measurement basis by assessing the costs incurred over the total expected costs to satisfy the obligations in the contract.

Variations in contract work, claims and incentive payments are recognised to the extent that they have been agreed with the customer. The probability of a profitable outcome of the contract is determined by regular review by management of project milestones, actual costs against budgeted costs and any other pertinent information. When it is probable that total contract costs will exceed total contract revenue, the expected loss is recognised as an expense immediately. The aggregate of the cost incurred and the profit/loss recognised on each contract are compared against the progress billings up to the year end.

Contract assets (accrued revenue) and contract liabilities (amounts received in advance of performance delivery) are recognised separately.

For the year ended 31 August 2022

2. Summary of significant accounting policies continued

(c) Revenue and long-term contracts continued

Supply of manufactured products

The majority of the Group's revenue is derived from the sale of manufactured products, which is broken down into two categories, being standard products and bespoke products. Revenue recognition on standard products which the Group regularly manufactures and sells is measured at the transaction price that is expected to flow to the Group and recognised at a point in time when the Group has transferred control to the customer in line with the Incoterms as agreed with the customer.

Revenue from custom-built laboratory and simulator equipment is recognised over time as the Group has no alternative use for these custom-built pieces of equipment and the Group has an enforceable right to payment, plus a reasonable profit margin throughout the life of the contract. An alternative use exists where there are multiple OEMs and tier 1 customers to whom the Group could provide the equipment. The Group measures progress towards satisfaction of the performance obligations on an input measurement by assessing the costs incurred over the total expected costs to satisfy the obligations in the contract as well as forecast costs to complete.

Supply of services

The Group recognises revenue from the provision of services to customers which include support. road testing, track testing and training. Services are a single performance obligation in the contract with customers. For road testing, track testing and training services revenue is recognised over time as the services are delivered on a straight-line basis over the period in which the services are performed. For support services under a subscription contract with the customer revenue is recognised at the transaction price on a straight-line basis over the contractual period.

Supply of software

The Group's software products are sold on licencing arrangements for set contracted periods in contracts with customers. These contracts provide the customer the right to access the product during the licence period. A new or renewed licence is a single performance obligation and revenue is recognised on a straight-line basis over the licence period.

(d) Basis of consolidation

The financial statements of subsidiaries are included in the consolidated financial statements from the date on which control over the operating and financial decisions is obtained and cease to be consolidated from the date on which control is transferred out of the Group. The Group controls an investee when it is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee.

All intercompany balances and transactions, including recognised gains arising from inter-group transactions, have been eliminated in full. Unrealised losses are eliminated in the same manner as recognised gains except to the extent that they provide evidence of impairment.

(e) Acquisitions

Acquisitions are accounted for using the acquisition method as at the acquisition date, which is the date on which control is transferred to the Group. Goodwill at the acquisition date represents the cost of the business combination (excluding acquisition related costs, which are expensed as incurred) in excess of the fair value of the identifiable tangible and intangible assets and liabilities acquired.

(f) Inventories

Inventories are valued on a first in, first out basis at the lower of cost and net realisable value. Cost includes all expenditure incurred during the normal course of business in bringing in inventories to their present location and condition, including, in the case of work-in-progress and finished goods, an appropriate proportion of production overheads. Net realisable value is based on the estimated useful selling price less further costs expected to be incurred to completion and subsequent disposal.

(g) Financial instruments

Financial instruments are recognised in the statements of financial position when the Company has become a party to the contractual provisions of the instruments.

Financial instruments are classified as assets, liabilities or equity in accordance with the substance of the contractual arrangement. Interest, dividends, gains and losses relating to a financial instrument classified as a liability are reported as an expense or income. Distributions to holders of financial instruments classified as equity are charged directly to equity.

Financial instruments are offset when the Group has a legally enforceable right to offset and intends to settle either on a net basis or to realise the asset and settle the liability simultaneously. A financial instrument is recognised initially, at its fair value plus, in the case of a financial instrument not at fair value through profit or loss, transaction costs that are directly attributable to the acquisition or issue of the financial instrument. Financial instruments recognised in the statement of financial position are disclosed in the individual policy statement associated with each item.

(i) Financial assets

On initial recognition, financial assets are classified as either financial assets at fair value through profit or loss or loans and receivables financial assets. The Group does not hold any financial assets at fair value through other comprehensive income.

Financial assets at fair value through profit or loss

As at the end of the reporting period, there were no foreign currency forward contracts classified under this category.

Loans and receivables financial assets

Trade receivables and other receivables that have fixed or determinable payments that are not quoted in an active market are classified as loans and receivables financial assets. Loans and receivables financial assets are recognised under an expected credit loss approach, in accordance with IFRS 9. The adoption of IFRS 9 has not had a material impact on the financial statements. Interest income is recognised by applying the effective interest rate, except for short-term receivables when the recognition of interest would be immaterial.

For the year ended 31 August 2022

2. Summary of significant accounting policies continued

(a) Financial instruments continued

(ii) Financial liabilities

All financial liabilities are initially recorded at fair value plus directly attributable transaction costs and subsequently measured at amortised cost using the effective interest method other than those categorised as fair value through profit or loss.

The fair value through profit or loss category comprises financial liabilities that are either held for trading or are designated to eliminate or significantly reduce a measurement or recognition inconsistency that would otherwise arise. Derivatives are also classified as held for trading unless they are designated as hedges.

(iii) Equity instruments

Ordinary shares are classified as equity. Incremental costs directly attributable to the issue of new shares or options are shown in equity as a deduction, net of tax, from proceeds.

Interim dividends are recognised when paid and final dividends on ordinary shares are recognised as liabilities when approved for appropriation.

(iv) Derivative financial instruments and hedging activities

Derivatives are initially recognised at fair value on the date a derivative contract is entered into and are subsequently measured at their fair value. The method of recognising any resulting gain or loss depends on whether the derivative is designated as a hedging instrument and, if so, the nature of the item being hedged. Changes in the fair value of any derivative instruments that do not qualify for hedge accounting are recognised immediately in the income statement.

(h) Property, plant and equipment

Property, plant and equipment is initially recorded at cost. Once the asset is available for use, depreciation is calculated at rates estimated to write off the cost of the relevant assets, less any estimated residual value, on either a straight-line basis or reducing balance basis over their expected useful lives.

Plant and machinery 10% straight line Motor vehicles 25% reducing balance Furniture and fittings 10% straight line Computer equipment 25% straight line General equipment 10% straight line

Test equipment Between 10 and 20% straight line

Buildings 5% straight line

(i) Intangible assets

All intangible assets, excluding goodwill arising on a business combination, are stated at their amortised cost or fair value at initial recognition less any provision for impairment.

(a) Research and development costs

Research expenditure is written off as incurred. Development costs are written off as incurred unless they meet the criteria in IAS 38 for capitalisation. Where forecast revenues for a particular project exceed attributable forecast development costs, they are capitalised and amortised on a straight-line basis over the asset's estimated useful life. Costs are capitalised as intangible assets unless physical assets, such as tooling, exist when they are classified as property, plant and equipment.

(b) Computer software costs

Where computer software is not integral to an item of property, plant or equipment, its costs are capitalised as other intangible assets. Amortisation is provided on a straight-line basis over its useful economic life of between three and seven years.

(c) Acquired intangible assets – business combinations

Intangible assets that may be acquired as a result of a business combination, include, but are not limited to, customer lists, supplier lists, databases, technology and software and patents that can be separately measured at fair value, on a reliable basis. They are separately recognised on acquisition at fair value, together with the associated deferred tax liability. Amortisation is charged on a straight-line basis to the consolidated income statement over the expected useful economic lives.

	Economic life
Customer relationships	7–10 years
Brand	10 years
Technology	5–7 years

(d) Goodwill – business combinations

Goodwill arising on the acquisition of a subsidiary represents the excess of the aggregate of the fair value of the consideration over the aggregate fair value of the identifiable intangible, tangible and current assets and net of the aggregate fair value of the liabilities (including contingent liabilities of businesses acquired at the date of acquisition). Goodwill is initially recognised as an asset at cost and is subsequently measured at cost less any accumulated impairment losses. Transaction costs are expensed and are not included in the cost of acquisition.

For the year ended 31 August 2022

2. Summary of significant accounting policies continued

(i) Impairment of tangible and intangible assets

An impairment loss is recognised to the extent that the carrying amount of an asset or cash generating unit (CGU) exceeds its recoverable amount. The recoverable amount of an asset or CGU is the higher of: (i) its fair value less costs to sell; and (ii) its value in use. Its value in use is the present value of the future cash flows expected to be derived from the asset or CGU, discounted using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset or cash generating unit. Impairment losses are recognised immediately in the consolidated income statement.

(a) Impairment of goodwill

Goodwill acquired in a business combination is allocated to a CGU; CGUs for this purpose represent the lowest level within the Group at which the goodwill is monitored by the Group's Board of Directors for internal and management purposes. CGUs to which goodwill has been allocated are tested for impairment annually, or more frequently when there is an indication that the unit may be impaired.

If the recoverable amount of the CGU is less than the carrying amount of the unit, the impairment loss is allocated first to reduce the goodwill attributable to the CGU. Impairment losses cannot be subsequently reversed.

(b) Impairment of other tangible and intangible assets

Other tangible and intangible assets are reviewed for impairment when events or changes in circumstances indicate the carrying value may not be recoverable. Impairment losses and any subsequent reversals are recognised in the consolidated income statement.

(k) Taxation

The income tax expense for the period comprises current and deferred tax. Tax is recognised in the income statement, except to the extent that it relates to items recognised in other comprehensive income or directly in equity. In this case, the tax is recognised in other comprehensive income or directly in equity, respectively.

The current income tax charge is calculated based on the tax laws enacted or substantively enacted at the balance sheet date in the countries where the Company and its subsidiaries operate and generate taxable income. Management periodically evaluates positions taken in tax returns with respect to situations in which applicable tax regulation is subject to interpretation. It establishes provisions where appropriate based on amounts expected to be paid to the tax authorities.

Deferred income tax is recognised, using the liability method, on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the consolidated financial statements.

Deferred income tax is determined using tax rates (and laws) that have been enacted or substantively enacted by the reporting date and are expected to apply when the related deferred income tax asset is realised, or the deferred income tax liability is settled.

Deferred income tax assets are recognised only to the extent that it is probable that future taxable profit will be available against which the temporary differences can be utilised.

(I) Share based payments

Employees (including Directors and senior executives) of the Group receive remuneration in the form of share based payment transactions, whereby these individuals render services as consideration for equity instruments (equity-settled transactions). These individuals are granted share option rights approved by the Board which can only be settled in shares of the respective companies that award the equity-settled transactions. Share options rights are also granted to these individuals by majority shareholders over their shares held. No cash settled awards have been made or are planned.

The cost of equity-settled transactions is recognised, together with a corresponding increase in equity, over the period in which the performance and/or service conditions are fulfilled, ending on the date on which the relevant individuals become fully entitled to the award (vesting point). The cumulative expense recognised for equity-settled transactions at each reporting date until the vesting date reflects the extent to which the vesting period has expired and the Group's best estimate of the number of equity instruments and value that will ultimately vest. The statement of comprehensive income charge for the year represents the movement in the cumulative expense recognised as at the beginning and end of that period.

The fair value of share based remuneration is determined at the date of grant and recognised as an expense in profit or loss on a straight-line basis over the vesting period, taking account of the estimated number of shares that will vest. The fair value is determined by use of the Black Scholes model method, or the Monte Carlo simulation method as appropriate.

(m) Foreign currencies

(a) Reporting foreign currency transactions in functional currency

The individual financial statements of each Group entity are prepared in their functional currency, which is the currency of the primary economic environment in which that entity operates. For the purpose of the consolidated financial statements, the results and financial position of each entity are translated into Sterling, which is the presentational currency of the Group.

Transactions in currencies other than the entity's functional currency (foreign currencies) are initially recorded at the rates of exchange prevailing on the dates of the transactions. At each subsequent balance sheet date:

- (a) Foreign currency monetary items are retranslated at the rates prevailing at the balance sheet date. Exchange differences arising on the settlement or retranslation of monetary items are recognised in the consolidated income statement.
- (b) Non-monetary items measured at historical cost in a foreign currency are not retranslated.
- (c) Non-monetary items measured at fair value in a foreign currency are retranslated using the exchange rates at the date the fair value was determined. Where a gain or loss on non-monetary items is recognised directly in equity, any exchange component of that gain or loss is also recognised directly in equity and conversely, where a gain or loss on a non-monetary item is recognised in the consolidated income statement, any exchange component of that gain or loss is also recognised in the consolidated income statement.

For the year ended 31 August 2022

2. Summary of significant accounting policies continued

(m) Foreign currencies continued

(b) Translation from functional currency to presentational currency

When the functional currency of a Group entity is different from the Group's presentational currency, its results and financial position are translated into the presentational currency as follows:

- (a) Assets and liabilities are translated using exchange rates prevailing at the reporting date.
- (b) Income and expense items are translated at average exchange rates for the year, except where the use of such an average rate does not approximate the exchange rate at the date of the transaction, in which case the transaction rate is used.
- (c) All resulting exchange differences are recognised in other comprehensive income; these cumulative exchange differences are recognised in the consolidated income statement in the period in which the foreign operation is disposed of.

(c) Net investment in foreign operations

Exchange differences arising on a monetary item that forms part of a reporting entity's net investment in a foreign operation are recognised in the consolidated income statement in the separate financial statements of the reporting entity or the foreign operation as appropriate. In the consolidated financial statements such exchange differences are initially recognised in other comprehensive income as a separate component of equity and subsequently recognised in the consolidated income statement on disposal of the net investment.

(n) Assets held for sale

Assets held for sale are assets previously classified as non-current which are expected to be sold rather than held for continuing use. These have principally arisen as part of a review of our physical estate. Assets held for sale have not been sold at the balance sheet date but are being actively marketed for sale, with a high probability of completion within twelve months.

(o) Alternative performance measures

Alternative performance measures are items of income and expense which, because of the nature, size and/or infrequency of the events giving rise to them, merit separate presentation. These specific items are presented below the income statement to provide greater clarity and a better understanding of the impact of these items on the Group's financial performance. In doing so, it also facilitates greater comparison of the Group's underlying results with prior periods and assessment of trends in financial performance. This split is consistent with how underlying business performance is measured internally.

Alternative performance measures may include but are not restricted to: adjustments to the fair value of acquisition related items such as contingent consideration, acquired intangible asset amortisation and other items due to their significance, size or nature, and the related taxation.

(p) Leases

At the lease commencement date (i.e. the date the underlying asset is available for use), the Group recognises a right-of-use asset and a lease liability on the balance sheet. The lease liability is initially measured at the present value of future lease payments, discounted using the Group's incremental borrowing rate. This is the rate that we would have to pay for a loan of a similar term, and with similar security, to obtain an asset of similar value. The right-of-use asset is initially measured at cost, comprising the initial value of the lease liability, any lease payments made before commencement of the lease, any initial direct costs and any restoration costs. The asset is recorded as property, plant and equipment, and is depreciated over the shorter of its estimated useful economic life and the lease term on a straight-line basis. The finance cost is charged to the income statement over the lease term to produce a constant periodic rate of interest on the lease liability. The lease payment is allocated between repayment of the lease liability and finance cost. The Group applies the short-term lease recognition exemption to those leases that have a lease term of twelve months or less from the commencement date and do not contain a purchase option. It also applies the low-value assets recognition exemption to leases of assets below £5,000. Lease payments on short-term leases and leases of low-value assets are recognised as an expense on a straight-line basis over the lease term.

3. Segment reporting

The Group derives revenue from the sale of its advanced measurement, simulation and testing products used in assisting the global transport market in the laboratory, on the test track and on road. The income streams are all derived from the utilisation of these products which, in all aspects except details of revenue, are reviewed and managed together within the Group and as such are considered to be the only seament.

The operating segment is based on internal reports about components of the Group, which are regularly reviewed and used by the Board of Directors, being the Chief Operating Decision Maker (CODM).

Analysis of revenue by country of destination:

	2022 £'000	2021 £'000
United Kingdom	5,459	4,449
Rest of Europe	13,723	11,352
North America	19,466	15,884
Asia Pacific	40,941	32,717
Rest of World	716	978
	80,305	65,380

One customer individually represents 12.5% of total revenue for the year ended 31 August 2022 (2021: no customer individually represented 10% of more of total revenue).

For the year ended 31 August 2022

Governance

3. Segment reporting continued

Assets and liabilities by segment are not reported to the Board of Directors, and therefore are not used as a key decision-making tool and are not disclosed here.

A disclosure of non-current assets by location is shown below:

	2022 £'000	2021 £'000
United Kingdom	39,565	41,174
Rest of Europe	1,262	1,009
North America	17,084	15,522
Asia Pacific	19,127	21,103
	77,038	78,808

Revenues are disaggregated as follows:

Revenue by sector	2022 £'000	2021 £'000
Track testing	64,743	49,680
Laboratory testing and simulation	15,562	15,700
	80,305	65,380

4. Alternative performance measures

In the analysis of the Group's financial performance and position, operating results and cash flows, alternative performance measures are presented to provide readers with additional information. The principal measures presented are adjusted measures of earnings including adjusted operating profit, adjusted operating margin, adjusted profit before tax, adjusted EBITDA and adjusted earnings per share.

The financial statements include both statutory and adjusted non-GAAP financial measures, the latter of which the Directors believe better reflect the underlying performance of the business and provide a more meaningful comparison of how the business is managed and measured on a day-to-day basis. The Group's alternative performance measures and KPIs are aligned to the Group's strategy and together are used to measure the performance of the business and form the basis of the performance measures for remuneration. Adjusted results exclude certain items because, if included, these items could distort the understanding of the performance for the year and the comparability between the periods.

We provide comparatives alongside all current year figures. The term 'adjusted' is not defined under IFRS and may not be comparable with similarly titled measures used by other companies. All profit and earnings per share figures in this Annual Report relate to underlying business performance (as defined above) unless otherwise stated.

	2022 £'000	2021 £'000
Amortisation of acquired intangibles	5,516	4,432
Acquisition related costs	328	840
ERP development costs	1,670	1,358
	7,514	6,630

Amortisation of acquired intangibles

The amortisation relates to the acquisition of VadoTech Group on 3 March 2021 and the businesses acquired in 2019, DRI and rFpro.

Acquisition related costs

The costs in the current year relate to the acquisition of Ansible Motion Limited which completed on 20 September 2022, after the year end.

The costs incurred during 2021 relate to the acquisition of the VadoTech Group as well as staff retention payments to the employees of rFpro.

ERP development costs

These costs relate to the development, configuration and customisation of the Group's new ERP system which is hosted on the cloud.

Tax

The tax impact of these adjustments was as follows: amortisation of £0.8m (2021: £0.7m), acquisition related costs of £0.1m (2021: £0.1m) and ERP development costs of £0.3m (2021: £0.3m). The tax impact has been calculated with reference to the prevailing tax rate in the jurisdiction in which the expense arose.

Cash impact

The cash flow impact of the adjustments was an outflow of £2.0m (2021: £1.7m), being £1.7m (2021: £1.4m) in relation to ERP development costs and £0.3m (2021: £0.3m) in relation to acquisition costs.

For the year ended 31 August 2022

5. Revenue from contracts with customers

Contract balances

The Group has recognised the following revenue related contract assets and liabilities:

	2022 £'000	2021 £'000
Contract assets (i)	3,917	4,269
Contract liabilities (ii)	5,787	3,568
Revenue recognised in the period from:		
Amounts included in contract liability at the beginning of the period:		
– Laboratory testing and simulation	3,452	1,919

(i) Significant changes in contract assets

Contract assets have decreased by 8% during the year reflecting completion of two contracts. There are 9 current contracts at various stages of completion.

(ii) Significant changes in contract liabilities

The increase in contract liabilities relates to a number of new contracts with payments in advance having been received prior to the year end. Within this figure is £810,000 relating to support and warranty which is recognised over the period in which these obligations are performed.

Remaining performance obligations as at 31 August 2022

	2022 £'000	2021 £'000
Unsatisfied performance obligations		
Track testing	12,447	12,746
Laboratory testing and simulation	12,944	12,107

The revenue on outstanding performance obligations at 31 August 2022 on the track testing systems will be recognised on delivery of these items, alongside the associated cost of sales, in the following financial year.

The revenue on outstanding performance obligations at 31 August 2022 on laboratory testing and simulation systems will be recognised over time alongside the associated cost of sales, in the following financial year. The typical length of time for these construction projects is 18-24 months.

Assets recognised from costs to obtain or fulfil customer contracts

No amounts have been recognised in relation to these categories of assets as at 31 August 2022.

6. Profit before tax

The profit before tax is stated after charging/(crediting):

	2022 £'000	2021 £'000
Depreciation of tangible fixed assets	2,352	1,964
Depreciation of right-of-use assets	964	660
Amortisation of other intangible assets	304	53
Amortisation of acquired intangible assets	5,516	4,432
Realised (gain)/ loss on foreign exchange	(368)	711
Staff costs:		
– Wages and salaries	26,418	18,118
– Social security costs	2,318	2,038
– Other pension costs	1,118	1,101
Share based payments	795	1,240
Research and development costs charged as an expense	356	526

Auditor's remuneration

	2022 £'000	2021 £'000
Fees payable to the Group's auditor during the year for:		
– The audit of the Company's financial statements	90	55
– The audit of the Company's subsidiaries	51	52
– Other services	_	_
	141	107

For the year ended 31 August 2022

7. Employees

The average monthly number of employees, including Directors, during the year was as follows:

	2022 No.	2021 No.
Directors and commercial	23	23
Engineers and technicians	351	256
Administration	60	54
	434	333

The total number of employees at the year end was 428 (2021: 394).

Total remuneration of key management personnel, being the Directors of the Company and the members of the Executive Committee (Excom) is set out below:

	2022 £'000	2021 £'000
Short-term employee benefits	2,212	1,622
Post-employment benefits	104	138
Social security costs	216	218
Share based payments – equity settled	691	667
	3,223	2,645

Further details relating to the remuneration of the Directors of the Company can be found in the Remuneration Committee report.

8. Tax expense

	2022 £'000	2021 £'000
Current tax:		
– For the financial year	718	102
– Adjustments in respect of prior year	6	(32)
	724	70
Deferred tax (note 21):		
– Origination and reversal of temporary differences	(290)	926
– Related to share based payments on exercised options	512	(196)
	946	800

The statutory effective rate of tax for the year of 19.5% is higher than (2021: higher than) the standard rate of corporation tax in the UK of 19% (2021: 19%) as set out below.

The effective rate of tax on the adjusted profit before tax is 17.7% (2021: 18.3%), the reduction being mainly due to an increase in Patent Box relief.

The tax charge can be reconciled to the consolidated income statement as follows:

Tax expense for the financial year	947	800
Overseas tax rates	(24)	48
Changes in tax rates	473	430
Patent Box relief*	(642)	(383)
Adjustments in respect of prior year	175	(228)
Research and development tax credit	(196)	(116)
Non-deductible expenses	238	330
Tax effects of:		
Tax at the applicable statutory rate of 19% (2021: 19%)	923	719
Profit before tax	4,855	3,785
	2022 £'000	2021 £'000

^{*} Patent Box relief represents the tax effect of the reduced amount payable on profits that fall within the Patent Box regime.

For the year ended 31 August 2022

8. Tax expense continued

In addition to the amount charged to the consolidated income statement, the following amounts relating to tax have been recognised directly in equity:

	2022 £'000	2021 £'000
Deferred tax		
Change in estimated excess tax deductions related to share based payments	(84)	(165)
Total income tax recognised directly in equity	(84)	(165)

Factors affecting the tax charge in future years

A number of changes to the UK corporation tax system were announced in the March 2021 budget statement which will increase the main rate of corporation tax to 25% by 1 April 2023. These changes were substantively enacted during the prior year. The impact on the Group's deferred tax liabilities was an increase of £0.4m.

The Group's future tax charge could be affected by several factors including: tax reform in the UK, the USA, Europe or Japan, any future acquisitions, availability of losses carried forward and availability of R&D and patent tax relief.

9. Dividends paid

	2022 £'000	2021 £'000
Final 2020 dividend paid of 4.4p per share	_	994
Interim 2021 dividend paid of 1.6p per share	_	362
Final 2021 dividend paid of 3.2p per share	733	_
Interim 2022 dividend paid of 1.8p per share	398	_
	1,131	1,356

The Board has proposed a final dividend of 3.54p per share totalling £735,000. An interim dividend was paid of 1.76p per share totalling £398,000. If approved, the final dividend will be paid on 27 January 2023 to shareholders on the register on 30 December 2022.

10. Earnings per share

Basic earnings per share is calculated by dividing the profit attributable to equity holders by the weighted average number of ordinary shares in issue during the period.

Diluted earnings per share is calculated by adjusting the weighted average number of ordinary shares outstanding to assume conversion of all dilutive potential shares. The Company has one category of potentially dilutive shares, namely share options.

The calculation of earnings per share is based on the following earnings and number of shares.

	2022	2021
Profit for the year attributable to owners of the Group (£'000)	3,909	2,985
Weighted average number of shares used in calculating earnings per share ('000)		
- Basic	22,625	22,602
– Diluted	22,908	22,782
Earnings per share		
- Basic	17.3p	13.2p
- Diluted	17.1p	13.1p
Adjusted profit after tax (£'000)	10,187	8,520
Adjusted earnings per share	45.0p	37.7p
Adjusted diluted earnings per share	44.5p	37.4p

For the year ended 31 August 2022

11. Goodwill

At 31 August 2021

		Track testing		
	VadoTech	exc.	Lab testing	
	Group	VadoTech	and simulation	Total
	£'000	£'000	£'000	£'000
At 1 September 2021	6,298	8,388	7,535	22,221
Exchange differences	49	1,548	_	1,597
At 31 August 2022	6,347	9,936	7,535	23,818
		T		
	VadoTech	Track testing	Lab testina	
		exc.	Lab testing and simulation	T-1-1
	Group	VadoTech		Total
	£'000	£'000	£'000	£'000
At 1 September 2020	_	8,635	7,535	16,170
Acquisitions	6,336	_	_	6,336

Goodwill acquired in a business combination is allocated at acquisition to the cash generating units (CGUs) that are expected to benefit from that business combination. The carrying amount of the goodwill has been allocated to the Group's principal CGUs, being the CGUs described above.

6.298

8.388

7.535

22.221

The Group tests goodwill at least annually for impairment. Tests are conducted more frequently if there are indications that goodwill might be impaired. The recoverable amounts of the CGUs are determined from value-in-use calculations. The key assumptions for the value-in-use calculations have been individually estimated for each CGU and include the discount rates and expected changes to cash flows during the period for which management has detailed plans.

Management estimates discount rates using pre-tax rates that reflect current market assessments of the time value of money and the risks specific to each of the CGUs. Pre-tax discount rates, derived from the Group's post-tax weighted average cost of capital of 8.5% which has been adjusted for a premium specific to each of the CGUs to account for differences in currency risk, country risk and other factors affecting specific CGUs, have been used to discount projected cash flows.

Expected changes to cash flows during the period for which management has detailed plans relate to revenue forecasts and forecast operating margins in each of the operating companies. The relative value ascribed to each varies between CGUs as the budgets are built up from the underlying operating companies within each CGU, but the key assumption for each CGU is that following the disruption caused by COVID-19, demand recovers as a result of the long-term drivers in the industry, including the increase in ADAS and autonomy and increased regulation.

The calculations have used the Group's forecast figures for the next three years. This is based on data derived from the three-year plan that has been approved by the Board. At the end of three years, the calculations assume the performance of the CGUs will grow at a nominal annual rate of 3.1% in perpetuity. Growth rates are based on management's view of industry growth forecasts. Changes in selling prices and direct costs are based on past practices and expectations of future changes. The weighted average cost of capital is derived using beta values of a comparator group of companies adjusted for funding structures as appropriate.

The pre-tax discount rate used for value-in-use calculations and the carrying value of goodwill by the principal CGUs is 9.6%.

Following a detailed review, no impairment losses were recognised in the year ended 31 August 2022.

Sensitivity testing was performed on the forecasts to consider the impact of reasonably possible worst case scenarios, including a 19% fall in the forecast cash flows. A 5% addition to the discount rate for each CGU was also separately modelled. None of these scenarios resulted in any CGUs requiring impairment.

At 31 August 2021

At 31 August 2021

Net book value At 31 August 2020

Notes to the consolidated financial statements continued

For the year ended 31 August 2022

12. Acquired and other intangible assets

	Customer			intangible	development		intangible
	relationships £'000	Brand £'000	Technology £'000	assets £'000	costs £'000	Investment £'000	assets £'000
Cost							
At 1 September 2021	23,837	1,897	10,738	36,472	1,677	12	1,689
Additions	_	_	_	_	1,711	_	1,711
Disposals	_	_	_	_	_	(12)	(12)
Exchange differences	776	192	362	1,330	_	_	_
At 31 August 2022	24,613	2,089	11,100	37,802	3,388	_	3,388
Amortisation							
At 1 September 2021	2,890	394	4,906	8,190	112	_	112
Charge for the year	3,020	195	2,301	5,516	305	_	305
Exchange differences	240	52	139	431	_	_	_
At 31 August 2022	6,150	641	7,346	14,137	417	_	417
Net book value							
At 31 August 2021	20,947	1,503	5,832	28,282	1,565	12	1,577
At 31 August 2022	18,463	1,448	3,754	23,665	2,971	_	2,971
Internally generated additions total £173,500 (2021: £735,284).							
······································				Total acquired	Capitalised		Total other
	Customer			intangible	development		intangible
	relationships £'000	Brand £'000	Technology £'000	assets £'000	costs £'000	Investment £'000	assets £'000
Cost	£ 000	£ 000	£ 000	£ 000	£ 000	£ 000	£000
At 1 September 2020	8,812	1,964	10,675	21,451	519	12	531
Additions		- 1,504 	- 10,075		1,158	_	1,158
Disposals	_	_	_	_		_	
Acquisitions	15,345	_	_	15,345	_	_	_
Exchange differences	(320)	(67)	63	(324)	_	_	_
At 31 August 2021	23,837	1,897	10,738	36,472	1,677	12	1,689
Amortisation							
At 1 September 2020	1,076	243	2,509	3,828	59	_	59
Charge for the year	1,969	191	2,287	4,447	53	_	53
Exchange differences	(155)	(40)	110	(85)	_	_	_

2,890

7,736

20,947

394

1,721

1,503

4,906

8,166

5,832

8,190

17,623

28,282

Acquired intangible assets relate to items acquired through business combinations which are amortised over their useful economic life.

Other intangible assets comprise acquired intellectual property, software and capitalised development costs.

112

460

1,565

Total acquired

Capitalised

Total other

112

472

1,577

12

12

For the year ended 31 August 2022

13. Property, plant and equipment

	•				
	Land and buildings	Plant and equipment	Test	Motor vehicles	Total
	£'000	£'000	equipment £'000	£'000	£'000
Cost					
At 1 September 2021	22,135	3,665	4,201	402	30,403
Additions	193	1,500	312	93	2,098
Disposals	(18)	(579)	(239)	_	(836)
Exchange differences	259	145	75	10	489
At 31 August 2022	22,569	4,731	4,349	505	32,154
Accumulated depreciation					
At 1 September 2021	961	1,448	1,951	228	4,588
Charge for the year	612	854	828	58	2,352
Disposals	(18)	(575)	(100)	_	(693)
Exchange differences	57	103	33	6	199
At 31 August 2022	1,612	1,830	2,712	292	6,446
Net book value					
At 31 August 2021	21,174	2,217	2,250	174	25,815
At 31 August 2022	20,957	2,901	1,637	213	25,708
		· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·	

There were no capital commitments contracted and not yet provided in these financial statements.

	Land and buildings £'000	Plant and equipment £'000	Test equipment £'000	Motor vehicles £'000	Total £'000
Cost					
At 1 September 2020	20,203	3,848	3,739	372	28,162
Additions	4,313	597	595	33	5,538
Acquisitions of businesses	_	17	_	_	17
Disposals	(356)	(749)	(100)	_	(1,205)
Transfers to assets held for sale	(1,978)	_	_	_	(1,978)
Exchange differences	(47)	(48)	(33)	(3)	(131)
At 31 August 2021	22,135	3,665	4,201	402	30,403
Accumulated depreciation	'	'			
At 1 September 2020	943	1,420	1,325	165	3,853
Charge for the year	377	805	718	64	1,964
Disposals	(356)	(746)	(86)	_	(1,188)
Exchange differences	(3)	(31)	(6)	(1)	(41)
At 31 August 2021	961	1,448	1,951	228	4,588
Net book value	'				
At 31 August 2020	19,260	2,428	2,414	207	24,309
At 31 August 2021	21,174	2,217	2,250	174	25,815

For the year ended 31 August 2022

14. Leases
Right-of-use asset

nd and ildings £'000	Total £'000
•	2,052
•	2,052
020	
938	938
(572)	(572)
122	122
2,540	2,540
1,139	1,139
964	964
(572)	(572)
133	133
1,664	1,664
913	913
876	876
	1,664 913

	Land and buildings £'000	Total £'000
Cost		
At 1 September 2020	1,263	1,263
Additions	246	246
Acquisitions	659	659
Disposals	(77)	(77)
Exchange differences	(39)	(39)
At 31 August 2021	2,052	2,052
Accumulated depreciation		
At 1 September 2020	562	562
Charge for the year	660	660
Disposals	(65)	(65)
Exchange differences	(18)	(18)
At 31 August 2021	1,139	1,139
Net book value		
At 31 August 2020	701	701
At 31 August 2021	913	913

For the year ended 31 August 2022

14. Leases continued Lease liabilities

	2022	2021
	£'000	£'000
Maturity analysis – contractual undiscounted cash flows		
Less than one year	631	456
One to five years	319	522
Total undiscounted cash flows	950	978
Discount	(7)	(11)
Total lease liabilities	943	967
Current	628	456
Non-current	315	511

Amounts recognised in the consolidated statement of comprehensive income

	2022 £'000	2021 £'000
Depreciation of right-of-use assets	964	660
Interest on lease liabilities	40	25

Amounts recognised in the consolidated cash flow statement

	2022 £'000	2021 £'000
Principal lease payments	964	656
Interest payments on leases	40	25

15. Inventories

	2022 £'000	2021 £'000
Raw materials	11,042	5,032
Work-in-progress	2,105	1,613
Finished goods	464	126
	13,611	6,771

The value of inventories recognised as an expense during the year was £24,755,000 (2021: £19,874,000). During the year the amount of write down of inventories recognised as an expense was £220,000 (2021: £400,000).

16. Trade and other receivables

	2022 £'000	2021 £'000
Trade receivables	10,600	12,126
Less: impairment provision	(508)	(592)
	10,092	11,534
Other receivables	2,394	1,742
Prepayments	1,296	2,224
	13,782	15,500

For the year ended 31 August 2022

16. Trade and other receivables continued

The maximum exposure to credit risk for trade receivables at 31 August, by currency, was:

	2022 £'000	2021 £'000
Sterling	4,754	4,987
Euro	3,482	4,200
US dollar	1,386	2,037
Japanese yen	470	310
	10,092	11,534

Trade receivables, before impairment provisions, are analysed as follows:

	2022 £'000	2021 £'000
Not past due	3,394	7,260
Past due, no credit loss for impairment	6,698	4,274
Past due, credit loss for impairment	508	592
	10,600	12,126

The ageing of trade receivables, classified as past due, but not impaired, is as follows:

	2022	2021
	£'000	£'000
Less than three months past due	5,042	3,229
Over three months past due	1,656	1,045
	6,698	4,274
	2022	2021
	£'000	£'000
At 1 September	592	522
Provision for impairment of receivables	(84)	104
Receivables written off during the year as uncollectable	_	(34)
At 31 August	508	592

Given the Group's customer base expected credit losses are not material; however, the Group's policy is to provide in full for trade receivables outstanding for more than 90 days beyond agreed terms, unless there are facts and circumstances that support recoverability.

17. Cash and cash equivalents

	2022 £'000	2021 £'000
Cash at bank:		
- Sterling	15,230	15,483
- Euro	8,867	4,923
– US dollar	4,111	2,203
– Japanese yen	1,596	417
– Other currencies	337	256
	30,141	23,282

Net cash

	2022 £'000	2021 £'000
Cash and cash equivalents	30,141	23,282
Lease liabilities	(943)	(967)
	29,198	22,315

The Group has a £15.0m revolving credit facility with NatWest Bank which expires in February 2025. The facility is priced on a floating rate of SONIA plus 1.5% and includes financial covenants which are measured on a quarterly basis. No drawdowns were made against the facility during the year. The Group was in compliance with its financial covenants during FY 2021 and FY 2022.

18. Assets held for sale

Following completion of our Engineering Design Centre and a review of our existing manufacturing locations, previously acquired land with a net book value of £1,978,000 is surplus to requirements and has been classified as held for sale. The sale is expected to be completed during 2023. The asset was written down by £85,000 to fair value less costs to sell of £1,893,000 and the related cost was included in general and administrative expenses within the consolidated statement of comprehensive income in the prior year.

19. Trade and other payables

	16,053	10,933
Other payables and accruals	10,526	7,776
Social security and other taxes	571	453
Trade payables	4,956	2,704
	2022 £'000	2021 £'000

For the year ended 31 August 2022

19. Trade and other payables continued

The maximum exposure to foreign currency risk for trade payables at 31 August, by currency, was:

	2022	2021
	£'000	£'000
Sterling	3,635	2,257
Euro	154	200
US Dollar	1,096	247
Japanese Yen	71	_
	4,956	2,704

20. Financial instruments

The Group's activities are exposed to a variety of market risk (including foreign currency risk, interest rate risk and equity price risk), credit risk and liquidity risk. The overall financial risk management policy focuses on mitigating the potential adverse effects on the Group's financial performance.

(a) Currency risk

Strategic report

The Group is exposed to foreign currency risk on transactions and balances that are denominated in currencies other than Sterling. The transactional exposure arises on trade receivables, trade payables and cash and cash equivalents and these balances are analysed by currency in notes 16, 17 and 19. Currency risk is monitored closely on an ongoing basis to ensure that the net exposure is at an acceptable level.

The Group maintains a natural hedge whenever possible, by the cash inflows (revenue stream) and cash outflows used for purposes such as capital expenditure and operational expenditure in the respective currencies. Forward exchange contracts are used to manage transactional exposure where appropriate.

Management considers that the most significant foreign exchange risk relates to US dollar and Euro. The Group's sensitivity to a 10% strengthening in Sterling against each of these currencies (with other variables held constant) is as follows:

	2022 £'000	2021 £'000
Decrease in adjusted operating profit (at average rates)		
US Dollar	230	214
Euro	310	218

(b) Interest rate risk

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. The Group's exposure to interest rate risk arises mainly from interest-bearing financial assets, being interest-bearing bank deposits. The Group's policy is to obtain the most favourable interest rates available whilst ensuring that cash is deposited with a financial institution with a credit rating of AA or better. Any surplus funds are placed with licensed financial institutions to generate interest income.

A 100 basis point strengthening/weakening of the interest rate as at the end of the reporting period would not have a significant impact on profit after taxation and equity. This assumes that all other variables remain constant.

(c) Equity price risk

The Group does not have any quoted investments and hence is not exposed to equity price risk.

(d) Credit risk

The Group's exposure to credit risk, or the risk of counterparties defaulting, arises mainly from trade and other receivables. The Group manages its exposure to credit risk by the application of credit approvals, credit limits and monitoring procedures on an ongoing basis. For other financial assets (including cash and bank balances), the Group seeks to minimise credit risk by dealing exclusively with high credit rating counterparties. An analysis of the ageing and currency of trade receivables is set out in note 16. An analysis of cash and cash equivalents is set out in note 17.

The Group establishes an allowance for impairment that represents its expected credit loss in respect of the trade and other receivables as appropriate. The main components of this allowance are a specific loss component that relates to individually significant exposures. Impairment is estimated by management based on prior experience and the current economic environment.

The Group's major concentration of credit risk at 31 August 2022 relates to the amounts owing by 10 customers which constituted approximately 70% of its trade receivables as at the end of the reporting period.

As the Group does not hold any collateral, the maximum exposure to credit risk is represented by the carrying amount of the financial assets as at the end of the reporting period.

The exposure of credit risk for trade receivables by geographical region is as follows:

	2022 £'000	2021 £'000
North America	1,326	2,985
United Kingdom	541	427
Europe	2,407	3,439
Rest of World	5,818	4,683
	10,092	11,534

For the year ended 31 August 2022

20. Financial instruments continued

(e) Liquidity risk

Liquidity risk is the risk that the Group will not be able to meet its financial obligations as they fall due. The exposure to liquidity risk arises primarily from mismatches of the maturities of financial assets and liabilities.

The Group maintains a level of cash and cash equivalents and bank facilities deemed adequate by management to ensure, as far as possible, that it will have sufficient liquidity to meet its liabilities when they fall due.

The following table details the Group's contractual maturity for its financial liabilities. The table has been drawn up based on the undiscounted cash flows of financial liabilities based on the earliest date on which the Group and the Company can be required to pay.

The Group's financial liabilities are as follows:

	2022 £'000	2021 £'000
Trade payables	4,956	2,704
Other payables	10,526	7,776
Lease liabilities	943	967
Derivative financial instruments	123	31
	16,548	11,478
The maturities of the undiscounted liabilities are as follows (excluding leases):		
Less than one year	15,605	10,511

(f) Capital risk management

Capital is defined as the total equity of the Group. The Group's objectives when managing capital are to safeguard the Group's ability to continue as a going concern in order to provide returns for shareholders and benefits for other stakeholders and to maintain an optimal capital structure to reduce the cost of capital. In order to maintain or adjust the capital structure, the Group may adjust the amount of the dividend paid to shareholders, return capital to shareholders, issue new shares or sell assets to reduce debt.

The Group manages its capital based on debt-to-equity ratio. The strategies adopted were unchanged during the period under review and from those adopted in the previous financial year. The debt-to-equity ratio is calculated as net debt divided by total equity. Net debt is calculated as borrowings plus trade and other payables less cash and cash equivalents.

At 31 August 2022, the Group's cash resources exceed its total debt. Hence, the Company has no net debt.

(g) Classification of financial instruments

All financial instruments are categorised as follows:

	2022 £'000	2021 £'000
Loans and receivables		
Trade receivables	10,092	11,534
Contract assets	3,917	4,269
Cash and bank balances	30,141	23,282
	44,150	39,085
Financial liabilities held at amortised cost		
Trade and accruals and other payables	15,482	10,480
Lease liabilities	943	967
	16,425	11,447
(h) Fair value hierarchy		
	2022 £'000	2021 £'000
Held at fair value		
Assets held for sale Level 3	1,862	1,862
Derivative financial instruments Level 2	(123)	(31)
	1,739	1,831

The fair values of the financial assets and liabilities are analysed into level 1 to 3 as follows:

- Level 1: Fair value measurements derive from quoted prices (unadjusted) in active markets for identical assets or liabilities.
- Level 2: Fair value measurements derive from inputs other than quoted prices included within level 1 that are observable for the asset or liability, either directly or indirectly.
- Level 3: Fair value measurements derive from valuation techniques that include inputs for the asset or liability that are not based on observable market data (unobservable inputs).

The carrying value of all financial instruments approximates their fair value (valued using level 2 or level 3 in the case of assets held for sale).

For the year ended 31 August 2022

21. Deferred tax

Short-term timing differences

Acquisitions

	2022 £'000	2021
		£'000
At 1 September	(6,552)	(2,549)
Acquisitions	_	(3,472)
Recognised in profit or loss:		
– In respect of timing differences	290	(376)
– In respect of deferred tax on share options	(512)	(354)
Recognised in equity:		
– In respect of deferred tax on share options	84	165
Exchange differences	293	34
At 31 August	(6,397)	(6,552)
The deferred tax balance is analysed as follows:		
	2022	2021
	£'000	£'000
Deferred tax liability	(6,397)	(6,552)
	(6,397)	(6,552)
The deferred tax liabilities are attributable to:		
The deferred tax habitates are attributable to.		
	2022	2021
	£'000	£'000

22. Share capital

The allotted, called up and fully paid share capital is made up of 22,626,466 ordinary shares of £0.01 each.

At 31 August 2022		22,626	226	62,260	62,486
Issued during the year	(ii)	4	_	50	50
At 31 August 2021		22,622	226	62,210	62,436
Issued during the year	(i)	46		474	474
At 1 September 2020		22,576	226	61,736	61,962
	Note	Number of shares '000	Share capital £'000	Share premium £'000	Total £'000

- (i) During the year ended 31 August 2021, 44,750 shares were issued to satisfy exercises of share options. A total of 692 shares and 349 shares were issued to James Routh and Sarah Matthews-DeMers respectively in satisfaction of 20% of their annual bonus payments for the year ended 31 August 2020.
- (ii) During the year ended 31 August 2022, 1,654 shares were issued to satisfy exercises of share options. A total of 1,536 shares and 932 shares were issued to James Routh and Sarah Matthews-DeMers respectively in satisfaction of 20% of their annual bonus payments for the year ended 31 August 2021.

23. Other reserves

199

(6,596)

(6,397)

44

(6,596)

(6,552)

	Reconstruction reserve £'000	Merger relief reserve £'000	Translation reserve £'000	Hedging reserve £'000	Other reserves £'000
At 1 September 2020	(11,284)	11,390	(1,800)	_	(1,694)
Total comprehensive income	_	_	(614)	(31)	(645)
At 31 August 2021	(11,284)	11,390	(2,414)	(31)	(2,339)
Total comprehensive income	_	_	3,574	(93)	3,481
At 31 August 2022	(11,284)	11,390	1,160	(124)	1,142

The reconstruction reserve and merger relief reserve have arisen as follows:

The acquisition by the Company of the entire issued share capital of Anthony Best Dynamics Limited in 2013 was accounted for as a Group reconstruction. Consequently, the assets and liabilities of the Group were recognised at their previous book values as if the Company had always been the Parent Company of the Group.

For the year ended 31 August 2022

23. Other reserves continued

The share capital for the period covered by these consolidated financial statements and the comparative periods is stated at the nominal value of the shares issued pursuant to the above share arrangement. Any differences between the nominal value of these shares and previously reported nominal values of shares and applicable share premium issued by Anthony Best Dynamics Limited were transferred to the reconstruction reserve.

24. Share based payments

The share based compensation schemes were established to reward and incentivise the executive management team and staff for delivering share price growth. The schemes are administered by the Remuneration Committee.

The schemes adopted by the Company are equity settled and a charge of £795,000 (2021: £1,240,000) has been charged to the consolidated statement of comprehensive income relating to these options.

Summary of movements in share options

	N. 1	Weighted average
	Number of shares	exercise price (pence)
Outstanding at 1 September 2021	466,306	691
Options and awards granted	135,581	1,271
Options and awards exercised	(1,654)	395
Options and awards lapsed	(60,000)	2,140
Outstanding at 31 August 2022	540,233	1,445
Exercisable at 31 August 2022	86,704	1,358
Outstanding at 1 September 2020	442,126	946
Options and awards granted	69,971	1,017
Options and awards exercised	(45,791)	1,047
Outstanding at 31 August 2021	466,306	691
Exercisable at 31 August 2021	88,358	1,340

The weighted average share price on the date of exercise was 978p (2021: 2,046p). The weighted average remaining contractual life of the options outstanding at the statement of financial position date is 8.2 years (2021: 8.8 years).

The weighted average fair value of options granted in the year was £12.71 (2021: £14.51).

The fair values of the share option awards granted were calculated using the Black Scholes option pricing model. The long-term incentive plan awards made in 2020, 2021 and 2022 had targets based on earnings per share total growth and shareholder return and were valued using a Monte Carlo simulation. The inputs into the model for awards granted were as follows:

_	Date awarded					
	11 March 2022	3 December 2021	2 December 2020	17 January 2020	3 December 2019	1 October 2019
Stock price	1,025p	1,750p	1,768p	2,230p	2,140p	2,140p
Exercise price	nil	nil	nil	nil	2,140p	2,200p
Interest rate	1.25%	0.5%	0.02%	0.39%	0.28%	0.38%
Volatility	64%	62%	53%	40%	49%	42%
Vesting period	3 years	3 years	3 years	3 years	1-2 years	1-3 years

The expected volatility was determined with reference to the published share price.

For the options granted in 2018 and 2019 one-third of the options will vest on each of the first, second and third anniversary of the grant date subject to the employees remaining employed by the Company.

The long-term incentive plan awards vest on the third anniversary of the award date.

25. Related party disclosures

Mr A Best, a significant shareholder and the former Chairman of the Company, is a trustee and beneficiary of the Best Middleton Trust. Rental payments of £Nil (2021: £44,000) were made in the year. No amounts were due to or from the trust at 31 August 2022 (31 August 2021: £Nil). The lease was terminated on 29 July 2021.

Balances and transactions between the Company and its subsidiaries are eliminated on consolidation and are not disclosed in this note.

The remuneration of the key management personnel of the Group is set out in note 7.

26. Ultimate controlling party

There is no ultimate controlling party.

For the year ended 31 August 2022

27. Acquisition of businesses

On 3 March 2021, the Group acquired 100% of VadoTech Pte Ltd and Zynit Pte Ltd (collectively 'VadoTech Group') for total cash consideration of up to €26,000,000. The initial cash consideration was €17,000,000 (£14,700,000). Two further conditional cash payments of up to €3,000,000 (£2,600,000) and €6,000,000 (£5,200,000) were subject to certain performance criteria being achieved for the year ended 31 December 2020 and the year ended 31 December 2021, respectively. The criteria in relation to both payments were met and an additional €3,000,000 was paid in 2021, with a further €6,000,000 paid in the current year.

Acquisition expenses totalled £273,000 and were included within general and administrative expenses in the prior year in the consolidated statement of comprehensive income.

The provisional fair values reported in the prior year Annual Report were finalised during the year with no adjustments required. Goodwill of £6,336,000 represents the amount paid for future sales growth from both new customers and new products and employee know-how. From the date of acquisition to 31 August 2021, the newly acquired business contributed £5,900,000 to revenue and £1,500,000 to adjusted operating profit. Had the acquisition been completed at the beginning of the period, Group revenue would have been £72,000,000 and adjusted operating profit would have been £12,000,000.

An accrual for the remaining deferred contingent consideration was included in the balance sheet at 31 August 2021 at net present value. £215,000 (2021: £331,000) of the discount to present value unwound during the year which has been included in other finance expense.

		VadoTech		
	Book value £'000	Adjustment £'000	Fair value £'000	
Acquired intangible assets	_	15,345	15,345	
Deferred tax liabilities	_	(3,472)	(3,472)	
Investment	3	_	3	
Property, plant and equipment	872	(198)	674	
Trade and other receivables	2,540	564	3,104	
Trade and other payables	(3,016)	_	(3,016)	
Net assets acquired	399	12,239	12,638	
Goodwill	_	_	6,336	
	399	12,239	18,974	
Cash paid			14,680	
Cash acquired			(2,923)	
Expenses of acquisition			273	
Deferred consideration paid 2021			2,572	
Deferred consideration paid 2022			4,645	
Net cash paid, after acquisition expenses			19,247	
Less: expenses of acquisition			(273)	
Total consideration			18,974	

28. Post-balance sheet event

On 20 September 2022, the Group acquired 100% of Ansible Motion Limited for initial consideration of £19,200,000 with deferred contingent consideration of up to £12,000,000.

The initial consideration comprised cash of £16,000,000 and £3,200,000 of new ordinary shares in AB Dynamics plc issued to the vendors. The contingent consideration is subject to certain performance criteria being achieved for the year ending 31 August 2023.

The book value of the acquired assets and liabilities at the date of acquisition was £4,100,000. The Group is currently in the process of determining the fair values of the assets and liabilities acquired. Based on unaudited accounts for the year ended 31 March 2022, Ansible Motion generated revenue of £8.0m (2021: £5.4m), earnings before interest, tax, depreciation and amortisation (EBITDA) of £1.9m (2021: £0.8m) and operating profit of £1.8m (2021: £0.7m).

Acquisition expenses totalled £500,000, of which £328,000 was incurred in the year ended 31 August 2022 and is included in administrative expenses in the consolidated statement of comprehensive income.

The number of shares issued totalled 258,795 which will increase the weighted average shares in issue for FY 2023 by 243,865 shares.

Company statement of financial position

As at 31 August 2022

Note	2022 £'000	2021 £'000
ASSETS		
Non-current assets		
Right-of-use assets	61	_
Investments 3	67,124	61,295
Deferred tax assets	202	_
	67,387	61,295
Current assets		
Other receivables 4	14,782	17,874
Cash and cash equivalents	6,131	9,451
	20,913	27,325
LIABILITIES		
Current liabilities		
Trade and other payables 5	2,110	1,833
Short-term lease liabilities	62	_
	2,172	1,833
Net current assets	18,741	25,492
Net assets	86,128	86,787
Shareholders' equity		
Share capital	226	226
Share premium	62,260	62,210
Retained earnings	23,642	24,351
Total equity	86,128	86,787

The loss for the financial year dealt with in the financial statements of the Parent Company was £328,000 (2021: profit of £14,123,000).

The financial statements were approved by the Board of Directors and authorised for issue on 23 November 2022 and are signed on its behalf by:

Dr James Routh Sarah Matthews-DeMers

Director Director

Company registration number: 08393914

Company statement of changes in equity

For the year ended 31 August 2022

	Note	Share capital £'000	Share premium £'000	Retained profits £'000	Total equity £'000
At 1 September 2020		226	61,736	10,344	72,306
Share based payments		_	_	1,240	1,240
Total comprehensive income		_	_	14,123	14,123
Dividends	7	_	_	(1,356)	(1,356)
Issue of shares, net of share issue costs		_	474	_	474
At 31 August 2021		226	62,210	24,351	86,787
Share based payments		_	_	750	750
Total comprehensive expense		_	_	(328)	(328)
Dividends	7	_	_	(1,131)	(1,131)
Issue of shares, net of share issue costs		_	50	_	50
At 31 August 2022		226	62,260	23,642	86,128

The share premium account is a non-distributable reserve representing the difference between the nominal value of shares in issue and the amounts subscribed for those shares.

Retained profits represent the cumulative value of the profits not distributed to shareholders but retained to finance the future capital requirements of the Group.

Notes to the Company financial statements

For the year ended 31 August 2022

General information

AB Dynamics plc ('the Company') is the UK holding company of a group of companies which are engaged in the provision of advanced testing systems to the global motor industry. The Company is registered in England and Wales (registered number 08393914). Its registered office and principal place of business is Middleton Drive, Bradford on Avon, Wiltshire BA15 1GB.

Basis of accounting

The financial statements have been prepared in accordance with the historical cost convention and in accordance with FRS 102, The Financial Reporting Standard applicable in the UK and Republic of Ireland, and the Companies Act 2006. The financial statements present information about the Company as an individual entity and the principal accounting policies are described below. They have all been applied consistently throughout the period.

Reduced disclosure exemptions

The Company, as a qualifying entity, has taken advantage of the disclosure exemptions in FRS 102 paragraph 1.12 as follows:

- No cash flow statement has been presented as the Company is included within the consolidated financial statements of the Group
- Disclosures in respect of the Company's financial instruments have not been presented as equivalent disclosures are included in the consolidated financial statements of the Group

The Company has also taken advantage of the disclosure exemptions in FRS 102 paragraph 33.1A as follows:

· Related party transactions have not been disclosed with other wholly owned members of the Group

Going concern

At 31 August 2022 the Company had net current assets of £18,741,000 (2021: £25,492,000) with the main current asset being amounts owed from its subsidiary Anthony Best Dynamics Limited, amounting to £13,568,000 (2021: £16,917,000). The Company has assessed its ongoing costs with cash generated by its subsidiary to ensure that it can continue to settle its debts as they fall due.

The Directors have, after careful consideration of the factors set out above, concluded that it is appropriate to adopt the going concern basis for the preparation of the financial statements and the financial statements do not include any adjustments that would result if the going concern basis was not appropriate.

Investments

Investments held as fixed assets are stated at cost less provision for impairment.

Current tax, including UK corporation tax and foreign tax, is provided at amounts expected to be paid (or recovered) using the tax rates and laws that have been enacted or substantively enacted by the balance sheet date.

Deferred tax is recognised in respect of all timing differences that have originated but not reversed at the balance sheet date where transactions or events that result in an obligation to pay more tax in the future or a right to pay less tax in the future have occurred at the balance sheet date. Timing differences are differences between the Company's taxable profits and its results as stated in the financial statements that arise from the inclusion of gains and losses in tax assessments in periods different from those in which they are recognised in the financial statements. A net deferred tax asset is regarded as recoverable and therefore recognised only when, on the basis of all available evidence, it can be regarded as more likely than not that there will be suitable taxable profits from which the future reversal of the underlying timing differences can be deducted.

Financial instruments

Financial assets and liabilities are recognised in the statements of financial position when the Company has become a party to the contractual provisions of the instruments.

The Company only enters into basic financial instrument transactions that result in the recognition of financial assets and liabilities like trade and other debtors and creditors and loans to related parties.

Debtors

Short-term debtors are measured at transaction price, less any impairment. Loans and receivables are measured initially at fair value and are measured subsequently at amortised cost using the effective interest method, less any impairment.

Creditors

Short-term trade creditors are measured at the transaction price. Other financial liabilities, including bank loans, are measured initially at fair value and are measured subsequently at amortised cost using the effective interest method.

For the year ended 31 August 2022

Critical accounting judgements and key sources of estimation uncertainty

In the application of the Company's accounting policies, the Directors are required to make judgements, estimates and assumptions about the carrying amounts of assets and liabilities that are not apparent from other sources. The estimates and assumptions are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. Actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised if the revision affects only that period or in the period of the revision and future periods if the revision affects both current and future periods.

The following are the key assumptions concerning the future and other key sources of estimation uncertainty at the statement of financial position date that have a significant risk of causing a significant adjustment to the carrying amounts of assets and liabilities in the financial statements:

Share based payment

The fair value of share based remuneration is determined at the date of grant and recognised as a capital contribution to its subsidiary on a straight-line basis over the vesting period, taking account of the estimated number of shares that will vest. The fair value is determined by use of option pricing models.

1. (Loss)/profit for the financial year

The Company has taken advantage of Section 408 of the Companies Act 2006 and, consequently, a profit and loss account for the Company alone has not been presented.

The Company's loss for the financial year was £328,000 (2021: profit of £14,123,000).

The Company's profit for the financial year has been arrived at after charging auditor's remuneration payable to Crowe U.K. LLP for audit services to the Company of £25,000 (2021: £25,000). Statutory information on remuneration for other services provided by the Company's auditors and its associates is given on a consolidated basis in note 6 of the consolidated financial statements.

2. Employees and Directors' remuneration

Staff costs during the year by the Company were as follows:

	2022 £'000	2021 £'000
Wages and salaries	2,602	1,580
Social security costs	158	220
	2,760	1,800

The executive management team is remunerated by the operating subsidiary Anthony Best Dynamics Limited and costs recharged to AB Dynamics plc. Details of its remuneration is in the Remuneration Committee report.

The average number of employees of the Company during the year was:

	2022	2021
	Number	Number
Directors and management	9	5

3. Investments

	2022 £'000	2021 £'000
Subsidiary undertaking		
1 September	61,295	42,803
Capital contribution arising on share based payment	750	1,240
AB Dynamics Overseas Holdings Ltd	5,114	17,252
Exchange differences	(35)	_
31 August	67,124	61,295

For the year ended 31 August 2022

3. Investments continued

The Company owns more than 20% of the following undertakings:

	Class of share held	% shareholding	Registered office
Anthony Best Dynamics Limited	Ordinary	100	Middleton Drive, Bradford on Avon, Wiltshire BA15 1GB
AB Dynamics GK	Ordinary	100	2-2-3 Shinyokohama, Dai-Ichi Takeo bldg. 6F 606 Kohoku-ku, Yokohama 222-0033, Japan
AB Dynamics Inc	Ordinary	100	48325 Alpha Drive, Suite 120, Wixom, MI 48393, USA
rFpro Limited	Ordinary	100	Middleton Drive, Bradford on Avon, Wiltshire BA15 1GB
AB Dynamics UK Holdings Limited	Ordinary	100	Middleton Drive, Bradford on Avon, Wiltshire BA15 1GB
AB Dynamics Overseas Holdings Limited	Ordinary	100	Middleton Drive, Bradford on Avon, Wiltshire BA15 1GB
*AB Dynamics Singapore Holding Pte Ltd	Ordinary	100	77 Robinson Road, #13-00 Robinson 77, Singapore, 068896
*VadoTech Pte Ltd	Ordinary	100	77 Robinson Road, #13-00 Robinson 77, Singapore, 068896
*VadoTech Japan KK	Ordinary	100	Nichitochi Nishishinjyuku Building 8F, 6-10-1, Nishishinjyuku, Shinjyuku-ku, Tokyo, Japan
*VadoTech Deutschland	Ordinary	100	Bismarckstraße 7, 10625 Berlin, Germany
*VadoTech Services SL	Ordinary	100	Calle Madrid, n. 70, Edificio Irene II, local 1, Monachil, Granada, Spain
*VadoTech US Inc	Ordinary	100	The Corporation Trust Center, 1209 Orange Street, City of Wilmington, County of New Castle, Delaware 1980, USA
*VadoTech Korea Ltd	Ordinary	100	301 ho, 10-1, Maebong-gil, Seongdong-gu, Seoul, South Korea
*Zynit Pte Ltd	Ordinary	100	77 Robinson Road, #13-00 Robinson 77, Singapore, 068896
*Zynit China Co Ltd	Ordinary	100	No.13, Jinma Yuan 2 Street, Gaoliying Town, Shunyi District, Beijing, China
*rFpro Inc	Ordinary	100	48325 Alpha Drive, Suite 120, Wixom, MI 48393, USA
* AB Dynamics Europe GmbH	Ordinary	100	Vogelsang 11, 35398 Gießen, Germany
*Dynamic Research Inc	Ordinary	100	355 Van Ness Avenue, Suite 200, Torrance, CA 90501, USA
*DRI Advanced Test Systems Inc	Ordinary	100	355 Van Ness Avenue, Suite 200, Torrance, CA 90501, USA
*DRIATSERO SRL	Ordinary	25	36 Libertatii St, Buhusi, Romania
*ABD Solutions Ltd	Ordinary	100	Middleton Drive, Bradford on Avon, Wiltshire BA15 1GB

^{*} Denotes indirect shareholding.

For the year ended 31 August 2022

4. Other receivables

	2022 £'000	2021 £'000
Amounts owed by Group undertakings	14,709	17,630
Prepayments	73	244
	14,782	17,874

5. Trade and other payables

	2022 £'000	2021 £'000
Other payables and accruals	2,110	1,833
Short-term lease liabilities	62	_
	2,172	1,833

6. Share capital

The allotted, called up and fully paid share capital is made up of 22,626,466 ordinary shares of £0.01 each.

	Note	Number of shares '000	Share capital £'000	Share premium £'000	Total £'000
At 1 September 2020		22,576	226	61,736	61,962
Issued during the year	(i)	46	_	474	474
At 31 August 2021		22,622	226	62,210	62,436
Issued during the year	(ii)	4	_	50	50
At 31 August 2022		22,626	226	62,260	62,486

- (i) During the year ended 31 August 2021, 44,750 shares were issued to satisfy exercises of share options. A total of 692 shares and 349 shares were issued to James Routh and Sarah Matthews-DeMers respectively in satisfaction of 20% of their annual bonus payments for the year ended 31 August 2020.
- (ii) During the year ended 31 August 2022, 1,654 shares were issued to satisfy exercises of share options. A total of 1,536 shares and 932 shares were issued to James Routh and Sarah Matthews-DeMers respectively in satisfaction of 20% of their annual bonus payments for the year ended 31 August 2021.

7. Dividends paid

	2022 £'000	2021 £'000
Final 2020 dividend paid of 4.4p per share		994
Interim 2021 dividend paid of 1.6p per share		362
Final 2021 dividend paid of 3.2p per share	733	_
Interim 2022 dividend paid of 1.8 per share	398	_
	1,131	1,356

The Board has proposed a final dividend of 3.54p per share totalling £735,000. An interim dividend was paid of 1.76p per share totalling £398,000. If approved, the final dividend will be paid on 27 January 2023 to shareholders on the register on 30 December 2022.

8. Related party disclosures

The only key management personnel of the Company are the Directors. Details of their remuneration are contained in the Remuneration Committee report.

For the year ended 31 August 2022

9. Share based payments

The share based compensation schemes were established to reward and incentivise the executive management team and staff for delivering share price growth. The schemes are administered by the Remuneration Committee.

The schemes adopted by the Company are equity settled and a charge of £795,000 (2021: £1,240,000) has been charged to the consolidated statement of comprehensive income relating to these options.

Summary of movements in share options

	Number of shares	Weighted average exercise price pence
Outstanding at 1 September 2021	466,306	691
Options and awards granted	135,581	1,271
Options and awards exercised	(1,654)	395
Options and awards lapsed	(60,000)	2,140
Outstanding at 31 August 2022	540,233	1,445
Exercisable at 31 August 2022	86,704	1,358
Outstanding at 1 September 2020	442,126	946
Options and awards granted	69,971	1,017
Options and awards exercised	(45,791)	1,047
Outstanding at 31 August 2021	466,306	691
Exercisable at 31 August 2021	88,358	1,340

The weighted average share price on the date of exercise was 978p (2021: 2,046p). The weighted average remaining contractual life of the options outstanding at the statement of financial position date is 8.2 years (2021: 8.8 years).

The fair values of the share option awards granted were calculated using the Black Scholes option pricing model. The long-term incentive plan awards made in 2020, 2021 and 2022 had targets based on earnings per share total growth and shareholder return and were valued using a Monte Carlo simulation. The inputs into the model for awards granted were as follows:

_	Date awarded					
	11 March 2022	3 December 2021	2 December 2020	17 January 2020	3 December 2019	1 October 2019
Stock price	1,025p	1,750p	1,768p	2,230p	2,140p	2,140p
Exercise price	nil	nil	nil	nil	2,140p	2,200p
Interest rate	1.25%	0.50%	0.02%	0.39%	0.28%	0.38%
Volatility	64%	62%	53%	40%	49%	42%
Vesting period	3 years	3 years	3 years	3 years	1-2 years	1-3 years

The expected volatility was determined with reference to the published share price.

For the options granted in 2018 and 2019 one-third of the options will vest on each of the first, second and third anniversary of the grant date subject to the employees remaining employed by the Company.

The long-term incentive plan awards vest on the third anniversary of the award date.

Notice of Annual General Meeting 2023

Notice of Annual General Meeting

THIS DOCUMENT IS IMPORTANT AND REQUIRES YOUR IMMEDIATE ATTENTION

If you are in any doubt as to the action you should take, you should consult your stockbroker, bank manager, solicitor, accountant or other independent professional adviser immediately.

If you have sold or transferred all of your shares in AB Dynamics plc, please forward this document, together with the accompanying report and accounts and form of proxy, to the purchaser or transferee or to the stockbroker, bank or other agent through whom the sale or transfer was effected for delivery to the purchaser or transferee.

AB Dynamics plc

Notice of Annual General Meeting

NOTICE IS HEREBY GIVEN that the Annual General Meeting (AGM) of the members of AB Dynamics plc (the Group) will be held at 11.00 a.m. on Wednesday 11 January 2023 at the offices of Tulchan Communications, 2nd Floor, 85 Fleet Street, London EC4Y 1AE, for the purpose of considering and, if thought fit, passing the following resolutions of which resolutions 1 to 10 (inclusive) will be proposed as ordinary resolutions and resolution 11 will be proposed as a special resolution.

ORDINARY RESOLUTIONS

- 1. To receive the annual accounts of the Group for the year ended 31 August 2022, together with the reports of the Directors and the auditor on those accounts.
- 2. To approve the Directors' remuneration report, as set out on pages 82 to 89 of the Group's Annual Report and Accounts for the financial year ended 31 August 2022.
- 3. To declare a final dividend of 3.54p per share, to be paid to all shareholders on the register of members as at 30 December 2022.
- 4. To re-appoint Richard Elsy as a Director of the Group.
- 5. To re-appoint Louise Evans as a Director of the Group.
- 6. To re-appoint Richard Hickinbotham as a Director of the Group.
- 7. To re-appoint Sarah Matthews-DeMers as a Director of the Group.
- 8. To re-appoint Dr James Routh as a Director of the Group.
- 9. To appoint Grant Thornton UK LLP as the auditor of the Group from the conclusion of this AGM until the conclusion of the next AGM of the Group and to authorise the Directors to determine the auditor's remuneration.
- 10. That, in substitution for any previous authority but without prejudice to any allotment of shares or grant of rights already made, offered or agreed to be made pursuant to such authorities. the Directors from time to time be and are hereby generally and unconditionally authorised for the purpose of Section 551 of the Companies Act 2006 (the Act) to allot shares of the Group and/or grant rights to subscribe for, or convert any securities into, shares of the Group up to an aggregate nominal amount of £76,284, being approximately one-third of the current issued share capital of the Group provided that this authority shall expire (unless previously renewed, varied or revoked by the Group in a general meeting) at the conclusion of the next AGM of the Group or 15 months after the passing of this resolution (if earlier) except that the Directors may before the expiry of such period make an offer or agreement which would or might require shares to be allotted or rights granted after the expiry of such period and the Directors may allot shares or grant rights in pursuance of that offer or agreement as if this authority had not expired.

Notice of Annual General Meeting 2023 continued

Notice of Annual General Meeting

SPECIAL RESOLUTION

Strategic report

- 11. That, subject to the passing of resolution 10 above, the Directors be empowered pursuant to Section 571 of the Companies Act 2006 (the Act) to allot equity securities (within the meaning of Section 560 of the Act) for cash pursuant to the authority conferred by resolution 10 above as if Section 561 of the Act did not apply to such allotment, provided that this power shall be limited to the allotment of equity securities as follows:
 - a. the allotment of equity securities in connection with any offer by way of rights or an open offer of relevant equity securities where the equity securities respectively attributed to the interests of all holders of relevant equity securities are proportionate (as nearly as may be) to the respective numbers of relevant equity securities held by them but subject to such exclusions or other arrangements as the Directors may deem necessary or expedient to deal with equity securities which represent fractional entitlements or on account of either legal or practical problems arising in connection with the laws or requirements of any regulatory or other authority in any jurisdiction; and
 - b. otherwise than pursuant to paragraph (a) above, up to an aggregate nominal amount of £11,442, being approximately 5% of the current issued share capital of the Group,

provided that the powers conferred by this resolution shall expire (unless previously renewed, varied or revoked by the Group in a general meeting) on a date which is the earlier of 15 months from the date of the passing of this resolution and the conclusion of the next AGM of the Group (the Section 571 Period) but so that the Group may at any time prior to the expiry of the Section 571 Period make an offer or agreement which would or might require equity securities to be allotted pursuant to these authorities after the expiry of the Section 571 Period and the Directors may allot equity securities in pursuance of such offer or agreement as if the authorities hereby conferred had not expired.

Action to be taken

Each shareholder is entitled to appoint one or more proxies to attend, speak and vote instead of that shareholder. A proxy need not be a shareholder.

Shareholders should kindly complete and return the enclosed form of proxy as soon as possible, whether or not they expect to be able to attend the AGM. Return of a form of proxy will not prevent a shareholder from attending, speaking and voting in person at the meeting if that shareholder so wishes and is so entitled. If you are a CREST member you can submit your proxy electronically through the CREST system by completing and transmitting a CREST proxy instruction as described in the notes to this circular and in the form of proxy.

Recommendation

The Board is of the opinion that these proposals are in the best interests of the Group and its shareholders as a whole.

Accordingly, the Directors unanimously recommend all shareholders to vote in favour of the resolutions, as they intend to do in respect of their own beneficial shareholdings.

Explanatory notes in respect of the resolutions proposed are set out in the appendix to this Notice.

By Order of the Board

David Forbes

Company Secretary 23 November 2022

Registered office: AB Dynamics plc Middleton Drive Bradford on Avon Wiltshire BA15 1GB

Registered number: 08393914

Notice of Annual General Meeting 2023 continued

Notice of Annual General Meeting

Notes

Pursuant to the Group's Articles of Association (the Articles), members are entitled to appoint a proxy or proxies to exercise all or any of their rights to attend, speak and vote at the meeting. A proxy need not be a shareholder of the Group.

A shareholder may appoint more than one proxy in relation to the AGM, provided that each proxy is appointed to exercise the rights attached to a different share or shares held by that shareholder. In addition, the Chairman of the meeting will direct that voting on all resolutions will take place by way of a poll, rather than a show of hands, to ensure that proxy votes are recognised in order to accurately reflect the views of shareholders.

- 1. Only holders of ordinary shares are entitled to attend and vote at the AGM. A member is entitled to appoint another person as his proxy to exercise all or any of his rights to attend, speak and vote at the meeting. A member may appoint more than one proxy in relation to the meeting, provided that each proxy is appointed to exercise the rights attached to a different share or shares held by the relevant member. A proxy need not be a member of the Group.
- 2. You can register your vote(s) for the AGM either:
 - (a) by logging on to www.shareregistrars.uk.com, clicking on the 'Proxy Vote' button and then following the on-screen instructions;
 - (b) by post or by hand to Share Registrars Limited, 3 The Millennium Centre, Crosby Way, Farnham, Surrey GU9 7XX using the proxy form accompanying this notice. Instructions for completion are shown on the form. To appoint a proxy, the form of proxy, and any power of attorney or other authority under which it is executed (or a duly certified copy of any such power or authority), must be completed; or
 - (c) in the case of CREST members, by utilising the CREST electronic proxy appointment service in accordance with paragraphs 5 to 8 below.

In order for a proxy appointment to be valid the proxy must be received by Share Registrars Limited by 11.00 a.m. on 9 January 2023, being 48 hours (ignoring any part of any day that is not a working day) before the start of the AGM. Completion of one of the above proxy voting options will not preclude members from attending and voting in person at the AGM, should thev so wish.

- 3. In the case of joint shareholders, the signature of the senior shareholder (seniority to be determined by the order in which the names stand in the register of members) shall be accepted to the exclusion of all other joint holders. The names of all joint shareholders should be stated at the top of the form.
- 4. In order to have the right to attend and vote at the meeting (and also for the purpose of determining how many votes a person entitled to attend and vote may cast), a person must be entered on the register of members of the Group at 11.00 a.m. on 9 January 2023, being 48 hours (ignoring any part of any day that is not a working day) before the start of the AGM, or, in the event of any adjournment, 48 hours before the start of the adjourned meeting (ignoring any part of any day that is not a working day). Changes to entries on the register of members after this time shall be disregarded in determining the rights of any person to attend or vote at the AGM.

- 5. CREST members who wish to appoint a proxy or proxies through the CREST electronic proxy appointment service may do so by using the procedures described in the CREST Manual (available via www.euroclear.com/CREST). CREST personal members or other CREST sponsored members, and those CREST members who have appointed a voting service provider(s). should refer to their CREST sponsor or voting service provider(s) who will be able to take the appropriate action on their behalf.
- 6. In order for a proxy appointment or instruction made using the CREST service to be valid, the appropriate CREST message (a CREST Proxy Instruction) must be properly authenticated in accordance with Euroclear UK & Ireland Limited's (Euroclear) specifications and must contain the information required for such instruction, as described in the CREST Manual. The message. regardless of whether it constitutes the appointment of a proxy or is an amendment to the instruction given to a previously appointed proxy must, in order to be valid, be transmitted so as to be received by the issuer's agent (ID 7RA36) by the latest time for the receipt of proxy appointments specified in note 2 above. For this purpose, the time of receipt will be taken to be the time (as determined by the timestamp applied to the message by the CREST Application Host) from which the issuer's agent is able to retrieve the message by enquiry to CREST in the manner prescribed by CREST. After this time any change of instructions to proxies appointed through CREST should be communicated to the appointee through other means.
- 7. CREST members and, where applicable, their CREST sponsors, or voting service providers should note that Euroclear does not make available special procedures in CREST for any particular message. Normal system timings and limitations will, therefore, apply in relation to the input of CREST Proxy Instructions. It is the responsibility of the CREST member concerned to take (or, if the CREST member is a CREST personal member, or sponsored member, or has appointed a voting service provider, to procure that his CREST sponsor or voting service provider(s) take(s)) such action as shall be necessary to ensure that a message is transmitted by means of the CREST system by any particular time. In this connection, CREST members and. where applicable, their CREST sponsors or voting service providers are referred, in particular, to those sections of the CREST Manual concerning practical limitations of the CREST system and timings.
- 8. The Group may treat as invalid a CREST Proxy Instruction in the circumstances set out in Regulation 35(5)(a) of the Uncertificated Securities Regulations 2001.
- 9. Any corporation which is a member can appoint one or more corporate representatives who may exercise on its behalf all of the powers as a member provided that no more than one corporate representative exercises powers over the same share.

Notice of Annual General Meeting 2023 continued Notice of Annual General Meeting

Notes continued

- 10. Any member attending the meeting has the right to ask questions. The Group must cause to be answered any such question relating to the business dealt with at the meeting but no such answer need be given if:
 - (a) to do so would interfere unduly with the preparation for the meeting or involve the disclosure of confidential information;
 - (b) the answer has already been given on a website in the form of an answer to a question; or
 - (c) it is not in the interests of the Group or the good order of the meeting that the question be answered.
- 11. As at 22 November 2022 (being the last business day prior to the publication of this Notice), the Group's issued ordinary share capital consisted of 22,885,261 ordinary shares of 1p each, carrying one vote each. Therefore, the total voting rights in the Group as at 22 November 2022 were 22,885,261.
- 12. A copy of this Notice, and other information required by Section 311A of the Companies Act 2006 (the Act), can be found at www.abdplc.com.
- 13. You may not use any electronic address (within the meaning of Section 333(4) of the Act) provided in this Notice or in any related documents (including the Chairman's letter and form of proxy) to communicate with the Group for any purposes other than those expressly stated.
- 14. Your personal data includes all data provided by you, or on your behalf, which relates to you as a shareholder, including your name and contact details, the votes you cast and your Reference Number (attributed to you by the Group). The Group determines the purposes for which and the manner in which your personal data is to be processed. The Group and any third party to which it discloses the data (including the Group's registrars) may process your personal data for the purposes of compiling and updating the Group's records, fulfilling its legal obligations and processing the shareholder rights you exercise.

Appendix: Explanatory notes on the resolutions to be proposed at the Annual General Meeting

Resolution 1 – Annual Report and Accounts

The Directors must present the annual audited accounts of the Group and the Directors' and Auditor's reports for the year ended 31 August 2022 (2022 Annual Report) to shareholders at the meeting. You are voting to receive the 2022 Annual Report. Detailed information is contained within the 2022 Annual Report.

Resolution 2 – Directors' remuneration report

Shareholders will have the opportunity to cast an advisory vote on the Directors' remuneration report for the year ended 31 August 2022. The report is set out in full on pages 82 to 89 of the 2022 Annual Report. The Directors' entitlement to remuneration is not conditional on the report being approved.

Resolution 3 – Declaration of dividend

Final dividends must be approved by shareholders but cannot exceed the amount recommended by the Directors. The Directors propose a final dividend of 3.54p per ordinary share. If approved, the dividend is expected to be paid to shareholders on the register of members as of 30 December 2022. The Group paid an interim dividend this year; therefore, the total dividend distribution for the year shall be 5.3p per ordinary share.

Resolutions 4 to 8 – Re-appointment of Directors

Resolutions 4 to 8 relate to the re-appointment of the Group's Directors. Under the Group's Articles, one-third of the Directors are required to retire from office by rotation each year. Notwithstanding the provisions of the Articles, the Board has determined that all of the Directors shall retire from office at the AGM in line with the best practice recommendations of the Financial Reporting Council's UK Corporate Governance Code. Each of the Directors intends to stand for re-appointment by the shareholders. Biographical details, skills and experience for each of the Directors can be found on pages 62 and 63 of the 2022 Annual Report and at www.abdplc.com/about/board-of-directors.

Notice of Annual General Meeting 2023 continued

Appendix: Explanatory notes on the resolutions to be proposed at the Annual General Meeting continued

Resolution 9 – Appointment of the auditor and the auditor's remuneration

The Group is required to appoint an auditor at each general meeting at which accounts are laid before the Group to hold office until the end of the next such meeting. Grant Thornton UK LLP has expressed its willingness to be appointed as the auditor to the Group. This resolution proposes the appointment of Grant Thornton UK LLP and, in accordance with standard practice, gives authority to the Directors to determine the remuneration to be paid to the auditor.

Resolution 10 – Directors' authority to allot shares

Under the Act, the Directors of a company may only allot unissued shares in the capital of the company or grant rights to subscribe for, or convert any security into, shares in the company if they are authorised to do so by the shareholders at a general meeting or by the company's articles of association.

This resolution gives the Directors authority to allot shares in the Group up to an aggregate nominal amount of £76,284, representing approximately one-third of the Group's issued ordinary share capital as at 22 November 2022 (being the last business day prior to the publication of this Notice). This authority will expire at the conclusion of the next Annual General Meeting to be held in 2024.

The Directors do not have any present intention of exercising this authority but consider it desirable that they should have the flexibility to allot shares, or grant rights to subscribe for, or convert any security into shares, if circumstances arise where it may be advantageous for the Group to do so.

Resolution 11 – Partial disapplication of pre-emption rights

This resolution will, if approved, renew the Directors' authority to allot equity securities (as defined in the Act) for cash otherwise than to existing shareholders pro rata to their holdings. This authority, which will expire at the conclusion of the Annual General Meeting of the Group to be held in 2024, is limited to the allotment of: (a) equity securities in connection with a rights issue; and (b) equity securities up to an aggregate nominal amount of £11,442, representing approximately 5 per cent. of the Group's issued ordinary share capital as at 22 November 2022 (being the last business day prior to the publication of this Notice).

The Directors have no present intention to use this authority but consider that the proposed disapplication of pre-emption rights is desirable to give the Group the ability to issue a limited number of shares for cash to third parties, where to do so would be of benefit to the Group.





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Middleton Drive Bradford on Avon Wiltshire BA15 1GB

T: +44 (0)1225 860 200 F: +44 (0)1225 860 201 E: investors@abdplc.com www.abdplc.com

