TT Electronics

WINNING IN GROWTH MARKETS

TT Electronics plc
Annual Report and Accounts 2022

"We are a global provider of design-led, advanced electronics technologies for performance-critical applications in specialised markets.

We solve technology challenges for a sustainable world. We do this by delivering solutions for our customers that enable products that are cleaner, smarter and healthier, and that will benefit our planet and people. Our positioning and offering to customers in markets that are growing well, and our differentiated customer service, are driving strong top line growth for the Group."

Richard Tyson
CEO

IN THIS REPORT

CONTENTS

Read more on page 4

CHAIRMAN'S STATEMENT

The Board is extremely proud of what has been achieved in 2022 and the expert, 'can do' and supportive culture we have nurtured in the organisation.

Read more on page 6

EXECUTIVE LEADERSHIP TEAM Q&A

Our teams have executed exceptionally well in the continuing challenging environment, given the ongoing significant supply chain and cost headwinds, to deliver a strong trading performance with very good profit growth.

OUR 2022 PERFORMANCE HIGHLIGHTS

REVENUE

£617.0m

2021: £476.2m

ADJUSTED OPERATING PROFIT

£47.1m

2021: £34.8m

ADJUSTED OPERATING PROFIT MARGIN

7.6%

2021: 7.3%

ADJUSTED EPS

18.2p

2021: 14.5p

ORGANIC REVENUE GROWTH

20%

2021: 10%

STATUTORY OPERATING LOSS

£(3.4)m

2021: £19.3m profit

STATUTORY OPERATING MARGIN

(0.6)%

2021: 4.1%

STATUTORY EPS

(7.5)p

2021: 7.3p

Throughout this Annual Report we refer to a number of Alternative Performance Measures (APMs) which have been adopted by the Directors to provide further information on underlying trends and the performance and position of the Group. Details of these APMs and a reconciliation to statutory measures can be found on pages 220 to 226.

Read more on page 20

OUR STRATEGY

Our strategy is designed to generate optimum returns for all our stakeholders while maintaining strong capital discipline to facilitate continued investment.

Read more on page 22

CFO REVIEW

We delivered strong progress during the year with organic revenue growth of 20% and adjusted operating profit growth of 19% at constant currency.

RETURN ON INVESTED CAPITAL

10.5%

2021: 9.1%

DIVIDEND PER SHARE

6.3p

2021: 5.6p

R&D INVESTMENT AS A % OF SALES

3.7%

2021: 4.5%

REDUCTION IN SCOPE 1 & 2 CARBON EMISSIONS

23%

2021: 25%

Read more on page 38

OUR PEOPLE, ENVIRONMENT AND COMMUNITIES

We are committed to having a positive impact on the world around us through our products and the way we do business.

Read more on page 76

GOVERNANCE

We have a strong governance platform that enables enhanced decision-making.

TT AT A GLANCE

WHO WE ARE

TT Electronics is a global provider of design-led, advanced electronics technologies for performance-critical applications in specialised markets.

OUR PURPOSE

We solve technology challenges for a sustainable world.

OUR STRATEGY

Our strategy is designed to leverage our assets and differentiators to generate optimum returns for all our stakeholders.

Read more on page 20

OUR CUSTOMERS

Our customers range from start-up businesses to global multi-nationals operating in the healthcare, aerospace, defence, automation, electrification, electronics and energy sectors. We aim to work as part of the customer's team, driving solutions, and with our products and services integral to customers' designs.

Read more on page 12

OUR GLOBAL REACH

We service our global markets from 26 design and manufacturing facilities and offices in the UK, North America, Sweden and Asia.

Global breakdown

North America: 9 primary locations
38% of Group revenue

United Kingdom: 10 primary locations
21% of Group revenue

Asia: 6 primary locations
24% of Group revenue

Rest of Europe: 1 primary location
17% of Group revenue

Pie chart and figures above represent revenue by destination

PEOPLE AND CULTURE

Our talented team of design, engineering and manufacturing experts operate in a supportive culture that champions expertise, innovation, problem solving and doing the right thing.

Read more on page 38

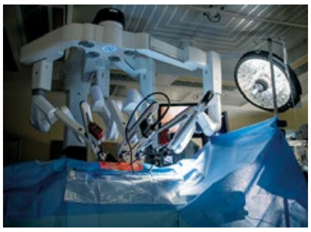
RESPONSIBLE BUSINESS

We are committed to having a positive impact on the world around us: creating value and enhancing sustainability through our products; the way we do business, including how we look after our employees; and by reducing our environmental footprint. This commitment is described in our purpose and embedded in our strategy as one of our four strategic priorities.

Read more on page 50

TARGET MARKETS

Read more about our target markets on page 14

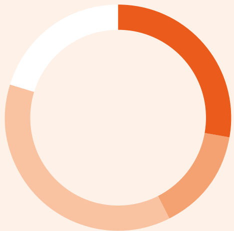


Healthcare
We provide design and manufacturing solutions for a range of diagnostic, surgical and direct patient care devices critical to the identification, treatment and prevention of disease.

Aerospace & defence
We provide solutions for high-reliability applications across a broad range of platforms operating on land, air and sea.

Automation & electrification
Customers rely on us to help solve their toughest automation and electrification challenges, streamlining their supply chains, increasing their efficiency, and helping them bring smart, new products to market.

% OF GROUP REVENUE



Our market breakdown

- **28%** – Healthcare
- **15%** – Aerospace & defence
- **37%** – Automation & electrification
- **20%** – Distribution sales channel

OUR DIVISIONS

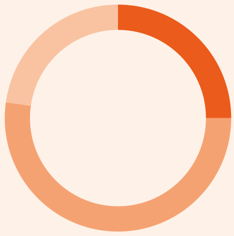
Read more about our divisions on page 26

Power and Connectivity
P&C designs and manufactures power application products for power efficiency and connectivity devices which enable the capture and wireless transfer of data to optimise electronic systems.

Global Manufacturing Solutions
GMS provides manufacturing services and engineering solutions for our product divisions and to customers that often require a lower volume and higher mix of products, including complex integrated product assemblies and engineering services such as value-engineering and designing testing solutions.

Sensors and Specialist Components
S&SC works with customers to develop high-specification, standard and customised solutions including sensors and power management devices that improve the precision, speed and reliability of applications.

% OF GROUP REVENUE



Our market breakdown

- **25%** – Power and Connectivity
- **52%** – Global Manufacturing Solutions
- **23%** – Sensors and Specialist Components

OUR KEY CAPABILITIES

POWER
We design and manufacture customised, highly efficient power management devices.

CONNECTIVITY
Our products support the digitisation of industrial processes, smart infrastructure and automation.

SENSING
Our solutions improve the precision, speed and reliability of critical aspects of customer applications.

CHAIRMAN'S STATEMENT

WINNING IN GROWTH...

"TT's strong performance in 2022 and our confidence going into 2023 derive from the positions we have built in growing markets and our reputation and relationships with customers. Teams across TT have also delivered exceptionally well in a year characterised by significant volatility. The Board is extremely proud of what has been achieved and the expert, 'can do' and supportive culture we have nurtured in the organisation."

Warren Tucker
Chairman

Our focus on realigning the business to structurally growing, higher added-value markets has transformed TT and its future potential. Our three target markets – healthcare, aerospace & defence and automation & electrification – continue to grow well, driven by enduring megatrends including the Net Zero and climate agenda. Our teams are experts in these markets and passionate about designing solutions that respond to customer needs and delivering on their expectations. Our top 40 customers now account for 58% of revenue, but without overdue concentration, which is testament to the strong relationships we have built and our reputation in the market.

What makes us different?
Our target markets have strong, long-term structural growth potential supported by the megatrends we are aligned to: cleaner, smarter, healthier.

We have a culture of expertise and our teams are passionate about finding solutions to the world's toughest technology challenges.

We are focused on design-led technology, creating bespoke technology solutions for customer applications.

Our success has been built on engaging deeply with our customers and becoming real partners.

See our markets on page 14 and our business model on page 12

As leaders we have set the stage, but credit for our achievements goes to TT's employees. We have again asked a lot of them this year and they have absolutely risen to the challenge, working tirelessly to meet strong demand and supporting each other while doing so. The Board is conscious that times have been difficult for many in 2022 and we are pleased to have overseen significant growth in employee support activities – at both site and Group level – including on remuneration, financial support, physical and mental health, and equality, diversity and inclusion.

I am also delighted to report significant progress in our environmental performance. Not only are our technologies addressing resource scarcity, improving energy efficiency and supporting renewables, we are delivering on our ambitious agenda to reduce our environmental footprint and carbon emissions. We have hit our Scope 1 & 2 GHG emissions reduction target a year early and are poised to move forward with collecting data and setting targets for our relevant and measurable Scope 3 emissions in the very near future.

The Board would like to thank every member of the TT team for their contribution this year.

2022 PERFORMANCE

Top line growth in 2022 was excellent as we executed on our record order book and consolidated a significant number of new customer wins, incremental business opportunities with existing customers and market share gains. With continued book-to-bill well above 100%, our forward order book has continued to break records, giving us unprecedented visibility over almost all of our expected 2023 revenue. Some of this is the fruit of increased collaboration between our divisions such as our expanded position on the UK military's Boxer vehicle. Our adjusted operating margin moved ahead to 7.6% and our double-digit margin target is in view following the completion of our self-help programme. All this has been achieved in a year where we have faced continuing supply chain issues and cost inflation.

Our strategy is designed to generate optimum returns for stakeholders while maintaining strong capital discipline, delivering strong cash generation, and careful use of the balance sheet to facilitate continued investment. We prioritise organic investment, with a focus on R&D and capital spending to firmly embed us with customers and meet the challenges they set us. This year our R&D cash investment was £11 million and our pipeline of new products continued to grow, particularly in power conversion technologies and surgical navigation and robotics. Margin enhancement faced a temporary headwind this year due to the pass through of significant cost inflation but the actions we have taken underpin our confidence in continuing margin progression in the future. The integration of Ferranti Power and Control has been successful, and we continue to monitor an active pipeline of opportunities while we focus on free cash flow generation and leverage reduction to generate scope to deliver future M&A. Our fourth strategic priority to integrate ESG and sustainability matters into decision-making continues to move at pace as demonstrated by the work we have been doing in our communities, to support our people, and to accelerate the decarbonisation of our operations.

PEOPLE AND CULTURE

Our TT culture drives the whole company and has played an important role in 2022 when we have pulled together to satisfy strong business growth. Our people care about what they do and about each other and work and behave in line with our TT Way values. This gives us competitive advantage and is an important factor in enabling us to attract and retain the talent we need. We, in turn, care for our employees by treating them with respect and creating safe and supportive work environments where they are valued and backed to reach their full potential.

Highlights this year have been continued improvement in our safety record, the introduction of more support for mental and financial health, and the launch of our inaugural Women's Leadership Programme. The Board is pleased to be able to support an increased budget for our 2023 salary reviews, with distribution weighted to lower paid employees, and a cost of living payment to all UK employees on salaries up to £40,000.

BOARD AND GOVERNANCE

There were no changes to the Board or its principal Committees in 2022, but we were delighted to welcome two new Non-executive Directors to the Board at the beginning of 2023. Wendy McMillan will join the Nominations and Audit Committee and Michael Ord will join the Nominations and Remuneration Committees. Both have had outstanding careers and bring relevant knowledge and skills from their current and former executive roles.

We have robust governance practices at TT which have enabled us to grow significantly while minimising risk in a year that has presented a number of business challenges. We have navigated safely and thoughtfully, and I thank members of the Board for their dedication and counsel. I believe that we have a terrific team in place to steer the Group successfully into the future.

DIVIDEND

Given the strong trading performance in 2022 and our positive outlook for 2023 and beyond, the Board is proposing a final dividend of 4.3 pence per share. This, when combined with the interim dividend of 2.0 pence per share, gives an increase of 12.5% in our total dividend to 6.3 pence for the year.

OUTLOOK

As described in the Q&A with our Executive Leadership team from page 6 the Board believes that TT's alignment with global megatrends, our strong customer relationships and exceptional visibility on our order book position us strongly for 2023. We are therefore confident we will continue to deliver progress.

Warren Tucker
Chairman
7 March 2023

...MARKETS

EXECUTIVE LEADERSHIP TEAM

Q&A

“I could not be more proud of my team and how they have executed for customers this year.”

Richard Tyson
CEO

RICHARD TYSON, CEO

Q

What are you most proud of in 2022?

2022 has been another year of great progress for TT. Our positioning with customers who are succeeding in markets that are growing well, and our differentiated customer service are evidenced by our strong top line growth. We delivered organic, constant currency revenue growth of 20% and we also started 2023 with excellent visibility given a strong order book and with business in markets providing multi-year product revenue streams.

Our teams across the Group have executed exceptionally well in a year which brought with it significant volatility and ongoing supply chain issues characterised by lengthy lead times, material availability issues and cost inflation. At the same time, we have completed our programme of site rationalisation, with additional benefits still to come through. I could not be more proud of my team and how they have delivered for their customers and shareholders.

Here at TT we prioritise how we take care of our teams around the world as they face these daily challenges and, particularly, in the last twelve months, when we have focused additional efforts and resource on their welfare, not just physical but also financial through a range of schemes. As a leadership team we know that times are difficult, so this has been important to us.

Our strategy is working and we continue to unlock the potential of the Group. We have been winning new customers and developing relationships that are longer term and more collaborative. We have also progressed well on our sustainability agenda, which has remained central to strategic decision-making, particularly when we consider the opportunities presented by the move to a lower carbon world.

Finally, I am delighted that we completed a buy-in of our UK pension scheme. See page 25 for more information.

A STRONG TEAM

Our Executive Leadership Team

The Executive Leadership Team (ELT) is the principal decision-making body below the Board. We are experienced and passionate leaders, focused on building on TT's strong foundations to create a great company and continue to deliver value for all our stakeholders.

1

Richard Tyson
Chief Executive Officer

Joined: 2014

Relevant skills and experience:
Richard has an extensive portfolio of leadership, managerial and operational capabilities developed during his 30-year career in global engineering technology businesses. He previously held senior positions at Cobham plc.

See full biography on page 78

2

Mark Hoad
Chief Financial Officer

Joined: 2015

Relevant skills and experience:
Mark is a chartered accountant and has a deep understanding of finance and operational activities. He has 25 years of experience in finance roles in global industrial businesses, including being CFO at BBA Aviation plc.

See full biography on page 78

3

Lynton Boardman
General Counsel and Company Secretary

Joined: 2012

Relevant skills and experience:
Lynton qualified as a lawyer with Simmons & Simmons. He was formerly head of legal at Syngenta Crop Protection (EMEA) and General Counsel and Company Secretary at QinetiQ Group plc.

See full biography on page 78

4

Michael Leahan
Chief Operating Officer

Joined: 2017

Relevant skills and experience:
Michael has over 30 years of experience in operational roles in the aerospace & defence industry including holding senior positions at Marotta Controls, Lucas Aerospace and Fairchild Controls.

5

Sarah Hamilton-Hanna
Chief People Officer

Joined: 2019

Relevant skills and experience:
Sarah has spent nearly 20 years in HR and is experienced in business transformation, organisational development and talent management. She was formerly global HR lead for the food and beverage solutions division of Tate & Lyle.

Q

What is driving the growth you are seeing?

The strategic expansion of our capabilities into attractive, structurally growing end markets with customers offering partnership and market share growth is delivering excellent results for the Group. Our positioning in these markets with customers that are winning means demand for our products and services continues at attractive levels. The order book reflects our success on multi-year programmes, our customers providing more order book visibility due to longer lead times, and our ability to win new work.

We have a growing list of large, blue chip customers with whom we are gaining further traction and are well positioned to take a greater share of spend. Our top 40 OEM customers now account for 58% of Group revenue. As we become more embedded as strategic partners we have built greater trust and deeper and broader relationships, including more collaboration on solution design.

Demand from our customers is robust as this focus on building relationships delivers a longer list of new business opportunities and a healthy pipeline. We are delighted that a number of these have been successfully converted to 50 significant wins in the year which will produce over £125 million of multi-year revenues, and ongoing growth and visibility of our order book. We believe medium-term market growth rates will be higher than the CAGR rates we have historically seen for the totality of our end markets.

The success of our Business Development Council in driving cross-selling opportunities is also continuing to deliver results, as an increasing number of our customers build relationships across more than one of our capabilities. A great example of this in action is Honeywell. Historically we did business with Honeywell from our S&SC division, but we have recently been selected as a strategic manufacturing partner to provide engineering support, manufacturing and full systems integration for Anthem – Honeywell's new integrated cockpit avionics suite. TT now has around 40 customers each delivering over £2m revenue per annum.

MICHAEL LEAHAN, COO

Q

Can you give us your 2022 operational performance highlights?

GMS has performed incredibly well in 2022 with strong growth from our existing customer base, particularly from our healthcare and automation & electrification end markets.

In our S&SC business we are really proud of our growth and margin performance which demonstrates the commercial attractiveness of our offering and our ability to combat input cost inflation with price increases and efficiencies. The current S&SC order book length provides much improved visibility against typical visibility of 8-12 weeks in this division. As you would expect, we are closely monitoring stock levels in our distributors to look to manage overall consistency of demand from the broader customer base.

Our operational performance in P&C has been impacted by lower revenues due to timing issues on some key aerospace & defence programmes, as well as the ramp up of capacity linked to our site move from Lutterworth to Bedlington and bringing on additional capacity in the Minneapolis clean room. We remain confident that this business can reach the scale needed to get the operational leverage benefit given the magnitude of recent contract wins.

As part of the self-help programme, we closed six sites and consolidated the Covina site into the Torotel site at Kansas City to create one power business in North America. The programme moves were completed at the back end of 2022 and the full benefits of the actions will be realised in 2023. Our new S&SC facility at Plano, Texas completed its high volume product qualifications in December 2022. This process took longer than anticipated due to the need to prioritise higher than anticipated levels of customer demand and we expect to be operating at higher and more efficient levels of production in 2023.

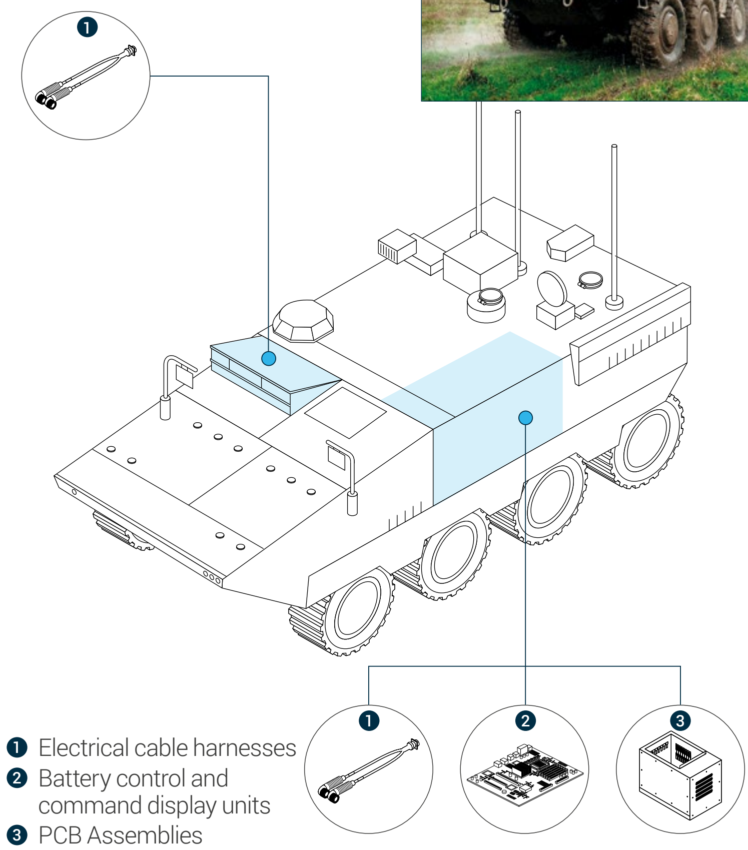
We are really pleased with the Ferranti acquisition, which has contributed well during its first 12 months with the Group. The operation will move to new bespoke facilities, as planned, during 2023.

TT EXPANDS WORK ON UK ARMY VEHICLE PROGRAMME INTO GMS

TT's Power and Connectivity division secured an initial multi-year development contract with major defence prime RBSL for Boxer, the main UK army vehicle programme in 2021. The contract covers two types of high-reliability primary power assemblies on the infantry vehicle, with TT leading the design, production and delivery of the battery control units and the command display units providing signalling and communications functionality. Subsequently, TT was awarded a package of electrical cable harnesses on the same programme.

The Boxer programme will run for 10-20 years and TT has successfully expanded its involvement in the vehicle to the GMS division in 2022 through a contract to design and manufacture printed circuit board assemblies (PCBAs).

The Boxer is a great example of TT's ability to cross-sell opportunities between divisions based on strong customer relationships.



Q

What are your ambitions for the GMS business?

In our GMS business we undertake low-volume, high-mix manufacture of complex electronic assemblies to our customers' designs and provide added value through design for manufacture and test capability. The business delivers an already best-in-class margin, which is good evidence of our move away from commoditised manufacturing to collaborating with customers and our focus on growing key accounts and moving to more complex, high-level assemblies. The GMS margin was around 4 per cent just five years ago. It is now consistently around 8 per cent.

GMS historically had a customer churn rate of 30 per cent but our increasingly complex work, with greater engineering content and some IP in test engineering, has reduced this to c.10 per cent.

We aim to add further IP to achieve greater value, for example by developing products in P&C and manufacturing in GMS and we want to build the contribution from our new product pull-through from customers attracted by our speed to market.

This high ROCE business has been a great engine of organic growth for TT. We see this continuing as long lead times and an uncertain supply chain situation mean healthcare and aerospace & defence customers are continuing to commit production to us to lock in the capacity they need for the longer term.

Q

Is your Voice of the Customer programme maturing?

Since 2020 our proactive customer feedback programme 'Voice of the Customer' has made real progress (a key aspect of which is the NPS or Net Promoter Score). All divisional participation scores have significantly increased and continuous improvement plans have been implemented where we have had low-scoring areas.

As you would expect, extended lead times and supply chain issues impacting component availability, and tricky conversations on pricing as we push through our cost increases, are reflected in current customer data; but we know through our surveys that our communication, transparency and commitment is highly valued.

RICHARD TYSON, CEO

Q

What are your thoughts on China and repatriation of supply chains/re-shoring capabilities?

At TT we benefit from the geographical diversity of our footprint. This will be particularly beneficial given the resurgence of more localised supply chains as some companies seek further diversification of their supply chains. Improved productivity will be a fundamental enabler of this, and companies will need to replicate capacity in an efficient manner. This is where the strength of our global footprint and capabilities provides a clear opportunity to manage the changing dynamics.

We have already implemented a natural, de-risk strategy with our move into Malaysia, so while the business in China has been growing, export growth has come out of our Malaysia facility.

Furthermore, our North American manufacturing facilities and innovation speed are differentiators and are expected to drive further growth as a result of geopolitical concerns.

Q

How are you managing to stay ahead of cost inflation, particularly given the longevity of the order book?

We continuously review our pricing to ensure we recover the inflationary cost increases we are experiencing, though there is inevitably a lag in some areas of the business. We estimate that we experienced circa £40 million of cost inflation in 2022, which we have fully recovered and with inflation being an ongoing dynamic, so is the process of pricing and price recovery.

We are mindful that order books in parts of the business now extend into 2024 and have sought to price in estimated cost inflation, including for energy and labour inflation for 2023.

Q

Are you still on track for double digit margins?

We are confident of achieving our 10 per cent Group operating margin milestone as we see a gradual reversal of the pass-through revenue impact on margin will eliminate inefficiencies and deliver operational leverage on growth.

Our S&SC business contributes mid-teens margins as our teams become even more commercially smart to get the best value for our technology.

GMS has made incredible progress in delivering a step change in its margin profile over recent years, reflecting the value of the service we bring to our customers, reliability, and the value engineering and testing capability we offer. We believe the GMS margin can improve incrementally with growth.

In P&C we operate slightly more fragmented, smaller facilities that are set up for higher volumes, including for the anticipated recovery in commercial aerospace. The drop in its revenues has therefore impacted margins here more noticeably, but with growth we should see strong recovery.

Q

How resilient are your end markets in these tougher economic conditions?

We have deliberately driven TT's end market exposure towards markets exhibiting supportive, structural growth trends. Our primary focus areas for growth and investment are healthcare, aerospace & defence, and automation & electrification. In these markets we provide components for products that address resource scarcity, improve energy efficiency, support renewables and drive productivity, connectivity and health.

Historically, our S&SC business has been the first to see the impact of tougher economic conditions. However, given order book visibility significantly ahead of the typical 8-12 week lead time, should market conditions soften we would have time to take appropriate action.

In healthcare markets, there is an ongoing need to do more with less, and market forecasts suggest double digit growth driven by medical technology innovation for procedures such as electromagnetic tracking for surgery, and for kidney, liver and lung procedures. Our sensors and coil winding products are key to this technology.

In defence markets we are yet to see commitments by various governments in response to the increasing geopolitical tensions flow through into programme spend. Defence spend is typically lumpy and currently more reflective of pull-through of product in replenishment orders relating to Ukraine. Commercial aerospace markets are now starting to recover.

Ultimately, we believe there are strong underlying structural growth drivers in our end markets and, coupled with the visibility in our order book, this gives us confidence that in the near term they will be resilient and in the medium term we will likely see good growth. That said, we are not complacent and continue to be mindful of risks, with our teams keeping a close watch on key indicators. There is more detail on our end markets on page 14.

MARK HOAD, CFO

Q

What is the cash flow generation potential of the Group?

TT is a cash generative business, but leverage is temporarily at the top end of our range, reflecting the investment in inventory we have made to execute our order book and support our high revenue growth. Longer lead times have impacted us; we have bought material or components and we are then holding for longer, waiting for other parts to arrive to complete products. We would never have been able to deliver the growth levels we have in the past 12 months without this investment in inventory.

Our leverage position also reflects the three acquisitions we have completed over the last two years as we have successfully deployed capital to add technology and market reach in aerospace & defence and the £22.7m spend on our self-help programme. We continue to monitor an active pipeline of opportunities while we focus on free cash flow generation and leverage reduction to generate capacity for further M&A.

Our specific actions are driving cashflow improvement and we are confident in our trajectory. This was evident in improved cash generation in the second half of 2022.

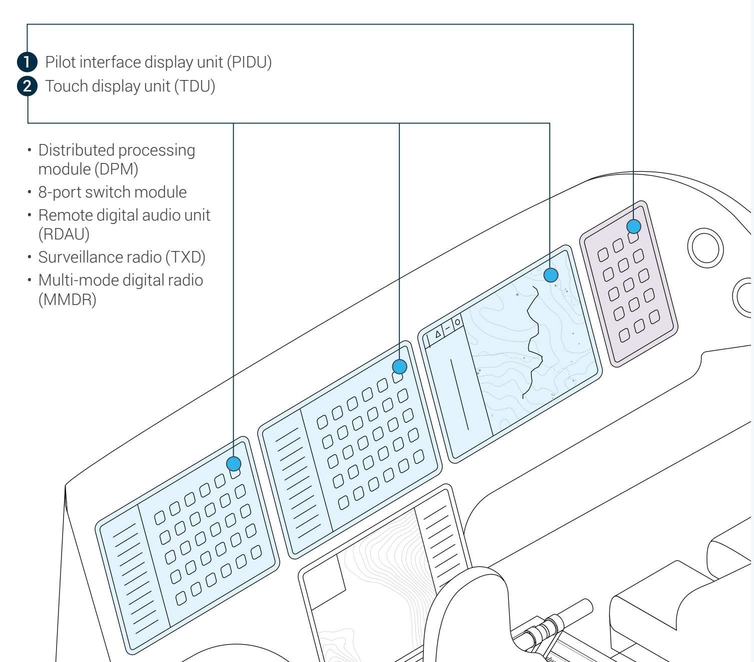
As we look into 2023, we expect to see free cash flow generation improve materially. Cash spend on the self-help programme is complete and there will be no pension payments (historically running at c.£6m per annum) due to the buy-in. Over the next couple of years we expect to see a steady unwind of inventory positions as supply chains start to ease.

TT TO PROVIDE GLOBAL MANUFACTURING SOLUTIONS FOR NEXT-GENERATION AVIONICS PROGRAMME

Following several years of prototype development and supply chain support, TT has been selected as a strategic manufacturing partner to support multiple line replaceable units (LRUs) that comprise the Honeywell Anthem avionics suite.

Unveiled to the public in late 2021, the Honeywell Anthem flight deck is the industry's first cloud-connected cockpit system. Anthem is powered by a flexible software platform that can be customised for virtually every type of aircraft, including large passenger and cargo planes, business jets, helicopters, general aviation aircraft, and the rapidly emerging class of advanced air-mobility (AAM) vehicles.

TT will be providing engineering support, manufacturing, and full systems integration for this next-generation avionics program over the next 12 years.



Q

What are the details of the pension buy-in?

After many years of improving the funding position of our UK pension scheme, we were able to complete a buy-in with Legal & General for the entire scheme, removing all related risk for the Group and our shareholders at no further cost to TT. This has given us an immediate £6 million benefit to our free cash flow in 2022 and an equivalent annual improvement going forwards. Importantly, the deal secures the pension benefits of the circa 5,000 current and former employees and their dependants.

SARAH HAMILTON-HANNA, CHIEF PEOPLE OFFICER

Q

People are clearly important to TT. What are your key achievements in 2022?

We are focused on attracting and retaining people who are talented and can contribute to our success and who share our values. Looking after our people is critical and we, of course, focus on safety, talent and leadership development and providing interesting work and strong career paths. 2022 has also been a year where we have really progressed our welfare and wellbeing, and diversity and inclusion agendas for employees. Financial welfare has been a particular focus as the cost of living crisis has impacted individuals. We have asked a lot of our employees this year – they have risen to the challenge and it has been our job to take care of them in return. We are proud of the help and support we have been able to give.

Our devolved business model allows our individual sites to tailor their People approach with support from the centre. This means that our teams on the ground have been able to provide a wide range of support targeted towards local needs. Support for mental and physical health ranges from the provision of medical services onsite to community efforts that combine fundraising with mental health awareness. Read more in the People section on page 38.

The need for equality and fairness at work is a given. Going beyond this, we consider diversity and inclusion to be a solution to business challenges rather than a nice-to-have. If our employees feel confident and happy at work then they give their best, and if we listen to diverse viewpoints we get to solutions quicker. Our sites know this and get involved in a wide range of awareness and support efforts over and above what we provide from the centre. I am particularly proud of our efforts to celebrate women and support female talent to grow their careers at TT.

Q

What progress have you made on your carbon reduction plans?

We were delighted to hit our near term carbon reduction target a year early, having delivered a 54% reduction in our Scope 1 & 2 emissions this year vs 2019. All of our sites have contributed to this outcome through site-specific plans to reduce energy use. In addition, we saw a significant benefit from our move to a new state-of-the-art manufacturing facility in Texas and a significant change in grid emissions data in Mexico as that country decarbonises electricity supplies. 45% of our global electricity consumption is now from renewable sources, up from zero in 2019.

We have also made great progress on Scope 3 emissions. Having analysed all categories, we have put in place preliminary systems and processes to collect data on our six most significant and meaningful categories so that we can report this data in the future and determine a route to Net Zero. This has been a significant piece of work for us. We recognise that we have work to do in 2023 on our TCFD disclosures.

Other environmental focus areas include reducing single-use plastics and waste to landfill. Read more on these in the Environment section on page 50.

RICHARD TYSON, CEO

Q

What are your priorities as you look into 2023?

Our top priority is the execution of the order book to deliver on the growth we currently see in all of our end markets. There is an opportunity for margin improvement across all of our divisions, although we expect that technical headwinds to margin, given the pass-through costs, will persist in our GMS business through 2023.

With the self-help programme moves now complete, we will ensure we reap the rewards of site rationalisation. In 2022 we worked through site closures, moving production lines, printers and furnaces to new facilities and achieving component and product qualifications. Our priority in 2023 will therefore be to see stability in our operations, drive efficiency and growth while realising the remaining benefits of the self help programme.

We will continue to focus on our safety performance and developing and supporting our people. After making significant progress in 2022, we are committed to further reducing our Scope 1 & 2 emissions and will begin to collect data on six Scope 3 categories.

TT can continue to deliver strong organic growth from its existing footprint and we are therefore focused on improving our ROIC and continuing to reduce leverage.

While conscious of the wider economic environment, I believe we are well positioned to deliver further growth in 2023 and improved margin and cash performance.

OUR BUSINESS MODEL

CREATING WINNING SOLUTIONS

OUR ASSETS

Engineering and manufacturing capability

- We have deep domain knowledge in our markets and years of experience.
- We have a particular skill in product design and manufacture to make customers' end products smaller, lighter and more energy efficient.
- We specialise in low-volume and high-mix products, enabling us to offer the customisation and flexibility our customers require.
- Our global footprint enables us to serve customers around the world.

Research and development

- We have R&D capability around the world with IP and specialist product development skills.
- Our agile development model enables us to bring new products to market quickly.
- We have the know-how and experience to comply with complex regulatory approvals.

Access to our customers

- We have excellent customer credibility, often working in partnership with customers over many years.
- We seek out customers who value what we do and with whom we can work long term to add value.
- We have a business development organisation that fosters inter-Group collaboration and cross-selling.

People and culture

- Our people are talented designers, engineers and manufacturing experts passionate about what they do.
- Our teams are caring, supportive and service-driven.
- Behaviour is shaped by the TT Way values which guide how we work with each other and our stakeholders.

We do the right thing

We bring out the best in each other

We achieve more together

We champion expertise

We get the job done… well

WHAT MAKES US DIFFERENT

Four key themes differentiate us from competitors, and we are focused on extending this differentiation:

Cleaner, smarter, healthier
Our target markets of healthcare, aerospace & defence, and automation & electrification have strong long-term structural growth potential. This growth is supported by megatrends pushing for the development of cleaner, smarter and healthier products and applications as we move towards a more sustainable world.

Culture of expertise
Our teams are passionate about finding solutions to the world's toughest technology challenges and delivering for customers. We champion knowledge, skills, innovation, problem solving and service in four key areas: power, connectivity, sensing, and manufacturing and engineering. We set out to attract, promote and retain the best, diverse, talented people and we are focused on developing expertise at all levels of the organisation.

Design-led technology
We design and manufacture bespoke technology solutions for specific customer applications, creating one-off solutions; customising and packaging products; and creating modular platforms built for customisation. We work from initial concept to production at scale, and from single component to complete device manufacture. We seek single source and designed-in development opportunities that enable us to move up the value chain and create long-term revenue streams.

Real partners
Our success has been built on engaging deeply with our customers and becoming real partners. Customer intimacy enables us to leverage our capabilities to respond to their unique requirements and become a critical contributor to their teams and their products. We retain a flexible approach that enables us to support customers as and when they need us.

We are a business with high-quality assets and a differentiated market offer, aligned with key global megatrends. We are creating value by helping our customers to succeed in growing markets, inventing products that support sustainability and that are more sustainable themselves, investing in and creating opportunities for our people, and doing business responsibly.

OUR STRATEGY

Our strategy is designed to leverage our assets and differentiators to generate optimum returns for all our stakeholders while maintaining strong capital discipline, a focus on cash generation, and careful use of the balance sheet to facilitate continued investment in the quality of our assets and TT's exposure to long-term growth markets.

OUR STRATEGIC PRIORITIES

TECHNOLOGY AND CAPITAL INVESTMENT SUPPORTING R&D and new programmes to drive growth and consolidate customer positions

MARGIN ENHANCEMENT through portfolio change, operational leverage and self-help actions

TARGETED AND COMPLEMENTARY M&A to expand technology capabilities and customer and market reach

INTEGRATION OF ESG and sustainability matters into decision-making and business practices, from product development to recruitment

Read more about our strategy on page 20

THE VALUE WE CREATE

Customers and suppliers

- We help our customers succeed by providing critical products and services and solving tough technology challenges.
- £81.3 million investment in R&D since 2015.
- We treat our suppliers fairly in line with our TT Way values.

Our people

- Employee safety and wellbeing (physical, mental and financial) is at the top of our agenda.
- We invest in our people to grow their skills and experience and create new opportunities.
- We view equality, diversity and inclusion (ED&I) as a positive business driver and we are committed to creating a work environment where everyone can be themselves every day.

Environment and our communities

- Our solutions contribute to cleaner, smarter and healthier products.
- 54% reduction in Scope 1 & 2 emissions in three years.
- Targeting Net Zero Scope 1 & 2 emissions by 2035.
- We are committed to social responsibility and ethical business practices.
- We have a fundraising culture and support our teams to undertake STEM educational outreach in their communities.

Shareholders

- 18.2p adjusted earnings per share.
- Increased ROIC by 140bps to 10.5%
- Medium-term target of double-digit annual adjusted earnings per share growth.
- 6.3p dividend per share.

Read more about our stakeholders and how we engage with them on page 36

OUR MARKETS: WINNING SOLUTIONS IN HEALTHCARE

CONTRIBUTION TO GROUP

28%

of Group revenue

We provide design and manufacturing solutions for a range of diagnostic, surgical and direct patient care devices critical to the identification, treatment and prevention of disease.

Public health is vital to the smooth functioning of society. Efforts to improve healthcare infrastructure continue to intensify globally, with wellness and longevity a top priority for consumers. These forces serve to accelerate the pace of innovation within the healthcare ecosystem. Electronics play a central role in advancing progress of medical technology.

Our power, connectivity and sensor technologies span the modern surgical suite, from patient monitoring and therapeutic devices to surgical navigation, diagnostic equipment and life sciences. Our products also help deliver therapy directly to patients during minimally invasive procedures, through implantable devices, such as pacemakers and defibrillators. Implantables are now also competing with pharmaceutical solutions for issues like hypertension and sleep apnoea and support other external applications that require high-reliability power and sensor-enabled communication.

Market trends and drivers

The global medical device manufacturing market is expected to have grown by around 5% in 2022. The healthcare market has a relatively inelastic demand profile, such that there will be an ongoing need for medical procedures and monitoring regardless of recession or pandemic. The medium- and long-term outlook for the global medical device manufacturing market is equally optimistic, with an expected CAGR of 6-8% to 2026.

Notable drivers include the growing importance of digitalisation, the rising disease burden of an ageing and growing population and increasing patient awareness. We are well placed to capitalise on increasing demand for high-complexity products driven by technological advancement such as diagnostics, monitoring and surgical products. COVID placed a renewed emphasis on the importance of the biotech and pharma industries and we therefore continue to expect favourable shifts in product mix towards high-value, high-margin devices suited to our capabilities. These dynamics are supported by continued increases in life expectancy, with the world's population of over 60s expected to double by 2050.

Our response

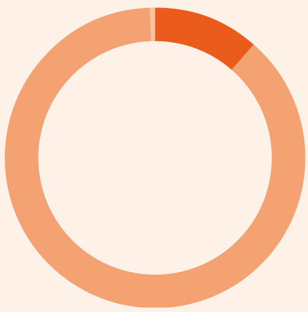
The pandemic created an opportunity to demonstrate to customers the extent of TT's agility by maintaining quality standards while rapidly and flexibly scaling production of urgently needed products. We continue to capitalise on that positive momentum. Our strategy has been tailored to bolster our technical expertise and capability in areas which OEMs find most complex to navigate, such as where significant engineering precision is required, or there are constraints due to regulatory compliance.

We are continuing to expand our involvement in life sciences and laboratory equipment, supporting new ultra-low temperature freezers and gaining momentum in automated sample storage systems as well as surgical devices, medical implants and diagnostics. In line with our purpose, we are energised by the tangible contributions we can make to health and quality of life in society. By supporting our life sciences partners, we are collectively improving laboratory automation systems and enabling samples to be collected and analysed with minimal human intervention, the benefits of which are improved data reliability and accuracy, less waste, and time-efficient results.

TT sensors attached to surgical instruments provide real-time positioning and orientation information and we are a market leader in the smallest EM micro-coil sensors for these applications. By supporting the development of smaller, lighter and more precise surgical devices, we are enabling reduced size of incisions, shortened recovery times, and improving overall patient outcomes. Our resistors team is working with major OEMs to provide non-contact Hall-effect sensors, optical switches and optical arrays that can detect the presence of objects, fluid levels and position sensing as well. Our sensors are incorporated in products that promote earlier detection of disease and better monitoring of cancer, cardiac, neurological and musculoskeletal disorders.

While there is emphasis on addressing supply chain challenges across the Group, the urgency of ensuring healthcare products are delivered in a timely manner is critical and we are proactively working with customers to mitigate global shortages and extend visibility into future demand. We are able to leverage our global manufacturing footprint to mitigate local issues and can innovate to provide quicker solutions. We believe that enhanced dialogue and continued performance under adversity has deepened our relationships with key healthcare and life science customers.

MARKET REVENUE BY DIVISION

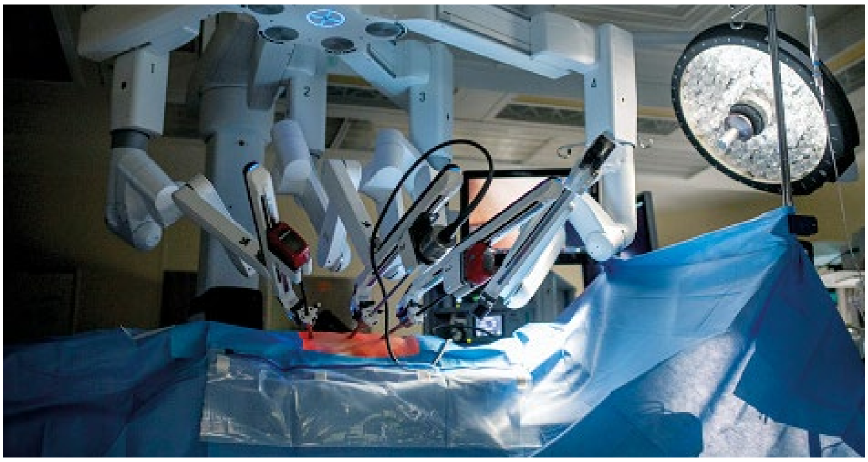


11% – Power and Connectivity

88% – Global Manufacturing Solutions

1% – Sensors and Specialist Components

TECHNOLOGY SHAPING THE FUTURE OF HEALTHCARE



EXPECTED MARKET GROWTH

6-8%

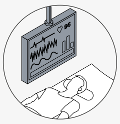
Healthcare market 2022-26 CAGR

WHAT WE DO

Our power, connectivity and sensor technologies span the modern surgical suite; from patient monitoring and therapeutic devices to surgical navigation, diagnostic equipment and life sciences.

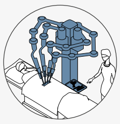
Our products help deliver therapy directly to patients during minimally invasive procedures, as well as in implantable devices and other external applications that require high-reliability power and sensor-enabled communication.

TT ELECTRONICS IN ACTION



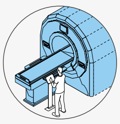
Direct patient care and monitoring

- Patient monitoring equipment, including remote applications
- Anaesthesia machines
- Surgical lighting
- Cardiopulmonary perfusion equipment
- Ventilators and defibrillators
- Fluid monitoring
- Wearable technologies



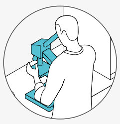
Advanced interventional and surgical devices

- Surgical navigation technology for ablation and resection procedures
- Implantable pacemakers and defibrillators
- Neuromodulators
- Implant programmers and chargers
- Ventricular assist systems
- Robotic assisted surgery



Innovative diagnostic and imaging

- Ultrasound, X-ray and MRI machines
- Radiotherapy equipment for cancer treatment
- Sensor-enabled diagnostic devices



Laboratory and life sciences

- Therapeutic drug monitoring
- Gene sequencing
- Immuno-assay
- Pill counting and dispensing
- Portable hemodialysis systems
- Scientific instrumentation

OUR MARKETS: WINNING SOLUTIONS IN AEROSPACE & DEFENCE

CONTRIBUTION TO GROUP

15%

of Group revenue

We provide solutions for high-reliability applications across a broad range of platforms operating on land, air and sea. Growth for TT is driven by increasing electrification of these platforms, which supports fuel efficiency and safety.

Market trends and drivers

In 2022 the global defence electronics manufacturing market is expected to have expanded by around 3%. This is a pace reflective of the past seven years, all of which have seen consistent, moderate expansion, as governments invest to maintain state-of-the-art capabilities. With Russia's invasion of Ukraine, it is likely that there will be a pickup in growth from here, with estimates suggesting an additional $2 trillion of defence spending over the next decade, and a $1 trillion investment in R&D, mostly in the US and Europe. Despite recessionary fears, heightened geopolitical tensions mean forecasts for growth in the defence market of c.5% per annum are possible – higher than the CAGR of 3-4% we have previously cited.

A central long-term growth driver is the desire of governments to maintain capabilities. In the US, investment in R&D and long-term projects such as the fifth generation F-35 Joint Strike Fighter and the B21 are driving growth. The US Department of Defense budget is set to increase by 14% to $817 billion in 2023 and it is expected that the global defence budget will continue to grow despite inflationary pressures, record high deficits and fiscal consolidation. We remain optimistic that our exposure to the defence market will provide growing, high-margin business for decades to come. Recently, we were awarded a contract from long-term partner Honeywell Aerospace to support the design of a new power supply for next-generation inertial navigation units.

Throughout 2022 the commercial aerospace market has shown steady recovery from pandemic levels with the gradual alleviation of travel restrictions and release of pent-up demand. Industry research predicts that this growth will continue to accelerate over the next 2-3 years as we get back to pre-pandemic levels. Air traffic is forecast to reach 97% of 2019 levels by the end of 2023, but demand for small- and medium-sized aircraft is not expected to recover to pre-COVID levels until 2024-5. We are planning for a strong civil aerospace recovery in the next two to four years, driven primarily by narrowbody aircraft deliveries, of at least double-digit CAGR growth.

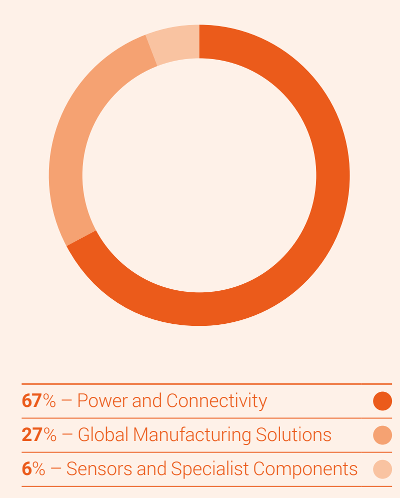
Fundamentally, the need for safer, more efficient and more environmentally friendly aircraft remains. This drives demand for increasingly advanced electronic systems and applications, and supports our capabilities. We anticipate further tailwinds given a growing, global middle-class population who exhibit greater propensity to travel.

Our response

In commercial aerospace we are focused on supporting increasing electronic content of aircraft. In the near term, this means opportunities lie in helping customers with the adoption of hybrid models, mid-life electrification initiatives and electronics updates. Presently, we are growing capabilities in electrical power conversion and related sub-systems. We are collaborating with aerospace companies in the development of high efficiency, high power density converters as well as technologies for the next generation of higher voltage platforms. Recently, we completed qualification on a Power Supply unit for the Digital Flight Control System (DFCS) on the Dassault Falcon 6X aircraft, and we are now working on the equivalent unit for a new programme. Our ultimate ambition is in broadening our position as a supplier of choice in the increasing electrification of aircraft and aircraft systems. As technology progresses, we believe that we are well positioned to support customers throughout this transition.

In defence, we are focused on next generation requirements for high-density power electronics and electrical machines through the development of technologies that reduce size, weight, power and cost (SWaP-C), while simultaneously enhancing command, control, communications, computing, intelligence, surveillance and reconnaissance (C4ISR) capabilities. We have recently found success in providing more integrated, design-led solutions. In these products we have demonstrated greater capacity to deliver SWAP-C improvements, and this is resonating with customers. A recent example is the delivery of a significant increase in the power density of DC-DC converters for a major prime. We expect this to drive favourable shifts in our product mix moving forward.

MARKET REVENUE BY DIVISION



PERFORMANCE-ENHANCING SOLUTIONS FOR SAFE FLIGHT

EXPECTED MARKET GROWTH

4-5%

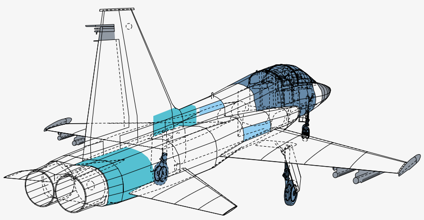
Aerospace & defence market 2022-26 CAGR

WHAT WE DO

From cockpit displays to engine controls and defence systems, our solutions optimise performance and reliability in the harshest and most demanding conditions, while our interior solutions enhance the passenger experience.

Our products provide size, weight and efficiency benefits for applications such as power conversion, actuation and control for mission-critical systems on a broad range of military and commercial platforms globally.

TT ELECTRONICS IN ACTION



Cockpit avionics and flight controls

- Avionics and display units
- Flight controls
- Landing gear
- Joystick controls
- Wing de-icing

Precision guidance and defensive aids systems

- Laser targeting and inertial navigation systems
- Precision guidance systems
- Radar jammers

Engine controls and fuel systems

- Engine control units
- Fuel distribution systems
- Engine ice protection
- Auxiliary power units

Communication, navigation and radar systems

- Global positioning systems (GPS)
- Radar systems
- Communications, navigation and identification

Aircraft interiors

- Passenger Control Units
- Cabin signage
- Mood and ambient lighting

OUR MARKETS: WINNING SOLUTIONS IN AUTOMATION & ELECTRIFICATION

Customers rely on us to help solve their toughest automation and electrification challenges; streamlining their supply chains, increasing their efficiency, and helping them bring smart, new products to market.

Automation & electrification markets continue to show encouraging signs of recovery from the disruption caused by the pandemic, and we support the increased demand for digitalisation through design and manufacture of connectivity solutions. Given the wide scope of these markets, performance correlates strongly with global economic growth, with key indicators being GDP growth and the Purchasing Managers' Index (PMI), but the digitisation and proliferation of electronics and electrification means markets will grow faster than these indicators.

Market trends and drivers

The electronics manufacturing market is estimated to have grown by over 10% globally in 2022. Our positioning in sub-segments such as electrification and industrial automation are good contributors to growth. Furthermore, the increasing trend to the re-shoring of manufacturing capability, or moves to regions with less expensive labour, will increase the demand for Artificial Intelligence, Augmented Reality, the Internet of Things, and other aspects of digitalisation. We see the key drivers of IoT connectivity being cost efficiency, better supply chain insight, smart buildings, fleet management, smart manufacturing and inventory tracking, and monitoring and diagnostics, and believe these structural growth drivers are aligned with our capabilities.

A key force underpinning growth in automation & electrification markets is an increasing focus on sustainability. With the backdrop of increasingly stringent regulation to reduce environmental impacts across supply chains, sustainability is a significant positive trend. Shifting towards electricity as the major fuel powering industrial systems is a key imperative for organisations looking to reduce their carbon footprints. Additionally, the increasing digitisation of industrial processes and proliferation of connected devices in areas such as smart infrastructure, robotics and automation is promoting improved energy management, efficiency and reliability. As many of our products are enabling devices, the demand profile is highly attractive. This is reflected in the market outlook, with a CAGR of 5-6% expected to 2026.

Our response

We are continuing to invest in developing capabilities which exemplify our low-volume, high-mix approach to address the needs of high-end industrial and connectivity markets. Within automation, we are focusing on products which will enable the full potential of innovation in this space. Irrespective of the final form industrial processes take, we are positioning our business to become embedded within the fabric of this technology transition. Industrial automation and infrastructure is a major portion of the Sensors & Specialist Components division serving market leaders like Schneider, Siemens, Rockwell Automation and Delta Electronics. Our focus is to provide niche and application-specific components that make our customers' applications safer, greener and smarter.

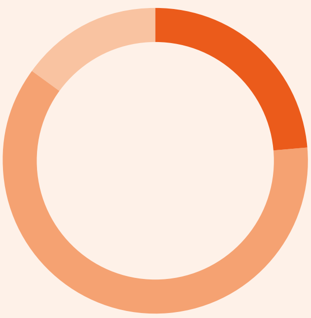
A key area is enhancing our optoelectronic sensors offering. TT sensor products improve the connectivity of manufacturing operations, promoting access to information throughout supply chains and supporting the collection of quality real-time data. Within electrification, our priority is to develop capabilities which support increasing energy efficiency and connectivity. Core focus areas include complex systems integrations and AC and DC power conversion technologies. We are increasingly able to develop complete, high-value products and durable components featuring higher voltage throughput. These are supporting our customers by improving legacy designs and enhancing their ability to meet complex, high-bandwidth requirements

CONTRIBUTION TO GROUP

37%

of Group revenue

MARKET REVENUE BY DIVISION



24% – Power and Connectivity

61% – Global Manufacturing Solutions

15% – Sensors and Specialist Components

EMPOWERING SMART INFRASTRUCTURE TO STREAMLINE PROCESSES AND IMPROVE LIVES

EXPECTED MARKET GROWTH

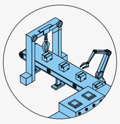
5-6%

Automation & electrification market 2022-26 CAGR

WHAT WE DO

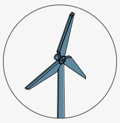
From clean energy and smart home applications to more efficient factory equipment and connected asset tracking, our technologies enable the Internet of Things (IoT) and innovations that are creating a smarter and cleaner world.

TT ELECTRONICS IN ACTION



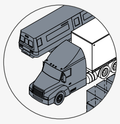
Factory automation and electrification

- Industrial robotics and automation equipment
- Power monitoring
- Industrial safety and security controls
- Smart packaging and labelling equipment
- Electric vehicle inverter technology



Clean energy and smart cities

- Renewable energy generation and smart grid metering
- Power management and energy control systems
- Water and wastewater measurement and monitoring
- Smart lighting, security systems and fire detection
- Secure access and safety controls
- Energy-efficient home appliances



Smart infrastructure and industrial connectivity

- Transportation communication systems
- Railway signalling systems and temperature control
- Rolling stock power systems
- Asset tracking and inventory management systems
- Communication and cloud service connectivity
- Electric vehicles and charging stations

OUR STRATEGY

BUILDING STRENGTH

AND CREATING VALUE

Our strategy is designed to leverage our assets and differentiators to generate optimum returns for all our stakeholders while maintaining strong capital discipline, a focus on cash generation, and careful use of the balance sheet to facilitate continued investment in the quality of our assets and growing our exposure to long-term growth markets.

OUR STRATEGIC PRIORITIES

TECHNOLOGY AND CAPITAL INVESTMENT SUPPORTING R&D and new programmes to drive growth and consolidate customer positions

MARGIN ENHANCEMENT through portfolio change, operational leverage and self-help actions

TARGETED AND COMPLEMENTARY M&A to expand technology capabilities and customer and market reach

INTEGRATION OF ESG and sustainability matters into decision-making and business practices, from product development to recruitment

STRATEGIC PRIORITY

Technology and capital investment supporting R&D and new programmes to drive growth and consolidate customer positions

We prioritise organic investment in the business, including R&D to maintain and drive our differentiation in the market and our offer to customers. R&D is critical if we are to stay ahead of customer needs and continue to meet the challenges they set us.

2022 ACHIEVEMENTS

- £22.7 million investment in technology and capital to support higher-growth, innovative and sustainable products. R&D investment at 3.7% of revenue.
- 50 significant contract awards and very strong growth from 40 largest key accounts.
- Collaboration with a world leader in aircraft electrical systems on power supplies for electric and hybrid electric aircraft.
- Enabling the expansion of the use of electromagnetic tracking for new medical procedures through TT sensor technology.
- Investment in clean rooms at Minneapolis and Bedlington to consolidate customer positions in healthcare and defence.
- The culmination of several years of prototype development resulted in our selection as one of two strategic manufacturing partners to support the Honeywell Anthem avionics suite.

2023 ACTIONS

- Continue to focus on investment in new product initiatives and development to build pipeline and enable customers to meet their sustainability agendas.
- Maintain target level of c.5% R&D investment in the P&C and S&SC businesses.
- Continue support for life science partners on laboratory automation and efficiency.
- Ongoing development of products supporting smaller, lighter and more precise surgical devices and surgical navigation.
- Capital investment to support growth opportunity in new programmes and products across all divisions.

STRATEGIC PRIORITY	2022 ACHIEVEMENTS	2023 ACTIONS
Margin enhancement through portfolio change, operational leverage and self-help actions We are focused on activities which will enable the Group to consistently achieve double-digit operating margins in the medium term. This has included increasing the proportion of higher-margin products in the portfolio, drop-through from organic revenue growth, and restructuring and footprint rationalisation.	– Completion of self-help programme, including completing Covina business integration into Torotel. – New Plano facility completed final product qualifications. – Continued supply chain management and inventory investment to mitigate supply chain challenges and ensure pass on of costs. – Re-pricing of contracts and pass-through.	– Deliver final cost savings from the self-help programme; expected annual run rate of £13-14m by the end of 2023. – Operational improvements to achieve efficiencies, whether through an easing of the supply chain, an end to self-help (portfolio rationalisation) or automation improvements. – Ongoing management and collaboration with customers on cost headwinds. – Identify further automation and efficiency improvement activities through Group operations team. – Ramp up production through Plano and within new clean rooms at Minneapolis and Bedlington.
Targeted and complementary M&A to expand technology capabilities and customer and market reach We seek to maintain an M&A pipeline to build scale, expand our capabilities to increase our exposure to market sectors with high growth potential and higher margins, and enhance value.	– Successfully completed the acquisition and integration of the Ferranti Power and Control business. – Maintained pipeline of M&A opportunities.	– Continue to reduce financial leverage to create capacity for M&A opportunities. – Organic investment opportunities to take market share and support our growing customer base. – Complete relocation of the Ferranti business to a new flagship Power Solutions facility. – Continue to monitor pipeline of M&A opportunities.
Integration of ESG and sustainability matters into decision-making and business practices, from product development to recruitment We are well positioned to benefit from and support sustainability megatrends. Our products address resource scarcity, improve energy efficiency, support renewables and drive productivity, connectivity and health. We aim to produce them more sustainably with a focus on ethical sourcing practices and the work we are doing to reduce the impact of our operations on the environment. We maintain a strong governance framework and processes across the organisation and seek to have a wider positive impact on society by understanding and prioritising employee needs, doing business responsibly and reaching out to our local communities.	– Continued focus on building out technology and product opportunities that support energy transition and zero carbon global goals. – Significant efforts to support health and wellbeing (physical, mental and financial) of employees. – Salary increases and support payments targeted towards lower paid employees. Launched UK salary finance programme. – Inaugural Women's Leadership Programme. – Deployed 15 global health, safety and environmental minimum standards. – Achieved Scope 1 & 2 emissions reduction target vs 2019 a year early. – 45% of electricity now from renewable sources. – Significant progress on assessment of Scope 3 emissions.	– Continue to focus on developing technology and product opportunities that support energy transition and zero carbon global goals. – Deployment of employee wellbeing framework to all sites. – Divisional and site leadership teams required to identify one important equality, diversity and inclusion (ED&I) objective to work towards for the year. – Continue to pursue onsite solar projects where appropriate and possible. – Formalise Scope 3 measurement and build infrastructure to collect meaningful data and enable target setting. – Undertake climate risk and opportunities scenario analysis.

CFO REVIEW

STRONG PROGRESS

"There has been exceptionally strong order intake across the Group, reflecting underlying growth in our markets and new customer wins, as well as customers committing earlier to secure capacity and give us greater visibility."

Mark Hoad,
Chief Financial Officer

OVERVIEW

Revenue for the year was £617.0 million. This was 22 per cent higher than the prior year at constant currency and 20 per cent higher on an organic basis, with a significant acceleration of growth in the second half of the year. Adjusted operating profit increased by 35 per cent and by 19 per cent on a constant currency basis compared to 2021, reflecting the benefits of volume growth and our self-help programme. A much improved second half performance was in part driven by the expected recovery in our P&C division. The business performance in GMS was ahead of expectations and S&SC produced outstanding results over the year.

We continue to experience supply chain challenges with extended lead times, component shortages and notable cost inflation. Through our collaboration with customers, our investment in inventory and our actions to source some components on an expedited basis, organic revenue growth accelerated to 31% in the second half of 2022. We estimate that cost inflation in the year amounted to circa £40 million. This was fully recovered by re-pricing our offerings and working collaboratively with our customers. Of the increase circa £28 million was cost pass-through. This relates to materials where there has been very significant cost inflation which is being transparently passed on to customers with no margin mark-up. Even excluding these pass-through revenues, organic growth was still an excellent 14 per cent.

RESULTS FOR THE YEAR ENDED 31 DECEMBER 2022

	Adjusted results[1]				Statutory results	
£million (unless otherwise stated)	**2022**	2021	Change	Change constant FX	**2022**	2021
Revenue	**617.0**	476.2	30%	22%	**617.0**	476.2
Operating profit/(loss)	**47.1**	34.8	35%	19%	**(3.4)**	19.3
Operating profit margin	**7.6%**	7.3%	30bps	(20)bps	**(0.6)%**	4.1%
Profit/(loss) before taxation	**40.4**	31.5	29%	13%	**(10.1)**	16.0
Earnings/(loss) per share	**18.2p**	14.5p	26%	11%	**(7.5)p**	7.3p
Return on invested capital	**10.5%**	9.1%				
Cash conversion	**33%**	65%				
Free cash flow[1]					**(13.1)**	(1.3)
Net debt[1]					**138.4**	102.5
Leverage[1]					**1.98x**	1.74x
Dividend per share					**6.3p**	5.6p

1 Throughout the Annual Report we refer to a number of Alternative Performance Measures which have been adopted by the Directors to provide further information on underlying trends and the performance and position of the Group. Details of these APMs and a reconciliation to statutory measures can be found on pages 220 to 226.

There has been exceptionally strong order intake across the Group, reflecting underlying growth in our markets and new customer wins, as well as customers committing earlier to secure capacity and give us greater visibility. Customer demand remains robust, but we are vigilant to any changes in demand. Order intake for 2022 was 118 per cent of revenues, which we grew 20 per cent organically. We secured over 50 significant contract wins that will deliver over £125 million of multi-year revenues. Our collaborative approach to deliver solutions based on our technical expertise has been a key factor in winning new orders. We are focused on leveraging expertise across the Group to pursue cross-selling opportunities and deepening our relationships with our top customers. Much of this effort is led by the GMS division which is integral to converting these opportunities and increasingly showcases the capabilities of the P&C division.

Adjusted operating profit was £47.1 million, 19 per cent higher than the prior year at constant currency. The adjusted operating margin was 7.6 per cent. Excluding zero margin pass-through revenues, adjusted operating margin was 8.1 per cent. After the impact of adjusting items, including restructuring, pension, acquisition and disposal costs, and non-cash asset impairment, the Group's full year statutory operating loss was £3.4 million. The non-cash impairment of £23.1 million is shown within the Power and Connectivity division and is linked to an increase in discount rates, coupled with revised forecasts for the Connectivity business in the context of a weaker macro-economic environment and the impact of the evolution of the COVID pandemic on the potential demand for COVID testing. Cashflow impacting adjusting items totalled £11.1 million.

Adjusted EPS increased to 18.2 pence (2021: 14.5 pence) reflecting the improved adjusted operating profit in the period. Basic earnings per share was a loss of 7.5 pence (2021: profit 7.3 pence). The increase in adjusted operating profit was more than offset by the increase in non-cash adjusting items.

During the year we completed the cash spend on our self-help programme to support margin improvement. We also invested in inventory to support our high levels of growth, our increased customer order book and supply chain constraints on certain component parts. Cash conversion of 33 per cent (2021: 65 per cent) reflected this investment and included a working capital outflow totalling £38.8 million. The working capital outflow was mainly a result of investment in inventory to support the significant growth in order intake. This was exacerbated by material cost inflation and high value pass-through materials secured with customer agreement. We had anticipated a modest improvement in the second half, but this was adversely impacted by higher than anticipated receivables due to the exceptionally strong organic revenue growth as well as a small number of larger value receivables which arrived post year-end.

In 2022 we completed the buy-in of our UK defined benefit pension scheme. This buy-in secures pension benefits for circa 5,000 members and their dependents. The Scheme's circa £360 million of liabilities are now matched by an insurance policy, and TT no longer bears any investment, longevity, interest rate or inflation risk in respect of the scheme. There was a benefit to the Group's 2022 free cash flow of £6 million and there is an equivalent annual improvement to free cash flow in future years. On a statutory basis, cash flow from operating activity was £12.7 million (2021: £14.3 million). There was a free cash outflow of £13.1 million (2021: £1.3 million outflow). Dividend payments totalled £10.2 million (2021: £11.4 million). We ended the year with net debt of £138.4 million (2021: £102.5 million), including IFRS 16 lease liabilities of £23.1 million (2021: £22.6 million).

At 31 December 2022 leverage was 2.0 times (2021: 1.7 times), within the Board's target leverage range of 1-2 times, and down 0.4 times from June 2022, as anticipated. We are confident this downward trajectory will continue as EBITDA increases and as we deliver a material step-up in free cash flow in 2023.

Our return on invested capital was 10.5 per cent in 2022, increasing by 140 basis points due to the growth in adjusted operating profit, even with the additional investment in working capital.

FINANCIAL REVIEW

Revenue
Group revenue was £617.0 million (2021: £476.2 million). This included a £7.9 million contribution from acquisitions and currency translation benefit of £31.5 million. Group revenue was 22 per cent higher than the prior year at constant currency and 20 per cent higher on an organic basis. Excluding the zero margin pass-through revenues, organic growth was still 14 per cent, split approximately 11 per cent volume growth and 3 per cent pricing. Sales volumes across our key markets have been buoyant and the strength of our order book, and the pipeline of new business opportunities, gives us confidence that growth will continue. Our order book reached record levels in the second half of 2022.

Operating profit and margin
The Group's adjusted operating profit was £47.1 million (2021: £34.8 million) and statutory operating loss was £(3.4) million (2021: £19.3 million profit) after a charge for items excluded from adjusted operating profit of £50.5 million (2021: £15.5 million) including:

- Restructuring and other costs of £20.2 million (2021: £7.8 million) comprising:
  - Restructuring costs of £6.4 million (2021: £8.1 million) including £2.7 million relating to the restructure of the North America Resistors business (including pre-production costs at our new Plano facility), £2.0 million relating to the closure of our Lutterworth site, and £1.7 million relating to relocation of production facilities in the USA, as part of our self-help programme; and
  - Pension costs of £13.8 million (2021: £0.3 million credit) relating to pension projects which included £11.8 million non-cash settlement costs for the enhanced transfer value exercise and £2.0 million of cash costs associated with this exercise and the scheme buy-in project.
- Acquisition and disposal costs totalled £7.2 million (2021: £7.7 million) comprising £1.2 million (2021: £2.6 million) of integration and acquisition costs relating primarily to the Ferranti acquisition, which completed early in 2022. Amortisation of intangible assets arising on business combinations was £6.0 million (2021: £5.1 million).
- Non-cash impairment costs totalled £23.1 million (2021: £nil) being an impairment in respect of the IoT Technology Products business, including £5.4 million of assets associated with the Virolens project. This impairment is shown within the Power and Connectivity division and is linked to an increase in discount rates, coupled with revised forecasts for the business in the context of a weaker macro-economic environment and impact of the evolution of the COVID pandemic on the potential demand for COVID testing.

The adjusted operating margin of 7.6 per cent (2021: 7.3 per cent) reflects the benefits of growth and our self-help programme. We successfully offset increases in input costs through price increases.

Finance costs and taxation
The net finance cost was £6.7 million (2021: £3.3 million) with the increase being mainly due to a combination of higher base rates and higher drawn debt levels. The Group's overall tax charge was £3.1 million (2021: £3.2 million), including a £5.3 million credit (2021: £3.0 million credit) on items excluded from adjusted profit. The adjusted tax charge was £8.4 million (2021: £6.2 million), resulting in an effective adjusted tax rate of 20.8 per cent (2021: 19.6 per cent).

Earnings per share
Adjusted EPS increased to 18.2 pence (2021: 14.5 pence), reflecting the improved adjusted operating profit in the period. Basic earnings per share (EPS) was a loss of 7.5 pence (2021: profit 7.3 pence). The increase in adjusted operating profit was more than offset by the increase in non-cash adjusting items set out above.

Cashflow
Adjusted operating cash inflow after capex was £15.7 million (2021: £22.7 million inflow). Improved profitability was more than offset by a working capital outflow of £38.8 million (2021: £14.7 million outflow), including a £40.4 million investment in inventory to support the strong order book and impacted by supply chain constraints. Capital and development expenditure of £14.0 million (2021: £16.8 million) reflected investment to support growth and as part of the self-help programme. This resulted in adjusted operating cash conversion of 33 per cent (2021: 65 per cent). On a statutory basis, cash flow from operating activity was £12.7 million (2021: £14.3 million).

There was a free cash outflow of £13.1 million (2021: outflow £1.3 million), net of £11.1 million of restructuring and acquisition related costs (2021: £5.9 million), relating to the self-help programme and acquisition costs associated with the Ferranti acquisition. There were no pension contribution payments in the year (2021: £5.5 million) due to the buy-in of the UK scheme as detailed below.

Investments in acquisitions totalled £8.3 million (2021: £0.5 million) relating to the Ferranti Power and Control acquisition in January 2022. Dividend payments totalled £10.2 million (2021: £ 11.4 million).

Net debt
At 31 December 2022 the Group's net debt was £138.4 million (31 December 2021: £102.5 million). Included within net debt was £23.1 million of lease liabilities (31 December 2021: £22.6 million).

Pension buy-in
In November 2022, the Trustee of the TT Electronics Pension Scheme (the "Scheme") purchased a bulk annuity insurance policy from Legal & General Assurance Society Limited, covering all liabilities required to pay all future defined benefit pensions for the Scheme's circa 5,000 members and any eligible dependents. The purchase of this insurance policy was the successful culmination of extensive work over the last few years by TT and the Scheme Trustees. The insurance policy was purchased using existing assets held within the Scheme, without the need for TT to make any additional contributions. TT is not required to make any future contributions into the Scheme regarding defined benefit liabilities and the buy-in delivers greater security to the Scheme's members. The Scheme's circa £360 million of liabilities are now matched by the insurance policy, and TT no longer bears any investment, longevity, interest rate or inflation risk in respect of the Scheme. There was an immediate benefit to the Group's current year cash flow of £6 million in 2022 and there is an equivalent annual improvement to free cash flow in future years.

Outlook
2022 was a year of strong operational and financial progress. We delivered excellent top line growth for the Group as we executed on our record order book, which reflected a significant number of new customer wins, incremental business opportunities with existing customers, and market share gains. Our teams across the Group have performed exceptionally well in a year characterised by significant volatility, ongoing supply chain issues and cost inflation. At the same time, we have completed our programme of site rationalisation and finalised the buy-in of our UK pension scheme.

TT is well-aligned with global megatrends, driving demand from high growth markets. While we are mindful of the wider macro environment, we enter 2023 with good momentum underpinned by a strong order book. This unprecedented visibility, coupled with further benefits of our self-help programme mean we are confident in our ability to deliver further progress in 2023.

CASHFLOW, NET DEBT AND LEVERAGE

£ million	**2022**	2021
Adjusted operating profit	**47.1**	34.8
Depreciation and amortisation	**16.1**	16.1
Impairment of intangibles	–	–
Net capital expenditure[1]	**(11.7)**	(14.9)
Capitalised development expenditure	**(2.3)**	(1.9)
Working capital	**(38.8)**	(14.7)
Other	**5.3**	3.3
Adjusted operating cash flow after capex.	**15.7**	22.7
Adjusted operating cash conversion	33%	65%
Net interest and tax	**(13.4)**	(8.7)
Lease payments	**(4.3)**	(3.9)
Restructuring, acquisition and disposal related costs[1]	**(11.1)**	(5.9)
Retirement benefit schemes	–	(5.5)
Free cash flow	**(13.1)**	(1.3)
Dividends	**(10.2)**	(11.4)
Lease payments	**4.3**	3.9
Equity issued/acquired	**0.4**	1.4
Acquisitions & disposals[2]	**(8.3)**	(0.5)
Other	**(3.0)**	(0.5)
Increase in net debt	**(29.9)**	(8.4)
Opening net debt	**(102.5)**	(83.9)
New, acquired, modified and surrendered leases	**(2.3)**	(10.8)
Borrowings acquired	**(0.2)**	–
FX and other	**(3.5)**	0.6
Closing net debt	**(138.4)**	(102.5)

1 In 2021 Restructuring, acquisition and disposal related costs comprised proceeds on surplus property disposals of £9.1 million.

CFO REVIEW CONTINUED

POWER AND CONNECTIVITY

OVERVIEW

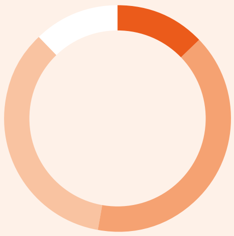
Revenue increased by £14.0 million to £154.2 million (2021: £140.2 million) and includes a £7.9 million revenue contribution from Ferranti Power & Control which we acquired in January 2022 and a currency benefit of £7.2 million. Organic revenue was 1 per cent lower dampened by the timing of programme revenues, the closure of the Akron, Ohio facility and the transfer of activity from Lutterworth to Bedlington.

25%
of Group revenue

16
Primary locations

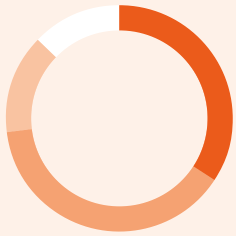
1,612
Employees

REVENUE BREAKDOWN



Revenue by market (%)

- **13**% – Healthcare
- **40**% – Aerospace & defence
- **35**% – Automation & electrification
- **12**% – Distribution sales channel



Revenue by geography (%)

- **34**% – UK
- **39**% – North America
- **14**% – Rest of Europe
- **13**% – Asia/ROW

FINANCIAL HIGHLIGHTS

	2022	2021	Change	Change constant fx
Revenue	**£154.2m**	£140.2m	10%	5%
Adjusted operating profit[1]	**£7.9m**	£7.8m	1%	(9)%
Adjusted operating profit margin[1]	**5.1%**	5.6%	(50)bps	(80)bps

1 Adjusting items are not allocated to divisions for reporting purposes. For further discussion of these items please refer to Note 7.

Adjusted operating profit increased by £0.1 million to £7.9 million (2021: £7.8 million). Included within this was a profit contribution of £1.9 million from the Ferranti acquisition and there was a £0.9 million foreign exchange benefit. The organic reduction in operating profit was mainly driven by reduced revenues and site inefficiencies including the impact of COVID disruptions in the first half. The operating profit contribution from the division stepped up materially from £2.1 million in the first half to £5.8 million in the second half as anticipated. The adjusted operating margin was 5.1 per cent (2021: 5.6 per cent) for the full year and 6.8 per cent in the second half.

Order intake has been good in the year, running well ahead of revenues, giving us confidence of a return to growth in 2023 which will support further margin improvement. With the consolidation of activities into the Kansas City site, following the closure of the Covina site, combined with the transfer of activity from Lutterworth to Bedlington now completed, we are well placed to benefit from these operational efficiencies in 2023.

There have been some notable contract awards during the year, including:

- We were awarded a contract from long-term partner Honeywell Aerospace to support the design of a new power supply for next-generation inertial navigation units. This partnership highlights TT's market responsiveness, innovation and long-standing expertise in demanding defence and military applications.
- Our work on the Boxer programme (the main UK army vehicle programme) has expanded with significant additional contracts wins. Following on from the power electronics assembly contract and the subsequent award for the design and development of electrical cable harness systems for the Challenger 3 upgrade project, we have recently cross sold our expertise into GMS. We are already contracted to provide complex, high-reliability power electronics assemblies to the Boxer vehicles and will lead the design, production and delivery of the battery control units enabling increased efficiency of the vehicle power management system as well as the command display units providing signalling and communications functionality on every Boxer vehicle.
- Recent significant advances have allowed electromagnetic tracking to become an emerging technology of choice for new clinical applications. This adoption is leading to an upsurge in related procedure volume. Working with a new customer, a medical equipment manufacturer, on its electromagnetic (EM) tracking system, which incorporates TT's EM micro-coil sensors, we have taken the system from prototype to full launch and this tracking system is now used for diagnosing certain cancers.
- Environmental innovation from ZapCarbon in combination with our electronics technology and IoT powered monitoring expertise brought to the mass market the Healthy Homes Sensor. This sensor is designed for use in social housing as a means to combat fuel poverty and unhealthy living conditions. Our battery operated, cellular connected sensor can detect unsafe humidity conditions long before mould occurs thus improving the health for occupants of social housing and preventing the need for costly remediation work.

In January 2022 we completed the £8.3 million acquisition of Ferranti Power and Control, based in Greater Manchester, which designs and manufactures mission-critical complex power and control sub-assemblies for blue chip customers in high-reliability and high-performance end markets, primarily aerospace and defence. One of the principal benefits of the acquisition is that it brings the skills to provide full-service capabilities from design, assembly, manufacturing, and testing including environmental stress screening and inspection through to service.

Ferranti adds further technology capability, IP and scale to our Power business. It brings valuable long-term customer relationships and programmes with leading global aerospace, defence and industrial OEMs operating in highly regulated markets with significant barriers to entry through necessary industry accreditations and customer approvals.

Ferranti is a mid-teens operating margin business, and in this, our first year of ownership, the acquisition has generated a return on invested capital in excess of the Group's WACC. We expect to generate cost synergies of circa £0.4 million by year three.

CFO REVIEW CONTINUED

GLOBAL MANUFACTURING SOLUTIONS

OVERVIEW

Revenue increased by £102.9 million to £323.0 million (2021: £220.1 million) including a currency benefit of £15.4 million, with organic revenue 37 per cent higher. The organic revenue performance reflects strong growth from our existing customer base, particularly from our healthcare and automation & electrification end markets.

52%

of Group revenue

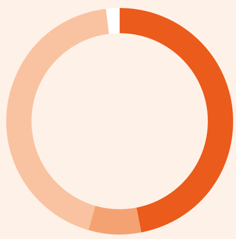
8

Primary locations

1,550

Employees

REVENUE BREAKDOWN



Revenue by market (%)

- **47**% – Healthcare
- **8**% – Aerospace & defence
- **43**% – Automation & electrification
- **2**% – Distribution sales channel

Revenue by geography (%)

- **21**% – UK
- **38**% – North America
- **15**% – Rest of Europe
- **26**% – Asia/ROW

FINANCIAL HIGHLIGHTS

	2022	2021	Change	Change constant fx
Revenue	**£323.0m**	£220.1m	47%	37%
Adjusted operating profit[1]	**£25.2m**	£18.3m	38%	23%
Adjusted operating profit margin[1]	**7.8%**	8.3%	(50)bps	(90)bps

1 Adjusting items are not allocated to divisions for reporting purposes. For further discussion of these items please refer to Note 7.

There was strong growth in all geographic regions. Pass-through revenue was around £32 million which has created a technical head wind to margin progression. Excluding this pass-through revenue the operating margin was 8.7 per cent.

This division has again performed incredibly well in 2022, as momentum built reflecting the targeted move towards customers who are winners in their own markets and provide opportunity to grow share of wallet. Work on positioning GMS as a partner to customers to win long-term incremental business is reflected in our order book growth. The addition of GMS capability to the Kuantan site in Malaysia, back in 2020, has added value through the expansion of our high-level assembly capabilities to a variety of key customers.

The division's planned revenues for 2023 are fully covered for 2023 and it has started to secure revenue for 2024.

Given the significant increase in revenues in 2022, GMS will make incremental capital investment in 2023 to enhance capacity in existing facilities.

Adjusted operating profit increased by £6.9 million to £25.2 million (2021: £18.3 million), including a £2.2 million foreign exchange benefit. The constant currency increase reflects operational leverage on the organic growth and the full recovery of inflationary costs. The adjusted operating profit margin was 7.8 per cent (2021: 8.3 per cent), impacted by the pass-through revenues, without which margins would have been 8.7 per cent.

The order book growth has been underpinned by several multi-million-pound wins, a number of which extend beyond 12 months. We continue to see that our power customers require manufacturing capability and so our GMS and P&C divisions are partnering to provide this solution. Packages secured on the Boxer programme illustrate how we are able to expand our involvement in a programme from initial work within Power and Connectivity to providing PCBAs through GMS. We continue to improve our understanding of how to leverage these opportunities from the customer perspective.

In late December, TT was delighted to receive an award for best-in-class performance as one of AMI's top performing suppliers for outstanding technical and operational achievements in areas including quality, service, lead time, delivery, cost and responsiveness. We believe this award reinforces our reputation as a trusted partner across multiple geographies.

Overall, the GMS division is in excellent shape, the order pipeline is stronger than ever, and our enhanced customer relationships and business development initiatives are delivering revenue and order book growth. GMS has achieved a step change in its margin profile over recent years, reflecting the value of the service we bring to our customers, reliability, and the value engineering and testing capability we offer. We believe GMS margins can improve incrementally with growth.

In 2022, a key component of the revenue and order book growth reflected large, ongoing programmes with our blue-chip customers in healthcare and automation, in addition, there have been a number of significant new customer awards which will impact future years. Some examples include:

– TT has been awarded a substantial five year agreement with a leading systems integrator in commercial aerospace worth circa £50 million, for the manufacture of complex electronic assemblies for aircraft braking systems. This award further strengthens our longstanding collaboration with this customer and reflects its confidence in our expertise in demanding military and aerospace applications.

– Following several years of prototype development and supply chain support, TT has been selected as a strategic manufacturing partner to support multiple line replaceable units (LRUs) that comprise the Honeywell Anthem avionics suite. Unveiled in late 2021, the Honeywell Anthem flight deck is the industry's first cloud-connected cockpit system. Anthem is powered by a flexible software platform that can be customised for virtually every type of aircraft, including large passenger and cargo planes, business jets, helicopters, general aviation aircraft and the rapidly emerging class of advanced air-mobility (AAM) vehicles. TT will be providing engineering support, manufacturing, and full systems integration for this next-generation avionics programme over the next 12 years.

– 2022 saw strong revenue growth on a number of new projects for a world-leading life sciences customer. These included high level assemblies for a Gas Chromatography Mass Spectrometer. Such machines are used in spectrometry elemental isotope analysis to understand the chemistry and composition of materials and healthcare and life sciences. Other key projects with this customer include a DNA sequencer and high-end analytical instruments for radiation detection.

CFO REVIEW CONTINUED

SENSORS AND SPECIALIST COMPONENTS

OVERVIEW

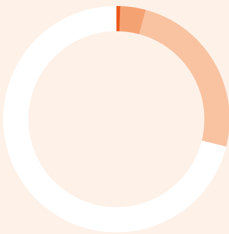
Revenue increased by £23.9 million to £139.8 million (2021: £115.9 million) including a currency benefit of £8.9 million. Organic revenue was 12 per cent higher, with strong growth through the division's distribution partners a key driver.

23%
of Group revenue

5
Primary locations

1,809
Employees

REVENUE BREAKDOWN



Revenue by market (%)

- **1**% – Healthcare
- **4**% – Aerospace & defence
- **24**% – Automation & electrification
- **71**% – Distribution sales channel

Revenue by geography (%)

- **7**% – UK
- **37**% – North America
- **26**% – Rest of Europe
- **30**% – Asia/ROW

FINANCIAL HIGHLIGHTS

	2022	2021	Change	Change constant fx
Revenue	**£139.8m**	**£115.9m**	21%	12%
Adjusted operating profit[1]	**£21.8m**	**£16.4m**	33%	20%
Adjusted operating profit margin[1]	**15.6%**	**14.2%**	140bps	110bps

1 Adjusting items are not allocated to divisions for reporting purposes. For further discussion of these items please refer to Note 7.

This business is in the sweet spot of enabling our customers to reach their sustainability goals with components for smart energy & city infrastructure and factory automation.

Historically, order visibility has been very limited, but more recently the order book has increased significantly reflecting strong underlying demand and also customers committing orders further ahead to protect their supply chains and responding to lead time extensions. We have been careful to adjust our commercial terms, where possible, to orders that are non-cancellable, non-refundable and in some cases, non-reschedulable.

Adjusted operating profit increased by £5.4 million to £21.8 million (2021: £16.4 million) with a currency benefit of £1.7 million. The constant currency operating profit growth reflects the benefits of our

self-help programme and the strong operational leverage on our revenue growth. We have benefited from our agility in adapting our pricing strategies to offset material and freight cost increases.

At our new facility in Plano, Texas we have invested in capacity and having substantially completed qualification, are now improving yields which is enabling volumes to be produced at higher rates. We are very focused on improving our customer experience.

There were a number of favourable developments during the year which will benefit the business, including:

– We secured repeat business with a major US defence prime, for a sole source, opto isolator used on power-up boards installed as safety critical, precision navigational aids, for guided defence systems for a major defence customer

– The US team secured two different optical sensor opportunities with a medical device company, for use in a blood analyser. These sensors are used in the disposable test vessel cartridges designed for the Werfen GEM 5000 blood gas analyser. The sensors are critical to detect the proper loading of the cartridge as its alignment with the analyser optics, for spectral measurements, is essential for proper execution of the test.

– Schneider Electric – We secured a contract to provide a thick-film resistor that met the high-reliability requirements of a Schneider Gas-insulated switchboard utilised in electricity distribution. The end customer for this product is France's main electricity distribution company which supplies 95 per cent of the market.

CFO REVIEW CONTINUED

DIVIDEND POLICY AND DIVIDEND

The Board has a progressive dividend policy, which primarily takes into account adjusted earnings cover, but also sees beyond this to take into account other factors such as the expected underlying growth of the business, its capital and other investment requirements, and its pension obligations. The Group's balance sheet position and its ability to generate cash are also considered.

The Board considers these factors in the context of the Group's Principal risks, which are set out on pages 69 to 72, and the overall risk profile of the Group.

The Group's ability to pay a dividend is impacted by the distributable reserves available in the parent Company, which operates as a holding company, primarily deriving its net income from dividends paid by its subsidiary companies. At 31 December 2022, TT Electronics plc had £202.8 million (2021: £251.2 million) of distributable reserves, sufficient to pay dividends for the foreseeable future. The parent Company Balance Sheet is set out on page 209.

Given our strong trading performance in 2022 and the positive outlook for 2023 and beyond, the Board is proposing a final dividend of 4.3 pence per share. The total cash cost of this dividend will be approximately £7.6 million. This, when combined with the interim dividend of 2.0 pence per share gives an increase of 13 per cent in the total dividend to 6.3 pence (2021: 5.6 pence per share). Payment of the dividend will be made on 26 May 2023, to shareholders on the register at 28 April 2023.

PENSIONS

In November 2022, the Trustee of the TT Electronics Pension Scheme (the "Scheme") purchased a bulk annuity insurance policy from Legal and General Assurance Society Limited, covering all liabilities required to pay all future defined benefit pensions for the Scheme's circa 5,000 members and any eligible dependents.

The Group has one significant defined benefit scheme in the UK and some much smaller defined benefit schemes in the US. All the Group's defined benefit schemes are closed to new members and to future accrual.

In November 2022, the TT Group Scheme entered into a bulk annuity insurance contract with an insurer in respect of the liabilities of the defined benefit scheme. This type of deal is also known as a 'buy-in'. The insurer, Legal & General, will pay into the scheme cash matching the benefits due to members. This investment decision reduces the risks in the scheme and provides additional security for the benefits due to the members.

The total net accounting surplus under the Group's defined benefit pension schemes was £28.4 million (2021: £74.5 million). The main driver of the decrease was the remeasurement loss following the buy-in of the UK scheme's assets and the completion of an exercise whereby deferred members were offered an enhanced transfer value (ETV) option. The effect of the ETV exercise was recognition of a £11.8 million settlement cost.

Net accounting pension surplus
Prior to the buy-in, the TT Group scheme exposed the Group to a number of actuarial risks such as longevity risk, currency risk, inflation risk, interest rate risk and market (investment) risk. The buy-in mitigates the majority of these risks and the principal risk remaining is the credit risk associated with Legal & General, which is assessed to be very low.

The assets and liabilities of the Group's UK defined benefit schemes are summarised below, together with the Group pension surplus:

£million	2022	2021
Fair value of assets	396.8	651.9
Liabilities	368.4	577.4
UK scheme (surplus)	31.3	78.4
Overseas schemes (deficit)	(2.9)	(3.9)
Total Group surplus	28.4	74.5

The next triennial valuation of the TT Group scheme, as at April 2022, is expected to be completed by July 2023 and will take account of the new buy-in policy held by the Trustee.

Further details of the Group's defined benefit schemes are in Note 22 on page 196 of the Consolidated Financial Statements.

FINANCIAL RISK MANAGEMENT AND TREASURY POLICIES

The Group's Treasury activities are managed centrally by the Group Treasury Function, which reports to the Chief Financial Officer. The Treasury Function operates within written policies and delegation levels that have been approved by the Board.

The Group's main financial risks relate to funding and liquidity, interest rate fluctuations and currency exposures. The overall policy objective is to use financial instruments to manage financial risks arising from underlying business activities and therefore the Group does not undertake speculative transactions for which there is no underlying financial exposure. The Group manages transactional foreign exchange positions by hedging a minimum of 75 per cent of expected net cash flow exposures for the next 12 months and 50 per cent of expected net cash flow exposures for the period from 12 to 24 months.

More details of the Group's Treasury operations are set out in Note 21 on page 187 of the Consolidated Financial Statements.

FUNDING AND LIQUIDITY

The Group's operations are funded through a combination of retained profits, equity and borrowings. Borrowings are generally raised at Group level from a group of relationship banks and lent to operating subsidiaries. The Group maintains sufficient available committed borrowings to meet any forecasted funding requirements.

NET DEBT AND GEARING

At 31 December 2022 the Group's net debt was £138.4 million (31 December 2021: £102.5 million). Included within net debt was £23.1 million of lease liabilities (31 December 2021: £22.6 million).

Consistent with the Group's borrowing agreements, which exclude the impact of IFRS 16 Leases, leverage ratio was 2.0 times at 31 December 2022 (31 December 2021: 1.7 times). Net interest cover was 7.4 times (31 December 2021: 13.5 times). The Group's debt covenants state that the leverage ratio must not exceed 3.0 times and that interest cover must be more than 4.0 times.

At 31 December 2022 the Group had available undrawn committed facilities of £47.4 million. In addition, the Group had available uncommitted facilities of £41.2 million. The group's borrowings are in the form of a multi-currency Revolving Credit Facility (RCF) and private placement fixed rate loan notes (PP). The RCF matures in June 2026 and the PP notes, issued in December 2021, are split between 7- and 10- year maturities with covenants in line with our bank facility.

The Group's leverage is usually expressed in terms of its net debt/ adjusted EBITDA ratio. The Group's main financial covenants in its RCF and PP notes states that net debt must be below 3.0 times adjusted EBITDA, and adjusted EBITDA is required to cover interest charges, excluding interest on pension schemes by at least 4.0 times.

Leverage ratio
The Group's year end leverage ratio of 2.0 times is within the Group's target range of 1-2 times. Under the Group's borrowing agreements, the figure for net debt used in the calculation of the net debt/adjusted EBITDA gearing ratio calculation is translated at an average foreign exchange rate, with IFRS 16 lease liabilities and other IFRS 16 impacts excluded. In addition, there are other adjustments including the exclusion of certain specified items from EBITDA.

TT's capital allocation policy is set within the framework of a target Group net debt/EBITDA gearing ratio that lies within a range of 1-2 times in current market conditions.

A further summary of the Group's borrowings and maturities are set out in Note 20 on page 186 of the Consolidated Financial Statements.

FOREIGN CURRENCY TRANSLATION

The following are the average and closing rates of the foreign currencies that have the most impact on the translation into sterling of the Group's Income Statement and Balance Sheet:

£million	2022	2021
Income Statement		Average rate
$/£	1.23	1.38
RMB/£	8.32	8.90
Balance Sheet		Closing rate
$/£	1.20	1.35
RMB/£	8.36	8.63

Foreign exchange translation exposure arises on the earnings of operating companies based in the US and China, with additional lesser exposures elsewhere in the world.

INTEREST RATES

The Group monitors its exposure to interest rates to bring greater stability and certainty to its borrowing costs. The policy is to have between 25 per cent and 75 per cent of the Group's debt subject to a fixed interest rate.

GOING CONCERN

See page 73 for the Going concern statement.

HOW WE ARE PERFORMING

OUR KPIS

FINANCIAL

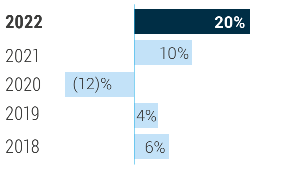
KPI DESCRIPTION AND WHY IT IS IMPORTANT	MEDIUM-TERM TARGET	FIVE-YEAR PERFORMANCE CHART	2022 PROGRESS	LINK TO STRATEGY

Organic revenue growth (%)

The percentage change in revenue from continuing operations in the current year compared to the prior year, excluding the effects of currency movements, divestments and acquisitions. This measures the like-for-like growth or decline of the business. Sustainable organic revenue growth is an indicator of value creation. It reflects a combination of conditions in our markets and our success in gaining market share from serving our customers better.

Medium-term target: **4-6% organic revenue growth annually over the medium term**

20% **2021:** 10%



2022 progress: Organic revenue growth doubled to 20%, reflecting a significant number of new customer wins, incremental business with existing customers and continued market share gains.

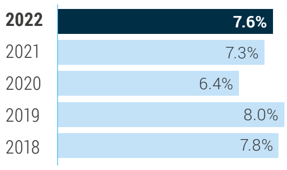
Link to strategy: TECHNOLOGY INVESTMENT AND R&D

Adjusted operating profit margin (%)

Adjusted operating profit as a percentage of revenue. Adjusted operating profit margin is an indicator of our ability over the longer term to extract fair value from our products and services, driven by a mixture of increasing revenue and an optimised cost base.

Medium-term target: **Double-digit margin**

7.6% **2021:** 7.3%



2022 progress: Adjusted operating profit margin was 7.6%, reflecting the benefits of growth and the self-help programme. Excluding zero margin pass-through revenues, adjusted operating margin was 8.1%.

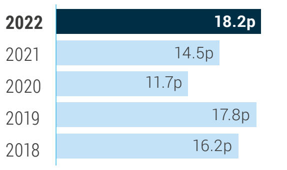
Link to strategy: TECHNOLOGY INVESTMENT AND R&D; MARGIN ENHANCEMENT

Adjusted earnings per share (pence)

The profit for the year attributable to shareholders excluding items not included within adjusted operating profit divided by the weighted average number of shares in issue during the year. Adjusted EPS summarises the overall financial performance of the Group, including revenue growth, operating margin, the cost of debt finance, and the rate of underlying taxation.

Medium-term target: **Double-digit adjusted EPS growth annually at constant currency over the medium term**

18.2p **2021:** 14.5p



2022 progress: Adjusted EPS increased to 18.2p, reflecting the improved adjusted operating profit.

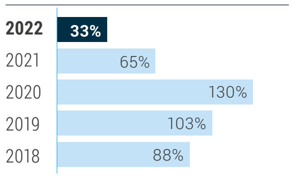
Link to strategy: TECHNOLOGY INVESTMENT AND R&D; MARGIN ENHANCEMENT; TARGETED AND COMPLEMENTARY M&A

Cash conversion (%)

Adjusted operating cash flow including capital expenditure, divided by adjusted operating profit. Cash conversion measures how effectively profit is converted into cash and, within this, reflects the management of working capital and capital expenditure. A high level of cash conversion aids investment in the business, enables the Group to deliver increased returns for shareholders and supports a strong balance sheet.

Medium-term target: **90%+ cash conversion annually over the medium term**

33% **2021:** 65%



2022 progress: Cash conversion of 33% reflected investment in inventory to support high levels of growth, the increased customer order book and supply chain constraints on certain component parts (£38.8 million working capital outflow).

Link to strategy: MARGIN ENHANCEMENT

Our KPIs include a number of Alternative Performance Measures (APMs) which have been adopted by the Directors to provide further information on underlying trends and the performance and position of the Group. Details of these APMs and a reconciliation to statutory measures can be found on pages 220 to 226.

FINANCIAL

KPI DESCRIPTION AND WHY IT IS IMPORTANT	MEDIUM-TERM TARGET	FIVE-YEAR PERFORMANCE CHART	2022 PROGRESS	LINK TO STRATEGY
Return on invested capital Adjusted operating profit for the year divided by average invested capital for the year. Average invested capital excludes pensions, provisions, tax balances, derivative financial assets and liabilities, cash and borrowings. It is calculated at average rates taking into account monthly balances. Return on invested capital is a measure of how efficiently the Group is utilising its assets, relative to profitability, in generating shareholder returns.	**Exceed the cost of holding assets with year-on-year increases**	**10.5%** **2021:** 9.1% 2022: 10.5% 2021: 9.1% 2020: 7.7% 2019: 10.8% 2018*: 11.5% * Excluding IFRS 16 impacts.	ROIC increased by 140bps due to the growth in adjusted operating profit, even with the additional investment in working capital.	TECHNOLOGY INVESTMENT AND R&D MARGIN ENHANCEMENT TARGETED AND COMPLEMENTARY M&A

NON-FINANCIAL

KPI DESCRIPTION AND WHY IT IS IMPORTANT	MEDIUM-TERM TARGET	FIVE-YEAR PERFORMANCE CHART	2022 PROGRESS	LINK TO STRATEGY
R&D investment as a % of sales R&D cash investment as a percentage of revenue. This metric excludes GMS which is a manufacturing services business and has no R&D. A consistent and sustainable level of R&D investment enables us to introduce new products that increase our revenue and deliver on our purpose to solve technology challenges for a sustainable world.	**Maintain R&D investment at around 5 per cent of revenue annually over the medium term**	**3.7%** **2021:** 4.5% 2022: 3.7% 2021: 4.5% 2020: 4.8% 2019: 5.1% 2018: 5.1%	R&D cash investment was £11.0 million, representing 3.7% of aggregate revenue of the product businesses. Total investment in technology and capital to support new product growth was £22.7 million.	TECHNOLOGY INVESTMENT AND R&D
Safety performance (number of three-day lost-time incidents) The number of workplace health and safety incidents that resulted in employees, contractors or visitors needing to be off work for three days or more. The number of incidents measures how well we are executing on our commitment to raise safety standards globally and protect our people on our journey to zero harm.	**Year-on-year reduction in incidents, ultimately leading to zero harm**	**2** **2021:** 5 2022: 2 2021: 5 2020: 5 2019: 4 2018: 17	Safety performance improved significantly, reflecting our continued focus on global safety standards and procedures which included the implementation of 15 global HSE standards during the year.	INTEGRATION OF ESG
Employee engagement score Results from a Best Companies Ltd third-party survey which gathers anonymous employee feedback and scores against eight success factors. Having engaged employees is crucial to attracting and maintaining the talent we need to execute our strategy.	**Survey-on-survey increase in the Group's engagement score over the medium term**	**2021:** 718.5 2022: Interim pulse surveys 2021: 718.5 2020: 694.8 2019*: Interim pulse surveys 2018: 678.8 * No employee engagement survey was undertaken in 2019 or 2022	We undertake an employee engagement survey every 12-18 months. We did not undertake a survey in 2022.	INTEGRATION OF ESG
Scope 1 & 2 emissions Total amount of carbon dioxide equivalent tonnes (tCO_2e) of Scope 1 & 2 emissions from operations. Details of the calculation method are set out on page 54. Reducing our Scope 1 & 2 emissions is a critical part of reducing our environmental footprint.	**Annual reductions vs our 2019 baseline. 50% reduction by 2023 vs 2019 and Net Zero by 2035**	**54%** **reduction since 2019** 2022: 12,166 2021: 15,740 2020: 20,875 2019: 26,657 Data available from 2019 only.	We made excellent headway on Scope 1 & 2 emissions, hitting our reduction target a year early. Primary drivers of the 23% fall during the year were the transfer to Plano, site energy reduction initiatives and Mexico grid emissions.	INTEGRATION OF ESG

ENGAGING WITH OUR STAKEHOLDERS

Engagement with our stakeholders is key to the long-term success of our business. We use the knowledge and feedback gained from our stakeholders to push our business forward and respond to key requirements and challenges in the industries in which we operate.

The Board fully understands its role in this process and regularly reviews the Group's key stakeholders and the impacts our activities have on these groups. The Board encourages open and purposeful engagement so that they can use clear and honest feedback to assist in their decision-making processes. The nature of Board meetings allows information about our stakeholders to flow from the workforce, through commercial teams and senior management to the Board and back down the organisational structure. The Board also actively seeks feedback from external advisers to help form its strategic decisions.

This section shows how the Board engages with stakeholders. More information on the Board's approach to S172 can be found on page 63, which sets out examples of decisions taken by the Board on priority strategic topics in 2022.

STAKEHOLDER	OUR ACTIVITIES THAT AFFECT THEM
CUSTOMERS AND SUPPLIERS	– R&D and new product introduction – Products, including those supporting environmental sustainability – Operations and production pipeline – Safety, environmental quality control and reliability – Legal and regulatory compliance – Payment practices/prompt payment – Inventory management – Responsible business practices – Supply chain management – Modern slavery review
EMPLOYEES	– Culture and purpose – TT Way values and conducting business with integrity – Safety and wellbeing – Employee Assistance Programme – Training and development – Group employment policies – Engagement activities – ED&I – Environmental sustainability – Pensions
INVESTORS	– Financial performance – Leadership – Governance and transparency – Sustainability/ESG – Reputation – Communication – Pensions buy-in – RCF extension
SOCIETY	– Products that solve technology challenges for a sustainable world – Responsible business practices – Environmental practices and sustainability – Employment training and apprenticeships – ED&I focus – Employee Assistance Programme – Local supply chains – Supporting local communities

HOW WE ENGAGE AT BOARD LEVEL	HOW WE ENGAGE ACROSS THE GROUP	HOW WE DELIVERED ON FEEDBACK THIS YEAR
– CEO and Board regularly receive reports from divisions and internal Councils on key customer and supplier initiatives. – The Board reviews and approves payment times and practices. – The Board reviews and approves responsible business practices and targets. – Discussions with customers on funding of working capital	– Day-to-day contact on supply chain, products and service. – R&D partnerships. – Collaboration across divisions to meet customer needs including through our Business Development and Supply Chain Councils. – Voice of the Customer formal feedback. – Supplier assessments.	– Continued focus on cleaner, smarter and healthier solutions. – New product launches and new contract wins including Honeywell (see page 10). – Continued review of Voice of the Customer programme (see page 9). – Acquisition of Ferranti Power and Control. – Longer-term collaborative relationships. – Monitoring of supplier payment times, global supply chain, inventory management and export risks.
– Oversight of Group culture. – HSE updates at each Board meeting. – Board , CEO, CFO & ELT site visits. – CEO and SID are members of the PSEE Committee. – Employee engagement – Oversight of ED&I roadmap. – Support for Employee Assistance Programme – Employee forums on Executive Remuneration – Approval of environmental sustainability targets. – Specific focus on pensions and RCF initiatives. **Read more on page 85**	– Regular engagement pulse surveys. – Site employee forums and Town Halls with ELT members. – Be Inspired recognition scheme. – Training and development activities aligned to business and employee needs. – ED&I Councils, inclusive leadership training and employee courses. – Financial wellbeing initiatives. – Career conversations and personal performance development plans. **Read more on page 38**	– Various Board/NED visits to TT sites in US/UK. – Leadership development workshops. – Driving new ED&I strategy at Group and site level. – Mindfulness and wellbeing activities. – Investment in sales and business development capability. – Ambitious environmental sustainability targets. – Board diversity policy to complement the Group policy. – Changes to site footprint. – Pension buy-in transaction.
– Regular report to the Board on investor views including ESG. – Committee Chair consultations/ Chairman engagement – Remuneration consultation activities (see page 101). – Results, Annual Report and AGM **Read more on page 81**	– Appropriate governance policies. – Alignment of business with Group strategy. – Engaging employees with Group strategy. – Collection of data supporting ESG strategy.	– Simplified and consistent messaging. – Ambitious environmental sustainability targets. – Focus on enabling customers to make products that meet sustainability goals. – Board approval of Pension Scheme buy-in transaction. – RCF refinancing. – Board review of strategic plan.
– Oversight of Group strategy including ESG strategy and performance. – The Board reviews and approves responsible business practices and targets. – CEO and SID are members of the PSEE Committee.	– Legal and regulatory compliance. – Responsible business practices including environmental practices and approach to modern slavery. – STEM education activities in local communities. – Charitable initiatives in local communities. – Consistent monitoring of our ESG and sustainability programmes. – Supply chain partnership with CDP. – Collaboration with IEMA. **Read more on page 38**	– Ambitious environmental sustainability targets. – Implementation of global reporting tool for emissions across all sites. – Continued focus on cleaner, smarter and healthier solutions. – New product launches that support efficiency and sustainability. – Site switches to renewable energy. – Driving ED&I strategy at Board, Group and site level. – Deployment of HSE minimum standards for auditing across TT sites. – InTTernship, graduate programme and apprentices.

OUR PEOPLE, ENVIRONMENT AND COMMUNITIES

A POSITIVE IMPACT

We are committed to having a positive impact on the world around us: creating value and enhancing sustainability through our products; the way we do business, including how we look after our employees and interact with our communities; and by reducing our environmental footprint. This commitment is described in our purpose and embedded in our strategy as one of our four strategic priorities.

Environment, social and governance (ESG) and sustainability matters are integrated into our strategy and day-to-day decision-making at all levels of the organisation. This way of operating reduces risk and provides significant opportunities to develop our business model.

Our activities in these areas are critical to our stakeholders, particularly our customers, communities and our employees. We want our teams to feel proud of our culture and enjoy working for TT.

Read more about governance in the Governance and Directors' report from page 76

OUR PURPOSE

We solve technology challenges for a sustainable world

We do this by delivering solutions for our customers that enable products that are cleaner, smarter and healthier and that will benefit our planet and people.

See page 20 for our strategic priorities

ALIGNMENT WITH THE UN SUSTAINABLE DEVELOPMENT GOALS

Our business activities and the way we operate are closely aligned to six of the UN's 17 Sustainable Development Goals.

UN SUSTAINABLE DEVELOPMENT GOALS	OUR CONTRIBUTION
3 GOOD HEALTH AND WELL-BEING	– Our products help to diagnose and treat disease earlier, contributing to better life outcomes for patients. – We are committed to the safety, health and wellbeing of our employees and are focused on physical health, mental health and financial health. – We contribute to the wellbeing of our local communities through our community activities.
5 GENDER EQUALITY	– We are committed to equal opportunities for all persons. We have 53% women in our organisation, and we prioritise the recruitment and development of female leaders. – We are actively working on ED&I and education initiatives to attract more women into our sector and support women to progress in their careers.
7 AFFORDABLE AND CLEAN ENERGY	– Our products are enabling customers to accelerate cleaner energy technologies including electric vehicles, offshore wind and micro turbines. – 45% of our electricity comes from renewable sources and we are committed to moving to green electricity where it is available.
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE	– We are a global employer of talented design, engineering and manufacturing experts. – We are passionate about encouraging young people to consider STEM careers and, in turn, make their own contribution to industry and innovation in the future. – Our products are enabling our customers to operate more efficiently and to develop smart infrastructure that is changing the way we live.
12 RESPONSIBLE CONSUMPTION AND PRODUCTION	– We conduct business with integrity, transparency and professionalism. – We are driven by the concept of zero harm in terms of the safety of our people and our approach to managing our impact on the environment. – We are reducing our consumption of single-use plastics and waste sent to landfill. – We develop, design, engineer and manufacture our products to use raw materials and other resource inputs in the most efficient way, including using recycled materials.
13 CLIMATE ACTION	– We are targeting Net Zero for Scope 1 & 2 emissions by 2035. We have met our short-term emissions reduction target a year early. – We are focused on moving to renewable electricity at all sites and investing in projects that will contribute to meaningful reductions in usage and self generation. – We have identified and are beginning to measure our most significant indirect emissions (Scope 3). – Our products are enabling customers to meet their own climate goals.

PEOPLE

OUR CULTURE AND VALUES

"We believe that embedding the right culture in the business is critical to our ability to deliver sustainably over time. Our TT Way values underpin the behaviours we encourage and live by every day. Our culture and values have played an exceptionally important role in 2022 when we have asked a lot of our employees in order to satisfy strong business growth and customer needs."

Sarah Hamilton-Hanna,
Chief People Officer

The TT culture is very important and drives the whole company. TT businesses have a similar heart – our people are proud to work for us and care about what they do and about each other. This gives us competitive advantage and makes TT a great company to work for and with, enabling us to attract and retain talented people and build strong partnerships with our customers. Our culture is overseen and supported by the Board. While some aspects of our culture, such as ethics and safety, are aligned and reinforced by policy, others are governed by frameworks originated at the centre which empower our sites to work appropriately in their jurisdictions and according to local needs and norms. For the purposes of the UK Corporate Governance Code, Jack Boyer is the designated Non-executive Director for engagement with the workforce. Read more on the Board's oversight of culture matters on page 85.

Our TT Way values connect us all and guide how we work with each other and stakeholders every day. We hold ourselves to high ethical and business standards, conducting business with integrity, transparency and professionalism and building relationships based on trust. This is supported by our internal focus on performance and knowledge to drive innovation, operate more efficiently and provide excellent service to customers.

We have a duty of care to our employees. Their safety and wellbeing are at the top of our agenda, with health and wellbeing being a big focus for the company during 2022. We treat employees with care and respect and strive to create work environments where people are valued, can be themselves, and where they are supported to achieve their ambitions.

Our TT Way values

- We do the right thing
- We bring out the best in each other
- We achieve more together
- We champion expertise
- We get the job done… well

OUR CULTURE IN ACTION – INTEGRATION OF FERRANTI

In January 2022, TT completed the acquisition of Ferranti Power and Control (Ferranti) based in Oldham, UK. The acquisition stepped up TT's aerospace & defence power capabilities in Europe and created a platform for growth in the Power and Connectivity division through its specialist capabilities and attractive customer positions. For this reason, it was critically important from the outset that the highly skilled and long-serving team of this relatively small business could see the benefit and opportunities of becoming part of a larger business and feel positive about joining us.

From the pre-acquisition legal consultation, through the integration process and, finally, planning relocation to a new flagship facility six miles away, the integration team has focused on engaging with the Ferranti team proactively and meaningfully, acting transparently and with integrity, and demonstrating TT's culture and values.

As a result of the integration team's work, all critical members of the Ferranti team chose to join TT and the business is now successfully operating within the Group and progressing its site move in 2023.

Engagement and onboarding activities:

- Legal consultation and TUPE process sessions
- Site leadership team selected from the Ferranti team
- Employee pulse survey conducted in February 2022 using similar questions to our global engagement survey
- Survey results discussed openly with employees and the employee forum and improvement action taken
- Implementation of new processes and reporting protocols
- Executive Leadership Team visit
- Other TT team visits
- Invitations to Ferranti team to visit other TT sites
- Board visit
- Annual UK HR meeting held at Oldham with Gemba-type walk to talk to team members about what was working and if more support was needed for integration
- Second pulse survey conducted in October 2022 – majority of scores increased
- Recruitment need identified and actioned to deal with increased reporting requirements
- Regular meetings with employees to plan relocation and design of the new facility
- Change workshops to ready the team for the move
- New apprentice hires to spread skill base and ready the business for expansion

ETHICS

The fundamental principles of fairness, honesty and common sense lie at the heart of our corporate standards. We have one ethical standard worldwide which seeks to create an environment where our business can flourish within an appropriate compliance and risk management framework and in line with our TT Way values.

Our Statement of Values and Business Ethics Code sets out these standards and covers a wide range of ethical matters including the working environment, standards of behaviour, avoiding conflicts of interest, hospitality and entertainment, bribery, intellectual property protection and fair competition. We do not tolerate fraud, corrupt practices or behaviour not in line with our standards and have in place effective systems and processes to detect and deal with contraventions of the Business Ethics Code.

Any concerns relating to matters covered by the Business Ethics Code and behaviour more generally can be reported, either to management or by using our anonymous, multi-lingual whistleblower reporting facility by telephone or on our ethics and integrity portal. Reports are investigated in detail and any significant concerns are reported to the Audit Committee. Our Whistleblowing Policy describes how employees should raise matters of concern, our approach to dealing with concerns, and examples of the types of issue employees should bring to our attention.

Day-to-day oversight of ethical matters is undertaken by our People, Social, Environmental and Ethics (PSEE) Committee. An Ethics Committee made up of the TT Executive Leadership Team can also be convened on an as-needed basis. Mandatory ethics training is provided for relevant employees on an annual basis. This covers different aspects of ethics including anti-bribery and corruption, IT and cyber security, export controls and information management.

Regulatory requirements are different around the world, so we have a core structure which Group businesses comply with, beyond which they are empowered to tailor their approach to local needs. The nature of our business and the markets we work in means that legal and regulatory compliance is a principal risk for TT.

Read more on page 72

Human rights

Upholding human rights is the responsibility of everyone at TT and, as part of our ethics framework, human rights are treated as an equal priority to other business issues. Our Human Rights Code is taken from the industry standard (Responsible Business Alliance Code of Conduct) and covers expected standards for the treatment of all workers associated with TT. The Code is supported by our Modern Slavery Policy.

Supply chain

We procure from a wide network of suppliers and distributors through global supply chains. It is important to us that our suppliers share our values and our approach, and we seek out those that do.

Our Corporate and Social Responsibilities – Supplier Expectations policy sets out our required standard with regard to supplier social and environmental practices, including modern slavery and the need for environmental improvement plans. The policy is provided to all suppliers with purchase orders. We carry out regular assessments of our suppliers to ensure compliance with our requirements and we will not do business with suppliers that violate them.

Our Supply Chain Council forum meets on a monthly basis and comprises a senior group of executives with responsibility for global purchasing and supply chain activities across TT. The Council considers ethical matters including modern slavery as part of its remit.

Modern slavery

We recognise that the rights of individual workers can, potentially, be violated within our supply chain and other partnerships. We have had a Modern Slavery Policy since 2016 which applies to all persons working for TT and its subsidiaries or acting on its behalf in any capacity.

Our approach to addressing the challenge of modern slavery is to ensure that there is transparency in our own business and throughout our supply chains. We expect the same high standards from all our contractors, suppliers, distributors and other business partners, consistent with our obligations under the Modern Slavery Act 2015. We include specific prohibitions in our contracting processes against the use of forced, compulsory or trafficked labour, or any other activity that amounts to an unreasonable restriction on the free movement of workers, and we expect that our suppliers will hold their own suppliers to the same high standards. We may terminate our relationship with any third party if they are found to be in breach of this policy.

We also publish a Modern Slavery Statement which, along with our Modern Slavery Policy, is available on our website.

EMPLOYEE ENGAGEMENT AND COMMUNICATION

Engaging employees by continuously building our culture, communicating, listening and supporting is an important part of what we do every day. We are one team, and this has been especially important during 2022 when there has been high demand on the business at the same time as a difficult economic environment for our employees.

We communicate frequently and openly with employees using a range of methods. These include weekly email digests, a quarterly newsletter celebrating success around the Group translated into all our global languages, and twice yearly Town Halls with members of the Executive Leadership Team at our sites. Members of our Board also take the time to visit our sites and visited Oldham, Cleveland and Minneapolis in 2022.

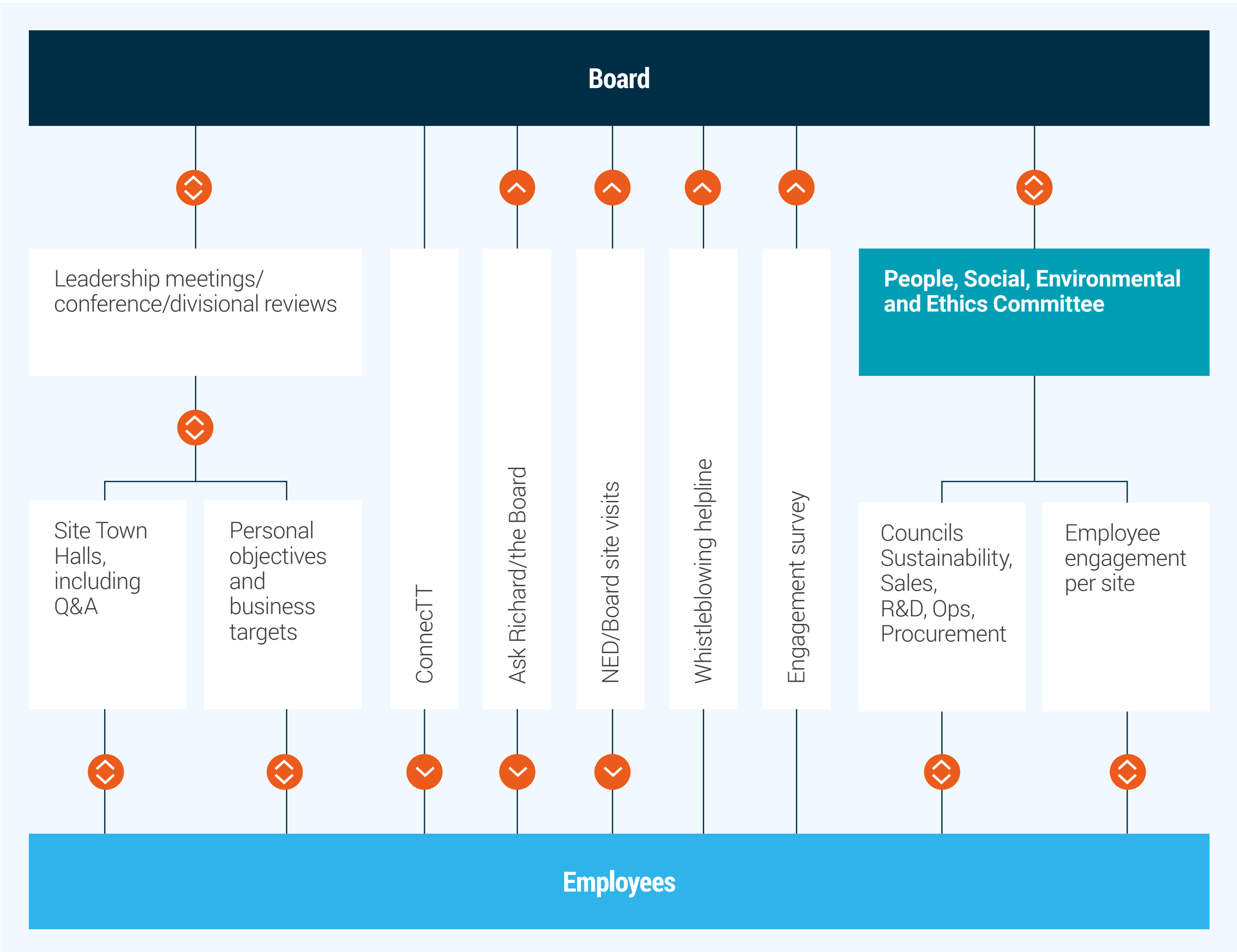
In October 2022, we launched a new Group intranet, ConnecTT, which enables employees to communicate and to easily find and share resources, news and Group policies. ConnecTT has also paved the way for the creation of a range of employee communities. Some of these communities relate to work specialisms, others are employee resource groups supporting our equality, diversity and inclusion (ED&I) work and others, including The Pets of TT, The Kitchen and TT Green Thumbs, are for engagement and fun.

Communication is also strong at our individual sites which have regular all-hands meetings, Gemba walks which cover safety and wellbeing topics as well as daily tasks and productivity, team meetings, and social and fundraising events. Read more about fundraising in the Communities section on page 61.

Employee engagement survey
We undertake a Group-wide employee engagement survey every 12-18 months, and we use pulse surveys to get the latest feedback and an indication of progress. Results from these surveys drive HR and local planning in the form of targeted action plans created by site management in response to their results. Engagement scores also drive a proportion of management discretionary incentive payments.

We did not do an engagement survey in 2022 while we focused on implementing the actions arising from the 2021 survey. Our most recent survey in October 2021 showed strong levels of engagement, delivering a score in line with the two star "outstanding companies to work for" Best Companies Ltd benchmark. More than 80% of employees participated. We will undertake our next all-employee survey in June 2023.

The employee voice
It is important that the employee voice is heard at the highest levels of the organisation. The results of our engagement surveys are reviewed by the Board so that findings can be acted upon and TT's SID, Jack Boyer, participates directly in people matters through his membership of the PSEE Committee. The strong links described in the diagram below ensure that the Board is aware of the views and needs of our most important stakeholders and can guide company actions accordingly.



HEALTH, WELLBEING AND SUPPORT

At TT we see it as a duty to support our employees to take care of their health. It is the right thing to do, but it also supports business needs by ensuring that our employees are fit and well to be at work, are not distracted by worries, and feel supported to give their best. In periods of high business demand such as 2022, and with some sites operating with mandatory overtime, our focus on health and wellbeing has been critical.

We see a strong crossover between all types of health – physical, mental and, at the current time, financial health – and we have endeavoured to raise awareness and make conversations on these matters normal and expected. We go out of our way to make sure that our teams have access to what they need, especially those things that are not top of mind, or difficult to find time for or access such as medical assessments. We know that this support is highly valued by our employees and is a core component of our strong culture.

At the current time much of our activity is driven at site level, but we have been working on a wellbeing support framework in the US which we plan to pilot in 2023.

Physical health

Our physical health support programmes centre on preventative measures and fun activities such as team sports and onsite exercise classes. During 2022 our sites have made available a range of support including health screenings, flu shots, subsidised gym memberships, weekly fruitbowls, access to private medical appointments, and sharing for success lunch time sessions on subjects such as stopping smoking and menopause.

Many of our sites undertake Gemba walks every day. These are led by our senior teams and often include physical check-ins with employees to review temperature, ergonomic environment and body posture, all of which contribute to good physical and mental health.

In May, TT Dongguan, China organised on-site physical examinations for all employees. 113 employees took advantage of the opportunity, which included a liver test, a general X-ray, a blood test, a stomach ultrasound, a skin cancer check, and an ECG.

TT KANSAS CITY, US EXAMINES MENTAL HEALTH

In May, employees at our Kansas City site dressed in green and enjoyed a walk together. Green is the colour associated with mental health awareness in the United States, representing hope, strength, support and encouragement for sufferers. Later in the month, the team invited a speaker from the local public health department to discuss mental health, how to recognise symptoms in yourself and others, and when to reach out for help.

Mental health

Mental health is equally important. Many of our sites have mental health first aiders who are trained to recognise triggers and help mobilise support for employees who may be struggling. Sites also organise events to raise awareness of mental health matters and provide resources covering matters such as stress management, anxiety and self-esteem.

For Mental Health Awareness month in May 2022, we asked employees from across TT to share their experiences of mental health issues and their tips for staying well. Across the month sites organised a range of activities including:

- A fundraising walk in aid of mental health charity MIND at TT Oldham, UK
- A week of events at TT Juarez, Mexico which included a 'gratitude chain', a joke contest and karaoke
- The creation of a positivity tree at TT Bedlington, UK for employees to share their positive thoughts with peers

Wellbeing framework

HEALTH, WELLBEING AND SUPPORT CONTINUED

Financial health

Concerns about finances can have a significant impact on mental health and we have been focused on giving employees more support in this area during 2022 as the cost of living crisis has increased. We have made a big effort to raise awareness of financial health and the benefits we have available to employees such as our Employee Assistance Programmes, our UK and US health plans, our UK and US all employee share plans and pension/retirement planning. As described in the reward and recognition section below we have also targeted support payments and salary increases towards lower paid employees.

In the UK we have partnered with a specialist third party not-for-profit organisation to offer a cohesive support package of salary finance options to help strengthen personal financial fitness and arrangements. The initiative was launched UK-wide in August 2022 and was developed in response to findings in our October 2021 Employee Engagement Survey and workforce remuneration sessions. Through the initiative all UK employees now have access to:

- Online financial wellbeing content
- A debt consolidation service with lower interest rates than those in the external market. While payments come directly from payroll, the service is confidential and entirely separate from TT
- An advance payment service to replace the use of payday loans. Employees are able to borrow half of what they have earned so far that month, again confidentially
- Savings vehicles attached to payroll, removing the hurdles to building rainy day savings
- The initiative has been widely publicised and take up indicates that employees have found the service beneficial

MOVING TO A FOUR-DAY WEEK AT BARNSTAPLE, UK

To support a rapidly growing order book and stand out in a difficult recruitment market, our Barnstaple, UK team chose to think outside of the box and pilot a four-day week for the majority of employees. Staff reacted positively to the idea when consulted in the summer of 2022 and a series of groups and forums were held to iron out the details before launch in October 2022. The arrangement is seen as benefiting all parties. Employees gain more work life balance by working longer days Monday to Thursday with the option of working overtime on Fridays rather than at the weekend. Those that choose not to work overtime have the Friday free for themselves for leisure time or to meet other commitments. TT benefits from increased capacity but with a potential reduction in overhead costs by opening five rather than seven days.

Take up has been high at 85% and employees say that they really value the change. The pilot concludes in March 2023 at which point it will be fully evaluated and the model used at other sites if appropriate.

REWARD AND RECOGNITION

Being fairly rewarded and recognised for your contributions is an important part of our culture.

During 2022 we sought to support our employees with the increased cost of living with measures appropriate to their region. Inflationary pressures on the cost of living have been most notable in the UK, and disproportionately impact our lower earners. We have undertaken a variety of pro-active actions, some of which are described in the financial wellbeing section above. In the UK, with the support of the Remuneration Committee, we reviewed and increased the 2023 salary review budget, with distribution once again being weighted to our lowest paid workers and typical increases averaging in the range of 6.5 to 7 per cent. We also provided an additional cost of living support payment of £300 to all UK employees on salaries up to £40,000.

Over and above salary we ensure that all employees are able to participate in site specific pay-for-performance schemes, be it our site incentive schemes, or annual incentive schemes and we operate attractive all-employee share plans for UK and US employees.

In line with Corporate Code Provision 41 we piloted reward workforce sessions in 2021 and continued these in 2022 with refined content and agendas. The sessions are designed to be open and transparent and create a safe environment where participants feel confident to ask questions. Content covers TT's reward principles, the role of the Remuneration Committee, and how we achieve alignment of remuneration.

Our BE Inspired recognition scheme recognises teams and individuals who demonstrate our TT Way values and have a positive impact on the business.

Participation is high as our teams are keen to recognise the successes of their colleagues. In 2022 the awards attracted more than 2,300 nominations, with each winner receiving a sum of money and a site celebration. We also celebrate long service and were delighted to be able to recognise a range of employees who had served more than 30 years with TT this year.

SAFETY

Team safety is a core value for everyone at TT and our safety framework and tools have been designed to support us in our pursuit of zero harm.

Safety performance is a Group KPI and has improved significantly in recent years as we have matured our framework and increased accountability. Local safety performance drives a proportion of management discretionary incentive payments and introducing our safety practices and standards is a key activity when we acquire new sites.

Our site HSE (Health, Safety, Environment) professionals report to our site general managers with a dotted line to our VP, Group HSE who leads progressive HSE programmes and acts as support for the whole business. Our VP, Group HSE undertakes a quarterly safety review with each of our divisional leaders and our site leaders are required to participate in site safety tours at least every quarter. Our HSE dashboards are submitted to the TT Board in a report every month.

During 2022 we completed the roll out of our 15 global minimum safety standards and supporting toolkits. These standards are based on ISO 45001 and ISO 14001 requirements and are an obligation for all of our sites. In 2022 all operating sites were audited to the first six standards as a transition towards a full HSE internal audit programme. In 2023 all operating sites will be audited to all 15 standards as part of this programme.

2022 also saw the launch of our new HSE Training Academy which initially focused on providing sessions for our HSE teams and operational leaders on expectations and successful implementation of the standards. Content within the Academy will expand over time to cover a range of HSE core competencies.

All TT sites prepare an annual HSE improvement action plan to direct progress. Site regulatory compliance audits are performed by an external third party every three years.

To drive further improvements, we are now focused on safety leading indicators, deeper employee engagement in prevention such as hazard identification and reporting near misses, and continuously upskilling our teams in safety matters. We are also holding targeted safety workshops led by our occupational health teams and have designed and implemented a behaviour-based reporting tool to further improve our proactive reporting culture.

We have a bespoke analytical safety reporting tool that provides data on causation and analysis of hazard, near miss and behavioural reporting opportunities. It incorporates an investigation tool that enables sites to mitigate issues quickly and, at Group level, guides the development of resources including training and communication materials. Our teams are able to report hazards and near misses through our Zero Harm reporting system in every language and we have recently introduced a Best in Class module that enables teams to capture and share positive health and safety observations, plans and improvements, and celebrate success.

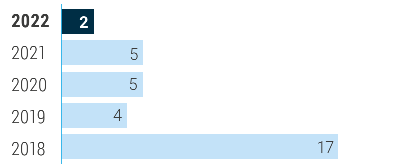
In 2023 we will audit to all 15 of our global minimum safety standards. We will also deliver additional training to our HSE teams worldwide.

Safety performance
Safety performance is quantified as the number of occupational injuries resulting in three or more days' absence for an employee, contractor or site visitor.

This benchmark is applied to all TT locations worldwide and is more stringent than the Lost Time Incident (LTI) requirement for UK reporting which is seven days absence.

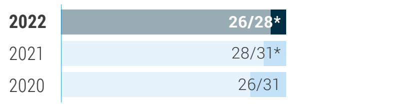
Total number of three-day lost-time incidents

2022: 2 **2021:** 5



Number of sites achieving zero harm (no three-day lost-time incidents) during the year

2022: 26/28* **2021:** 28/31*



* Includes sites that were closed during the year.

External certification was achieved/retained for 12 sites to ISO 14001 and six to ISO 45001.

Our Kuantan, Malaysia site celebrated 1,000 days with Zero incidents in May 2022. To maintain positive momentum, the site has introduced a hazard spotting reward programme to recognise and reward employees for their continuous efforts to spot and resolve hazards in the workplace.

Eleven TT operating sites around the world have passed the 1,000 day milestone: Oldham, Sheffield, Hartlepool, Eastleigh, Cardiff and Fairford in the UK; Kuantan, Suzhou and Dongguan in Asia; and Kansas City and Denver in the US.

COVID-19
Throughout 2022 we continued with appropriate COVID safety measures at our sites including responding to increased restrictions in Asia. We identified no site clusters of infection during the year.

DEVELOPMENT AND CAREERS

Investing in the training and development of our people enables them to do their jobs well and build long-term careers at TT. Given competition in every marketplace for people and skills, we are highly focused on 'growing our own' leaders and innovators by equipping our people with the right knowledge, opportunities and clarity on career paths. It is rare that we say no to any employee that has the desire to grow, and we take pride in the fact that anyone, at any level, will always be given the opportunity, encouragement and support to move through the ranks if they have the willingness and hunger to succeed.

We have a summer internship programme, a UK graduate programme, and more of our sites are beginning to take on young apprentices as well as offering mature apprenticeships which sponsor existing employees who wish to train for new roles.

Our line managers hold regular career conversations with their direct reports and create personal performance development plans that align with wider site, division and Group objectives. We use a five-point performance scale to guide performance conversations and give clarity to employees.

Improving line management skills
During 2022, in response to one of the findings of our October 2021 engagement survey, we launched a new line management skills programme to help new and existing line managers be more effective in that role and better support those working for them. The six bite-sized modules were prepared in consultation with TT's Divisions to provide practical and useful material to support business needs. The modules are available to all, but are typically accessed by supervisors, team leaders and new line managers.

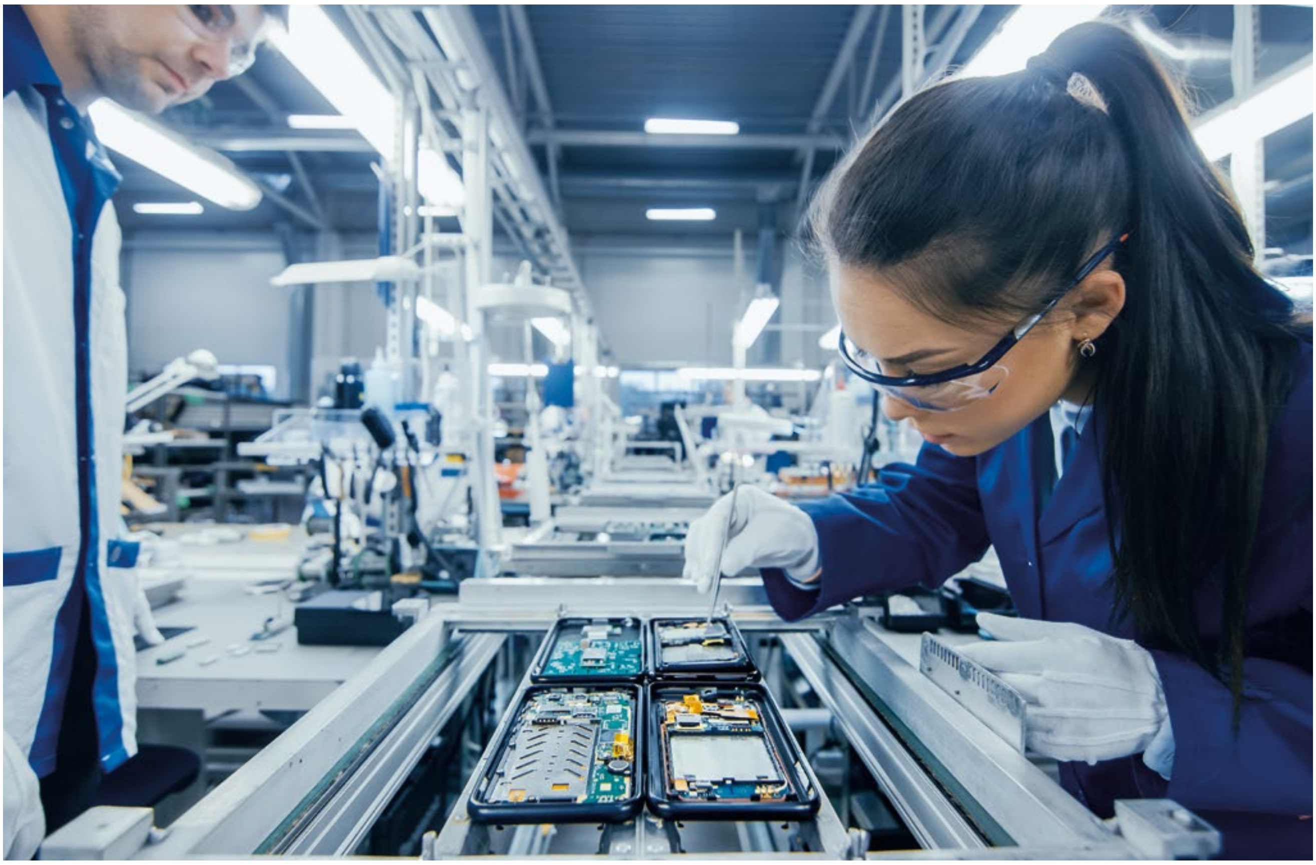
The key principles of the programme are that it is easy to access, simple, practical, effective and immediately applicable. Employees can self-register, sessions are independent of each other, and they are recorded and translated for all regions.

There are six modules covering practical topics for leaders:

- Manager 101 and expectations
- Effective communication (launched at the beginning of 2023)
- Managing absences and return to work discussions
- Recruitment
- Performance conversations and feedback
- Handling difficult conversations

"Interns are a critical part of our talent development strategy. Seeking to craft meaningful experiences, we maintain intentionally small cohorts and onboard interns immediately as real, paid team members. Each intern has the opportunity to work on impactful projects and rotate roles across the business, which enables them to develop the skills, knowledge and experience they need to forge a fulfilling post-graduate career. In turn, we gain fresh perspective and a richer talent pool of individuals who are eager to bring their passion to our business. The success we've seen through this programme has been incredible."

Mike Leahan,
Chief Operating Officer



EQUALITY, DIVERSITY AND INCLUSION

We see equality, diversity and inclusion (ED&I) as a solution to business challenges. It is a critical driver of employee engagement, talent acquisition and retention as an important and positive aspect of the employee experience, and this makes TT a happier and more productive workplace which is good for business. We have an ethnically diverse workforce given our geographic spread.

The need for equality and fairness is a given. We believe that everyone should be treated fairly and have access to equal opportunities in a workplace that is tolerant, respectful and ensures dignity for all. As set out in our employment policies, no employee, applicant, contractor or temporary worker should be treated less favourably or victimised or harassed on the grounds of disability, sex, marital or civil partnership status, race, nationality, colour, ethnicity, religion or similar philosophical belief, sexual orientation, gender identity, age or any other distinction other than merit.

Inclusion is fundamental in the workplace too. When you aren't able to be 'completely yourself', it's difficult to bring your full energy, perspective and focus as you are hiding a part of your life that is integral to who you are. When people feel comfortable and included, they're more likely to feel engaged and happier at work. We want TT to be a place where people feel included, and we are proud of the steps we are taking to get there.

We recognise that it is not always easy to recruit to increase diversity, so we are focused on the things that move the dial for team members – awareness and understanding, a sense of community, supporting and celebrating our female leaders, and creating work environments where people with disabilities are able to work safely and effectively.

Our ED&I strategy is led by a special committee and divisional working groups, and we have ED&I Councils at many sites. Our ED&I policy and roadmap which sets out our approach to ED&I and expected behaviours has been circulated to employees and we report progress through our usual communication channels, including a regular page in our Group newsletter. The policy explains our approach to equality, diversity and inclusion including such matters as harassment, victimisation and bullying, recruitment and promotion, religious accommodations, gender confirmation and workplace adjustments; the expected standards for employees and their responsibilities; and how we will deal with infringements of the policy.

We do not have Group ED&I KPIs, but we encourage our divisions and sites to prepare their own, relevant improvement plans every year. In 2023 our divisional and site leadership teams will be asked to identify one important ED&I objective to work towards for the year.

Sites are also encouraged to hold ED&I events appropriate for their locations. 2022 saw an active Pride Month at many sites, the celebration of Black History Month in the US, a continued focus on activities highlighting violence against women in Mexico, highlighting of International Disability Month, and a global celebration of International Women's Day in March.

Training, tools and events

ED&I 101 training was rolled out to all employees in 2022 and 14 Inclusive Leadership workshops were held, attended by more than 900 employees. The workshops focused on understanding what inclusion means and how to apply the learning at TT. They started important and sometimes challenging conversations and gave participants an opportunity to ask questions and listen to the experiences of others. Employees were also given the opportunity to hear from specialists at a series of speaker events through the year:

- 2015 Everywoman Female Entrepreneur of the Year Sarah Pittendrigh spoke on the Power of Failing;
- Former UK Special Forces Solider Ollie Ollerton spoke about mental limits;
- Former Wales and British Lions rugby captain and LGBT advocate Gareth Thomas spoke on inclusive leadership and inclusive teams;
- Paralympian Lauren Rowles helped us understand more about mental resilience by describing her journey from able bodied teenager to being paralysed by illness.

Around 250 employees listened live to each event, and a recording was distributed afterwards.

TT Juarez, Mexico highlighted a local day for non-violence against women with a series of talks given by the Municipal Institute for Women. An information module was also provided to the site by the Institute with legal and support resources, as well as emergency phone numbers.

After successful events in 2021, TT sites in the US were once again eager to recognise Black History Month in February. TT Kansas City encouraged employees to support Black-owned local businesses and TT Dallas hosted an art contest. Members of our Sheffield, UK team also decided to show their support in February by organising a celebration of Ethiopian culture covering history, traditions, religious beliefs and food.

TT Dallas proudly sponsored two buckles (given as prizes to winners) in the Texas Gay Rodeo held in April 2022. Team member Tom Frey, formerly a participant in the Steer Wrestling competition, volunteered his time as a gate operator. This rodeo is part of the IGRA (International Gay Rodeo Association) and is run completely by volunteers.

Gender diversity

We are pleased to have three women Board members and one woman on our ELT team of five. In total, we have more women employees than men. We are keen to see more women in leadership roles. Our Leadership Programme for women is an integral part of our ED&I strategy and includes joint workshops with senior male leaders as well as skills, mentoring and advocacy. We also have a Women's Business Forum which supports female leaders in the business.

Our UK Gender Pay Gap report is published annually on the TT website.

TT Women's Leadership Programme

Our inaugural Women's Leadership Programme kicked off in 2022 with two main goals. Firstly, to create a safe space for women to engage with one another and develop in the areas that our analysis and research identified as areas of challenge for women at work. Secondly, to create a network of male and female allies across the business who can sponsor, mentor, attract and develop women in and into our business. 13 women and 11 men were selected for the first cohort and our second cohort will join the programme in the second half of 2023. The programme is:

GENDER DIVERSITY AT 31 DECEMBER 2022

Employees – full-time equivalents	**Men**	**Women**
Board of Directors	4	2
Executive Leadership Team (ELT)	4	1
ELT and direct reports	25	12
Senior managers (ex-ELT)*	59	18
All employees:	**5049**	
UK and Europe	867	487
USA	456	347
Mexico and Caribbean	524	726
Asia	522	1,120
Total	**2,369**	**2,680**

* Senior managers (ex-ELT) includes TT's Group senior leaders, our divisional and functional leadership teams, and Directors of subsidiary Companies.

Evidence-based
- Based on analysis conducted by TT on attitudes towards women in 2020
- Underpinned by the ShapeTalent Barriers for Women framework
- Informed by the latest research about women in leadership roles

Focused
- On topics that matter the most and have the biggest impact for women in organisations
- On building understanding between women and between women and men

Experiential
- Heavy on application and learning through doing
- Promotes experimentation in a supportive environment

Includes
- Sponsorship
- Coaching
- Authentic leadership sessions
- Allyship workshop
- Navigating power and politics session
- Listening circles workshop
- Strategic networking session

INTERNATIONAL WOMEN'S DAY

In 2022 we celebrated March's International Women's Day right across TT, aiming to celebrate women in the organisation and highlight the importance of 'Breaking the Bias' to enable women and minority groups to achieve their goals, advance their careers and contribute their best. On the day we shared profiles of a wide range of women in the business and information about training and resources aimed at supporting female success.

Many of our sites held their own special celebrations which included collecting donations for a women's shelter, testimonies from women, a Wonder Woman programme, and a site banner featuring the handprints of female team members.

ENVIRONMENT

SUSTAINABILITY

TT technologies address key sustainability megatrends in our target markets and bring environmental and social benefits to society. Our components and, ultimately, products address resource scarcity, improve energy efficiency, support renewables and drive productivity, connectivity and health through their use in customer applications. We are committed to developing cleaner, lighter more efficient and durable solutions to help combat climate change, engineering advanced electronics to benefit our planet and its people for future generations.

Our cleaner, smarter, healthier focus is a key differentiator of our customer offer and drives our approach not only to R&D but to the way we develop, design, engineer and manufacture our products and use raw materials and other resource inputs in the most efficient way.

In producing more sustainable products for our customers we are also acutely aware that our own activities come with an environmental impact. That is why we are also leading by example to optimise our own operations to reduce TT's impact on the environment.

Understanding and managing the impact of our business operations on the environment and our local communities is an important part of the way we do business. We continue to make excellent headway with our ambitious commitment to achieving Net Zero Scope 1 & 2 emissions by 2035.

Find our sustainability data on page 54.

Group sustainability targets
We have targeted a 50% reduction in Scope 1 & 2 emissions by the close of 2023 against our 2019 Baseline, and Net Zero for Scope 1 & 2 emissions by 2035, at the latest. Due to the focused efforts of teams across the Group we have achieved our 50% reduction target in 2022, one full year early.

To demonstrate our commitment, Scope 1 & 2 emissions were added to our Group KPIs in 2020 and they are aligned with executive remuneration objectives and flowed through the organisation.

In order to continue our emissions reduction success story, we have all sites that are able to purchase electricity on renewable tariffs either doing so or planning to switch as soon as possible in the future. All of our sites have completed this switch except for two sites with a mixed energy supply (both renewable and non-renewable) and seven sites still with non-renewable supplies (one of which has low electricity usage). In the case that we cannot move to renewable supply in the near-term we will explore other opportunities, including electricity generated at source for instance, through the use of solar panels. We have one such facility progressing completion of a significant solar panel installation.

We will also seek and take action to reduce emissions through: reductions in actual energy consumption; elimination of waste energy; use of alternative energy sources (for example the replacement of natural gas for heating); switching to electric vehicles; increased recycling; and better use of building space.

To continue to improve and ensure transparency in our disclosures and progress in 2022 we undertook an internal audit of our data, as outlined in last year's Annual Report. We have completed our measurement of 'other Green House Gases' and they are not included within these figures as they have been found to be a negligible proportion of overall emissions.

Scope 3 indirect emissions
We expanded our data collection capabilities in 2022 to measure nine of the most significant Scope 3 categories for TT and define a potential roadmap to Net Zero for some of them. We partnered with CDP on the supply chain element of these emissions. CDP is an internationally recognised organisation, working specifically for transparent carbon disclosure. After conducting this exercise we eliminated three of the categories for measurement and, therefore, six Scope 3 categories will be measured in 2023 and results and targets will be published once we have a full year of data and an internal audit has been conducted.

Further detail on our Scope 3 ambitions can be found on page 53.

Governance and risk management
ESG matters including culture, strategy, compliance, risk and internal controls are governed as part of our overall governance and risk management frameworks, ultimately overseen by the Board. An update on key health, safety and environmental (including sustainability) metrics is provided at each Board meeting and in-depth reviews are undertaken on at least an annual basis.

See our governance structure on page 77.

Environmental and sustainability governance
Oversight of and decision-making on our environmental strategy and performance is provided by the PSEE Committee and both the Committee Chair and the Non-executive Director representative on the Committee report to the Board on these matters. The Committee is advised by our Sustainability Director who provides on-the-ground insight and specialist advice as well as enabling the sharing of best practice and ideas across the Group.

Responsibility for local planning and performance lies with our site managers who work with our site environmental champions and employee green teams to formulate and deliver projects and engage employees with our local and global agendas.

Risk management
Climate and environmental risks are considered as part of our overall risk management processes. We identify environmental risks at site level as part of our site operational risk assessments. These risk assessments are reviewed and consolidated at divisional and then Group level and significant identified risks are placed on the Group risk register. The Group register is reviewed by the Risk Committee and the Board on a regular basis.

Sustainability, climate change and the environment is considered to be a principal risk for the Group in terms of reputation in the event that we fail to appropriately manage the environmental impact of our operations and our products, and relationships with our stakeholders deteriorate as a result.

See page 69 for our principal risks and mitigating actions.

Climate risk workshop
An initial climate risk and opportunity workshop has been undertaken which involved senior leaders from within TT Electronics and yielded valuable information on next steps. Additional, more detailed, climate-related scenario analysis is planned to be undertaken during 2023. Should this prompt additional climate-related disclosures, these will be made in the Group's 2023 Annual Report. We have taken meaningful first steps to quantify the resilience of the organisation and will be taking this work forward in 2023.

Task Force on Climate-related Financial Disclosures (TCFD)
We fully support the need for businesses to be transparent on climate and environmental matters as a driver of change. We set out how our disclosures comply with the TCFD recommendations on page 55.

EXTERNAL RECOGNITION

We are pleased to continue to receive external recognition for ESG matters.

We received a rating of AA in the 2022 MSCI ESG Ratings assessment, placing TT in the leading companies in its sector group.

MSCI ESG RATINGS AA

CCC	B	BB	BBB	A	AA	AAA

We also participate in CDP's annual climate change survey. We received a C (Awareness level) rating in 2022 for our 2021 data submission.

CDP DISCLOSURE INSIGHT ACTION

ENVIRONMENTAL PERFORMANCE AND DISCLOSURES

SCOPE 1 & 2 EMISSIONS

Net Zero by

2035

Reduction since 2019

54%

50%

reduction targeted by 2023 vs 2019

Figures are for total Scope 1 & 2 emissions and not normalised to revenue

"We are proud to say that, thanks to the great efforts of our teams, we have achieved a reduction in our Scope 1 & 2 emissions of 23% year on year and beaten our 50% reduction target a full year early."

Vicki Faith,
Group Head of HSE and Sustainability

We have targeted a 50% reduction in Scope 1 & 2 emissions, by the close of 2023, against our 2019 Baseline and Net Zero for Scope 1 & 2 emissions by 2035, at the latest. Now that we have put in place preliminary systems and processes to collect data on our six most significant categories of Scope 3 emissions, we will formalise the collection of this data to establish baselines on which to base future reduction targets, including a plan to reach Net Zero.

In 2022 we moved a significant production capacity within Texas, USA, to a modern state-of-the-art facility in Plano, also Texas. By investing in this move and choosing modern green facilities we have reduced our Scope 1 & 2 emissions for this production capability by a tremendous 2,600 tCO_2e.

We achieved a third year in a row growth in use of renewables for our electricity supply and this is now at 45% of total electricity consumption. TT Electronics is committed to full use of green electricity wherever it is available.

RENEWABLE ELECTRICITY

	2019	2020	2021	2022
% renewables of total	0	6	36	45

We have now switched 11 manufacturing sites to renewable electricity. Our sites in Mexico, China and Malaysia do not have access to these tariffs and will require investment in alternative solutions. In 2022, we commissioned our first solar panel project for our site in Kuantan. This is a major installation that will provide approximately 1M kWhs per annum for use in the production of our leading-edge magnetics products in 2023 and beyond.

Every TT site developed and executed a plan to reduce electricity consumption in 2022. These plans also focused on reducing waste and water consumption. We have seen a significant dividend on the hard work from our teams as we have recorded a reduction in electricity consumption, in absolute terms, in a year when activity and revenue grew by a considerable amount.

EXAMPLE PROJECTS

LED lighting in our Suzhou warehouse

Reflective film on windows at Suzhou

Finding air leaks in Juarez

TT has significant manufacturing capability based in Mexico, primarily because of the talented people we have in our teams. We monitor long-term trends in power generation where our facilities are located as part of our strategic planning. Mexico has seen a significant reduction in grid emissions recently due to a move to more renewable energy and a shift from coal to natural gas. This means that our emissions in Mexico have been reducing while our activity has grown.

Although we have had a focus on Scope 2 and electricity supply, we have also taken action to reduce our Scope 1 direct emissions. Our site in Sheffield has a large service team using their vehicles to attend customer sites for thermal calibration work. The Sheffield team began replacing vehicles with electric vehicles two years ago and the latest all electric service team vehicles have just arrived. Sheffield also has an EV charging point available for all staff to use.

Scope 3 emissions
In 2022 we made significant progress in the assessment of Scope 3 emissions, as previously committed.

We assessed all 15 categories and determined that six categories are not applicable to TT operations and therefore will not be measured or reported. These are: *Category 3: Fuel and energy-related activities; Category 8: Upstream leased assets; Category 10: Processing of sold products; Category 13: Downstream leased assets; Category 14: Franchises; and Category 15: Investments.*

We assessed and made preliminary measurements on 9 categories and determined that three of these are not possible or in any way reasonably meaningful for us to measure. We will continue to assess these categories to ascertain if there might be other alternative measurement approaches that could yield meaningful results. As a result, we will not measure or report the following categories:

Category 2: Capital goods: In the event that we make significant capital goods purchases, we will include the supplier in our supply chain emissions analysis. Our capital goods purchases in isolation are not significant enough to warrant a specific annual measurement or reporting.

Category 11: Use of sold products: We manufacture a very wide range of products, including high volumes of electronic components. These are used in a very large number of applications and often sold to end users via a third-party distribution channel. It is impractical and unrealistic for us to attempt to measure the emissions related to these products in use. It should also be noted that many of our products do not necessarily consume electricity themselves during operation.

Category 12: End of life treatment of sold products: In this instance we face the same challenge as attempting to measure emissions due to use of our products. This is not feasible and would not yield any meaningful results.

We have assessed and made preliminary measurements on six categories that we believe are applicable to our operations. We commit to formalising our measurements and building an infrastructure that allows us to collect data in a meaningful way that is in line with the GHG Protocol in 2023. We will use this data to set a Baseline and publish emissions reduction targets.

These categories are:

Category 1: Purchased goods and services
We have implemented a process to assess and measure our supply chain.

Category 4: Upstream transportation and distribution
We have partnered with customers, suppliers and logistics providers to gain access to emissions data.

Category 5: Waste generated in operations.
We have constructed a robust system to measure and report all of our waste streams at our facilities.

Category 6: Business travel
We have partnered with centralised travel providers to gain access to emissions data.

Category 7: Employee commuting
We will calculate these emissions centrally taking into consideration employee data and GHG Protocol guidance.

Category 9: Downstream transportation and distribution
We have partnered with customers, suppliers and logistics providers to gain access to emissions data.

Waste to landfill
We are also reducing our waste to landfill by reducing overall waste and increasing the amount we recycle. The majority of sites are now segregating their waste streams to increase the amount of waste that can be recycled, including cardboard, paper, metal, hazardous waste, wood and plastic. Our target for all of our sites is to send zero waste to landfill and three sites have already achieved this. Waste management will now be driven through our Scope 3 initiatives.

Single-use plastics
We are reducing our reliance on single-use plastics and replacing them with more sustainable products. The majority of single-use plastics in our business are used in packaging products for shipment to customers and, working with customers, sites are switching to recyclable bubble wrap, pallet wrap and other packaging materials. We do not purchase single-use plastic bottles at any of our sites.

Water
While water use is not a key driver of our environmental footprint, we recognise that water is a precious global resource and should be managed as such. We therefore monitor our water use and seek to minimise it wherever possible, as well as directing wastewater to useful activities such as irrigation.

	2022	2021
Total water use m^3	127,720	104,024

ENERGY USE AND SCOPE 1 & 2 EMISSIONS REPORTING

	vs 2021	vs 2019
2022 reduction in Scope 1 & 2 emissions tCO_2e	23%	54%
Intensity ratio tCO_2e/£m revenue	40%	65%

The primary drivers of our Scope 1 & 2 emissions reductions in 2022 were:

– The transfer of a facility to Plano, Texas, USA
– A reduction in energy consumption driven by site improvement activities
– Reduction in Mexico grid emissions

Our results were calculated centrally from data collected locally. We use the market-based method for emissions calculations and, in line with GHG Protocol guidelines, we use the following information in this order of priority: energy attribute certificates; contracts; supplier emission rates; residual mix or grid average emission factors.

Other greenhouse gases are not included within these figures as they have been measured and found to be a negligible proportion of overall emissions. We are using an operational control boundary for direct GHG emissions. We have adopted a cross-sector calculation method in line with the GHG Protocol Corporate Standard. For Scope 1 emissions, we include our total owned and leased vehicle direct emission impact.

	2022	2021	2020	2019
Scope 1 tCO_2e Emissions from activities which the Group owns or controls, including the combustion of fuel and operation of facilities	897	955	1,259	1,479
Scope 2 tCO_2e Emissions from the purchase of electricity, heat, steam and cooling for own use	11,269	14,785	19,616	25,178
Total gross Scope 1 & 2 emissions tCO_2e	**12,166**	**15,740**	**20,875**	**26,657**
Revenue £m	617	477	432	478
Intensity ratio: Gross Scope 1 and 2 tCO_2e/£m revenue	**19.7**	**33**	**48.3**	**55.7**

2022 ENERGY USE AND SCOPE 1 & 2 EMISSIONS BY SOURCE AND BY GEOGRAPHY

Geographic region	United Kingdom	Rest of Europe	North America	Asia and ROW	Total 2022	Total 2021
Natural gas (MWh)	2,381	–	1,673	–	4,054	4,110
Fuel in company owned/leased vehicles (MWh)	573	1	20	31	625	818
Electricity (non-renewable) (MWh)	61	–	14,750	11,954	26,765	33,078
Electricity (renewable) (MWh)	12,151	16	9,815	–	21,982	18,738
Total energy (MWh)	**15,166**	**17**	**26,258**	**11,985**	**53,426**	**56,744**
Total scope 1 emissions (tonnes CO_2e)	580	0	310	7	**897**	**955**
Total scope 2 emissions (tonnes CO_2e)	12	–	4,599	6,658	**11,269**	**14,785**
Total scope 1 & 2 emissions (tonnes CO_2e)	**592**	**0**	**4,909**	**6,665**	**12,166**	**15,740**
Revenue (£million)	130	104	236	146	617	477
Tonnes of carbon dioxide equivalent per £million of revenue	4.5	0	20.8	45.6	19.7	33

In 2022 the UK was responsible for 28.4% of Group energy use and 4.9% of Scope 1 & 2 emissions.

TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES

Statement of the extent of consistency with the TCFD framework
At the time of publication, in compliance with Listing Rule 9.8.6R(8), the Company has made climate-related financial disclosures consistent with the TCFD recommendations and recommended disclosures against:

- Governance (all recommended disclosures)
- Risk management (all recommended disclosures)

With regard to all other recommendations and recommended disclosures we are not, at this time, fully consistent. We have included our explanation for this, a description of our current status, examples of our activities, and our plans to achieve full consistency. These are:

- **Strategy (a)**
  In order to be fully consistent, we need to expand upon our existing risk and opportunities analysis, specifically: granularity, materiality, and also to consider geographical and/or sector relevance. We aim to do this during 2023.
- **Strategy (b)**
  Our impact assessment needs to be reviewed once the improvements are in place for Strategy (a). Until this is complete, because we are not consistent with Strategy (a), we cannot be consistent with Strategy (b). This will also be concluded in 2023.
- **Strategy (c)**
  Transitional challenges in obtaining relevant data and embedding relevant modelling and analytical capabilities are not yet overcome. However, TT commits to completion of a climate-related scenario analysis, and thereby achieving consistency. We aim to do this during 2023.
- **Metrics and Targets (a)**
  TT utilises a wide range of climate-related metrics, however, in order to achieve full consistency we recognise the need to include additional metrics consistent with the cross-industry, climate-related metric categories (where applicable and in consideration of alignment with our own risks, opportunities and business processes). We aim to complete this task in 2023.
- **Metrics and Targets (b)**
  We have considered our preparedness to report our Scope 3 emissions. We have made significant progress in 2022 and our approach is laid out clearly in this Annual Report (see page 53). However, we have not as yet disclosed Scope 3 emissions data and, for this reason, we consider ourselves to be not consistent with the TCFD requirements at this stage. During 2023 we will focus on formalising our reporting process to enable future disclosure.
- **Metrics and Targets (c)**
  Our targets need to be reviewed once the improvements are in place for Metrics & Targets (a). Until this is complete, because we are not consistent with Metrics & targets (a), we cannot be consistent with Metrics & Targets (c). This will be concluded in 2023.

TT Electronics currently considers climate-related risk, with currently available data and analysis, to be financially immaterial in the context of the Company's overall financial statements.

TCFD RECOMMENDATION	RECOMMENDED DISCLOSURE	OUR RESPONSE	ANNUAL REPORT REFERENCE
GOVERNANCE Disclose the organisation's governance around climate-related risks and opportunities.	a. Describe the Board's oversight of climate-related risks and opportunities.	The Board of Directors is principally responsible for risk management, supported by the Audit Committee and informed by the executive Risk Committee. The Board defines risk appetite and monitors the management of significant risks. Climate-related risks and opportunities are specifically included in this remit. **Example:** During the year the Board performed a horizon scanning exercise to ensure that all material risks are considered, specifically including climate-related risks, in the Group risk register.	Page 66 (Strategic report – Risk management)
		The Board receives a regular update (minimum seven times per annum), in the form of a presentation and supplementary written document, on the status of Group environmental (including sustainability and climate-related risks and opportunities) issues and also on the progress made against targets and ongoing action items. **Example:** At each Board meeting there is a Group dashboard containing data for year-on-year reductions in Scope 1 & 2 emissions vs target and commentary from the Group Sustainability Director on risks and opportunities.	Page 87 (Governance and Directors' report – Leadership)
		The Senior Independent Director (SID) is a member of the PSEE Committee with the purpose of receiving information about the Group's engagement with its key stakeholders. This specifically includes sustainability and climate-related risk and opportunity matters as an agenda item. The SID reports this information directly to the Board following each PSEE Committee meeting. **Example:** The SID received a mid-year update at the PSEE meeting on the Group progress to Scope 1 & 2 emissions targets and was given an update on performance against forecast. Any anomalies were noted and actioned.	Page 88 (Governance and Directors' report – Leadership)
		Main events in the Board calendar include the review of the multi-year strategic plan and the approval of the budget. Climate-related risk and opportunities are specifically included in these review meetings. **Example:** The Chair of TT Electronics, in this year's Annual Report, clearly notes that a robust position has "allowed us to devote more Board time to core strategic priorities for the Group and address key operational imperatives in areas such as Health and Safety, Sustainability and ED&I".	Page 84 (Governance and Directors' report – Leadership)

TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES CONTINUED

TCFD RECOMMENDATION	RECOMMENDED DISCLOSURE	OUR RESPONSE	ANNUAL REPORT REFERENCE
GOVERNANCE CONTINUED	**Plans for 2023**	Update the Board on the outcome of the climate-related scenario analysis exercise to be performed. Expand further the inclusion of climate-related issues for consideration in response to major capital expense, acquisitions and divestments.	
	b. Describe management's role in assessing and managing climate-related risks and opportunities.	At the direction of the Board, management are assigned the responsibility to assess, monitor and manage climate-related risks and opportunities. Executive management performed a robust assessment of the principal risks facing the Group. Our management team are fully engaged in the governance process and monitor progress through monthly reports/dashboards and more detailed quarterly reviews. We use our existing structure to manage these processes. In addition, TT has a dedicated Sustainability Director and has management involvement in the PSEE Committee, as described in Governance (a). **Example:** CEO and CFO participated in a climate-related risk and opportunities scenario analysis workshop.	Page 67 (Strategic report – Risk profile)
		Risk identification, assessment and mitigation are performed bottom up, with more detailed assessment at operational level, as well as through top-down assessment at the Executive management and Board level, including climate-related risks and opportunities. Managers at all levels are involved. **Example:** The Group Sustainability Director, together with a taskforce of our managers, performed a detailed assessment of Scope 3 supply chain GHG emissions and their associated risks and opportunities.	Page 66 (Strategic report – Risk management)
		This process includes a bottom-up analysis of key risks and opportunities, including climate-related, at a divisional level. Risks and opportunities specific to our divisions are managed in detail. **Example:** Our divisions are focused on growth in automation & electrification markets. They have recognised that shifting towards electricity as the major fuel powering industrial systems is a key imperative for organisations looking to reduce their carbon footprints.	Page 67 (Strategic report – Risk profile)
	Plans for 2023	Update management on the outcome of the climate-related scenario analysis and develop action plans and/or amend business processes.	
STRATEGY Disclose the actual and potential impacts of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning where such information is material.	a. Describe the climate-related risks and opportunities the organisation has identified over the short, medium and long term.	We have identified sustainability, climate change and the environment as a principal risk. Specifically, our manufactured products or other activities or decisions of the Group may not be judged by our customers, employees, communities and investors as being sustainable. **Example:** We have stated our Purpose clearly to our Stakeholders, that is, we solve technology challenges for a sustainable world. We do this by delivering solutions for our customers that enable products that are cleaner, smarter and healthier and that will benefit our planet and people for future generations.	Page 69 (Strategic report – Principal risks)
		Specifically, we recognise that failure to appropriately manage the environmental impact of our operations and products could cause reputational impact and potential deterioration in our relationships with our stakeholders. **Example** : Clear, publicly stated, goal for Scope 1 & 2 emissions reduction to Net Zero in 2035 to mitigate this.	Page 72 (Strategic report – Principal risks)

TCFD RECOMMENDATION	RECOMMENDED DISCLOSURE	OUR RESPONSE	ANNUAL REPORT REFERENCE
STRATEGY CONTINUED		We recognise a wide range of product opportunities based on the fact that TT technologies address key sustainability megatrends in our target markets and bring environmental and social benefits to society. Our components and, ultimately, products address resource scarcity, improve energy efficiency, support renewables and drive productivity, connectivity and health through their use in customer applications. We are committed to developing cleaner, lighter, more efficient and durable solutions to help combat climate change, engineering advanced electronics to benefit our planet and its people for future generations. Our cleaner, smarter, healthier focus is a key differentiator of our customer offer and drives our approach not only to R&D but to the way we develop, design, engineer and manufacture our products and use raw materials and other resource inputs in the most efficient way. **Example:** Collaboration with a world leader in aircraft electrical systems on power supplies for electric and hybrid electric aircraft.	Page 50 (Strategic report – Our people, environment and communities – Environment)
		Our principal time horizons are short term (rolling 5 years strategic planning), medium term (2035) and long term (2050). **Example:** Clear, publicly stated timeline of 2035 to achieve Net Zero Scope 1 & 2.	Page 50 (Strategic report – Our people, environment and communities – Environment)
	Plans for 2023	Increased granularity and materiality of risks and opportunity analysis in conjunction with the climate-related scenario analysis, to improve upon the level of granularity and materiality that we already have. Consider geographical and/or sector relevance.	
	b. Describe the impact of climate-related risks and opportunities on the organisation's businesses, strategy and financial planning.	The impact on our planning, related to our principal risks, has been a recognition that our own activities come with an environmental impact and therefore we have implemented a detailed, and publicly stated, plan to reduce emissions. That is why we are leading by example to optimise our own operations to reduce TT's impact on the environment. Understanding and managing the impact of our business operations on the environment and our local communities is an important part of the way we do business. We continue to make excellent headway with our ambitious commitment to achieving Net Zero Scope 1 & 2 emissions by 2035. We prioritise these risks through our governance and risk management systems. **Example:** We targeted a 50% reduction in Scope 1 & 2 emissions by the close of 2023 against our 2019 Baseline, and Net Zero for Scope 1 & 2 emissions by 2035, at the latest. Due to the focused efforts of teams across the Group we have achieved our 50% reduction target in 2022, one full year early. To demonstrate our commitment, Scope 1 & 2 emissions were added to our Group KPIs in 2020 and they are aligned with executive remuneration objectives and flowed through the organisation.	Page 50 (Strategic report – Our people, environment and communities – Environment) AND Page 66 (Strategic report – Risk management)
		The impact on our planning, related to our principal opportunities (solving technology challenges for a sustainable world) is most evident in our integration of ESG and sustainability matters into decision-making and business practices, from product development to recruitment and the strategic planning process. This integration is a publicly stated strategic priority for us. **Example:** We are collaborating with aerospace companies in the development of high efficiency, high power density converters as well as technologies for the next generation of higher voltage platforms. This is a direct result of our integration of ESG and sustainability (including climate-related) matters into our decision-making and business processes. Recently, we completed qualification on a Power Supply unit for the Digital Flight Control System (DFCS) and we are now working on the equivalent unit for a new programme. Our ultimate ambition is in broadening our position as a supplier of choice in the increasing electrification of aircraft and aircraft systems. As technology progresses, we believe that we are well positioned to support customers throughout this transition.	Page 20 (Strategic report – Strategic priorities
	Plans for 2023	Improve the clarity of the strategic planning process to more fully reflect identified climate-related risks and opportunities, using the climate-related scenario analysis (to be completed) as a source of input and guidance.	

TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES CONTINUED

TCFD RECOMMENDATION	RECOMMENDED DISCLOSURE	OUR RESPONSE	ANNUAL REPORT REFERENCE
STRATEGY CONTINUED	c. Describe the resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	TT has not yet conducted detailed climate-related scenario analysis. We have begun this journey with a variety of actions, including a workshop in 2022, attended by the CEO and CFO, to assess risk and opportunity in a range of scenarios. TT commits to completion of this detailed climate related scenario analysis during 2023. Should this prompt additional climate-related disclosures, these will be made in the Group's 2023 Annual Report. **Example:** After completion of this workshop, we evaluated the output and used this as a starting point to enable the completion of a detailed scenario analysis.	Page 50 (Strategic report – Our people, environment and communities – Environment)
	Plans for 2023	Completion of a detailed climate-related scenario analysis during 2023 to aid detailed assessment of the resilience of TT's business and strategy.	
RISK MANAGEMENT Disclose how the organisation identifies, assesses, and manages climate-related risks.	a. Describe the organisation's processes for identifying and assessing climate-related risks.	Climate related risk identification is performed both bottom up with more detailed assessment at operational level, as well as through top-down assessment of strategic and market risk at the Executive management and Board level. Ongoing data and information relevant to climate related risks is supplied through regular Board reports in the form of dashboards and written submissions. Requirements of guidelines, and those of a regulatory nature, are monitored on an ongoing basis and we maintain both awareness and links to professional bodies and organisations such as CDP. Relative significance, size and scope of climate-related risks is assessed utilising our risk management procedures. The critical element of this is to determine materiality through consideration of likelihood, gross impact, mitigation and net impact. Our risk terminology is consistent throughout and in our hierarchy we position 'principal risk' as those risks that are highlighted in our Annual Report. **Example:** Inclusion of "sustainability, climate change and the environment" as a principal risk.	Page 66 (Strategic report – Risk management)
	Plans for 2023	Increased granularity and materiality of risks and opportunity analysis, once the climate-related scenario analysis is complete, to improve upon the level of granularity and materiality that we already have.	
	b. Describe the organisation's processes for managing climate-related risks.	As part of its risk management processes, the Board regularly considers its risk appetite in terms of the tolerance it is willing to accept in relation to each principal risk based on key risk indicators to ensure it continues to be aligned with the Group's goals and strategy. Each principal risk is considered as to whether or not it currently falls within the Group's appetite for that risk. As part of the year-end risk assessment with the Board, it was confirmed that all of the principal risk areas continue to be within Board and Executive management's appetite for that risk. **Example:** Regular updates on electricity consumption and therefore emissions of CO_2, highlighted a risk to Scope 2 targets, due to higher-than-expected levels of activity. This alerted us to a potentially increased level of risk and triggered our process to deal with the issue enabling us to react with a detailed plan to reduce electricity consumption. This was successfully implemented in a number of plants in 2022.	Page 67 (Strategic report – Risk management framework)
	Plans for 2023	**Opportunities for improvement**: Isolate climate-related risks within the Group Risk Register to improve clarity.	

TCFD RECOMMENDATION	RECOMMENDED DISCLOSURE	OUR RESPONSE	ANNUAL REPORT REFERENCE
RISK MANAGEMENT CONTINUED	c. Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organisation's overall risk management.	Climate-related matters are fully integrated into TT's risk management processes. The Risk Committee supports the Board and the Audit Committee in monitoring the exposure to climate-related risks through regular reviews, including reviewing the effectiveness of risk management processes and controls. The Risk Committee provides the framework for managing these risks, regular reviews of principal risks, and risk management processes. To enable a bottom-up detailed approach, the divisions provide risk identification, assessment and implementation of risk management action plans and actions. Business units/site level steering and reporting teams implement and embed risk management at operational level. Climate-related risks are included in these standard procedures. **Example:** The TT Group Risk Register contains a clear section on "sustainability and the environment" which includes climate-related risks. This allows these risks to be monitored as part of our usual business processes.	Page 67 (Strategic report – Risk management framework)
	Plans for 2023	Increased granularity and materiality of risk analysis, once the climate-related scenario analysis is complete, to improve upon the level of granularity and materiality that we already have.	
METRICS AND TARGETS Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where the information is material.	a. Disclose the metrics used by the organisation to assess climate-related risks and opportunities in line with its strategy and risk management processes.	TT uses a wide variety of metrics to assess climate-related risks and opportunities. Metrics (and reduction targets) for emissions of GHGs play a key role in reducing our impact on the planet, addressing a principal risk of reputational damage and bolstering our recognised opportunities related to our purpose of solving technology challenges for a sustainable world. Comprehensive emissions statistics are used at monthly divisional meetings, quarterly Executive reviews and at Board meetings. TT is committed to measuring and reporting Scope 3 emissions. Examples of other metrics include: electricity consumption; proportion of electricity coming from renewable sources; water use; ratings from external agencies (this year both MSCI and CDP); proportion of revenue as R&D spend on new products (strategically aligned with sustainability). With regard to cross-industry climate-related metrics: GHG emissions, transition risks, climate-related opportunities and capital deployment are all part of our planning and we have, or intend to have, appropriate metrics. Remuneration is already linked to climate-related issues. We do not intend to develop metrics based on internal carbon pricing. **Example:** TT reported a 23% reduction in GHG emissions (Scope 1 & 2) year-on-year in 2022 and a reduction of 54% against our Baseline in 2019. This is in comparison to our publicly stated target of a 50% reduction vs Baseline by 2023.	Page 50 (Strategic report – Our people, environment and communities – Environment)
	Plans for 2023	Develop additional metrics fully consistent with the cross-industry, climate-related metric categories (where applicable and in consideration of alignment with our own risks, opportunities and business processes).	

TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES CONTINUED

TCFD RECOMMENDATION	RECOMMENDED DISCLOSURE	OUR RESPONSE	ANNUAL REPORT REFERENCE
METRICS AND TARGETS CONTINUED	b. Disclose Scope 1, Scope 2 and, if appropriate, Scope 3 GHG emissions, and the related risks.	TT emissions data can be found in full in the Environmental performance and disclosures section of the Annual Report. In 2022 our Scope 1 emissions were 897 tCO_2e and Scope 2 emissions were 11,269 tCO_2e. Our total Scope 1 & 2 emissions were 12,166 tCO_2e, 23% less than 2021 and 54% less than our Baseline in 2019. Our Intensity Ratio was 19.8 tCO_2e/£M revenue, a 40% reduction from 2021 and a 65% reduction from Baseline in 2019. We have assessed nine categories of Scope 3 emissions in detail and will measure and report on six of these categories. A detailed explanation can be found in the Environmental performance and disclosures section of the Annual Report. TT is fully committed to measuring and reporting relevant Scope 3 emissions and we will be setting a Baseline and reduction targets within two years. Related principal risk is a failure to address our environmental impact and thereby damaging our reputation with stakeholders. **Example:** TT continues to grow the proportion of electricity use that comes from renewable sources. We have done this for three years in a row and it is now 45% of our total electricity consumption.	Page 52 (Strategic report – Our people, environment and communities – Environmental performance and disclosures)
	Plans for 2023	Measure and report Scope 3 emissions for 2023 and develop a Baseline and reduction targets by 2024.	
	c. Describe the targets used by the organisation to manage climate-related risks and opportunities and performance against targets.	TT uses a wide variety of targets to measure performance and manage climate-related risks and opportunities. Our key targets used to manage our environmental impact are critical to address a principal risk of reputational damage potentially caused by a failure to manage our impact on the environment. The key targets are: Scope 1 & 2 emissions measured against a Baseline of 2019, short term target reduction by 50% (2023), medium term target Net Zero (2035) and long-term target to maintain Net Zero (2050). Scope 3 emissions have been assessed and we will measure and report in the future. We will set a Baseline and reduction targets within two years and include a long-term target of Net Zero by 2050. We have an additional target to move all sites to renewable electricity supply, whether that is externally supplied or internally generated (medium term 2035). **Example:** Flow down of ESG targets, including sustainability and climate-related targets, into short term incentive objectives for our wider management teams.	Page 52 (Strategic report – Our people, environment and communities – Environmental performance and disclosures) AND Page 34 (Strategic report –Our KPIs)
	Plans for 2023	Develop additional targets fully consistent with the cross-industry, climate-related metric categories (where applicable and in consideration of alignment with our own metrics for risk, opportunities and business processes).	

COMMUNITIES

We encourage our teams to take an active role in their local communities, whether fundraising and volunteering for chosen charities or committing time and resources to promoting STEM education and careers.

STEM SKILLS

STEM skills are in high demand, and this will only grow in the future. Our teams of engineering, technology and manufacturing experts are passionate advocates for the development of STEM skills and engaging with the next generation of potential talent. We are particularly keen to encourage more women and under-represented groups to take up STEM subjects and careers.

Many of our employees give up their time to develop local STEM partnerships to promote careers in electronics and related fields, undertaking talks, demonstrations and attending careers fairs to interest and educate young people in the sector. Across the world we also aid school curriculums directly by supporting science projects and engineering competitions to highlight the importance of STEM subjects in everyday life.

STEM PROGRAMME RETURNS TO KUANTAN

After a three-year absence due to COVID, TT Kuantan, Malaysia launched its fourth STEM programme in 2022. The team selected a primary school for indigenous students located in a rural area around 70 kilometres from the Kuantan site. As in previous years the team spent a day at the school, setting up a STEM educational booth and leading interactive games with the students. A week later, the students were invited to visit TT for a guided plant tour. At the close of the programme the team donated a smart TV, an air conditioner and a camera to the school to support the students' continuing education.

TT CLEVELAND, US INTRODUCES A NEW GENERATION

TT Cleveland hosted a group of students from the local Auburn Career Center for a careers event in 2022. The students enjoyed a site tour, followed by a presentation and Q&A about TT and STEM careers. Two female team members – Helen Cole and Halley English, a graduate of Auburn Career Center – then shared how their careers had developed at TT. The event concluded with a pizza party and swag bags for the students which included a TT Way values t-shirt to remind them of the day.

VOLUNTEERING AND CHARITABLE GIVING

TT has a big fundraising and volunteering culture – our efforts bring our employee teams together as well as benefiting our communities.

Each site chooses a local charity to support through the year and our 'Hours for giving' programme enables employees to take five hours paid leave per year to support local causes.

In 2022 more than 3,600 hours were taken under the programme.

Our teams support many other local and national causes and are able to request matched funding from TT through the Giving the TT Way programme.

TT CARDIFF, UK RAISES A MASSIVE £10K

On hearing of the plight of Ukrainians affected by the Russian invasion of Ukraine our Cardiff team pledged to support them in any way they could. Then began a fundraising campaign which would ultimately raise more than £5k, which was matched by TT. Events included a raffle, a bake sale and a Walk for Ukraine and the team sold pins and asked other local businesses for donations. Some male team members even agreed to be waxed and Cardiff's two BE Inspired winners generously donated their prizes. The whole team was exceptionally proud of the result and went on to challenge all TT employees to plant sunflowers in TT's Annual Sunflower Contest in honour of Ukraine, with an award at the end of the summer for the tallest sunflower.

TT MEXICALI, MEXICO UNIDOS POR LA EXCELENCIA

In August, TT Mexicali held its second 'Unidos por la Excelencia' (United for Excellence) event. The event recognised elementary school children of TT Mexicali employees who had received high grades at school. Due to the generosity of employees, the site was able to gift scholarships, a gift certificate for school supplies, a backpack and a shirt with the event's slogan to these hard working children.

HELPING SUZHOU FAMILIES IN NEED

Our Suzhou, China team has been working with local charity Suzhou Little Red Cap Association since 2019 to support children of families in need. Despite COVID restrictions, our team was still able to hold a small in-house bazaar in November this year in which 200 employees participated, raising CNY3.5k. The team has now raised more than CNY30k for Little Red Cap since 2019.

25 YEARS OF REMEMBRANCE

Adam Bayliss from our Fairford, UK team has been playing The Last Post on his cornet at the Fairford War Memorial Remembrance Day service for 25 years. This year he recorded one of his rehearsals to play on site to mark the Fairford team's own two minutes' silence on 11 November.

TT DALLAS, US SUPPORTS LOCAL SHELTER

Our TT Dallas team partnered with local organisation Hope's Door New Beginning Center and raised nearly $1k in donations through various bake sales and a fun raffle. Hope's Door provides assistance to individuals and families affected by domestic abuse and violence.

SECTION 172 STATEMENT

Under Section 172 of the Companies Act 2006, Directors are required to promote the success of the Company for the benefit of our shareholders, whilst having regard to the factors set out in Section 172 including the interests of our other stakeholders. The Board has identified who its key stakeholders are and has considered how it engages with these groups (see pages 36 to 37). Throughout the year, the Board considered how stakeholders are affected by key decisions.

The principal decisions taken by the Board in 2022 centred around: (i) Board-level engagement (particularly with TT management, employees, customers and shareholders); (ii) "deep dive" strategic review sessions; (iii) progression of the Defined Benefit Pension Scheme Buy-in arrangement; (iv) refinancing the Group's Revolving Credit Facility; and (v) development of TT's Sustainability/ESG initiatives.

The following examples describe how the Board addressed its s172 responsibilities (and engaged across a range of stakeholder groups) in response to these priority initiatives in 2022.

1: BOARD LEVEL ENGAGEMENT WITH TT MANAGEMENT/EMPLOYEES/CUSTOMERS/INVESTORS

Stakeholders involved:
Employees, customers, investors.

A. Why?

- To deepen NED relationships with the ELT, senior management and staff at all levels across the organisation, in order to address the "wider engagement" post-pandemic action from the 2021 external Board evaluation exercise.
- To better understand key employee, customer, supply chain, geographic and technology-based trends across the Group's operations.
- To identify opportunities for improved cross-functional working, particularly between Power Solutions and the GMS Division.
- To stay ahead of the talent bench strength requirements for the Group and understand succession opportunities and individual/ Divisional development priorities.
- To better understand key investor priorities and drivers of growth.

B. Scope

- Board visit to the Oldham facility, to meet senior management and staff working in the Ferranti business acquired in January 2022 and to consider progress against the Power Solutions Strategy.
- Board visit to one of GMS Suzhou's key customers, Waters, including a site tour and Q&A session with senior management, which (i) provided a deep insight into TT's technology/supply chain positioning and the "strategic partnership" nature of the customer relationship; and (ii) allowed the Board to underline its customer support.
- NED visit to TT's Minneapolis and Cleveland facilities in the US, attended by the Chairman and Chair of the Audit Committee, to meet senior management/staff and better understand TT's customer opportunities, business performance and risk management activities, at both a site level and across the EMS market and medical/power solutions sectors.
- NED "pulse call" with the GMS Suzhou senior management team, conducted by video conference, to gain a greater insight into current operations, performance, opportunities and challenges at TT's largest Asia-based facility.
- Various face-to-face sessions conducted by the NEDs throughout the year with site, Divisional and functional heads to discuss business dynamics and operational challenges (including Board dinners and ad hoc meetings).
- CEO/CFO regularly meet with institutional shareholders.
- IR briefings provided to the Board (including from brokers) on investor feedback.
- Face-to-face meetings offered (and several accepted) for institutional investors to meet with Board/Committee Chairs.

C. Board decisions/Key outcomes

- Increased understanding of customer operating needs and TT's contribution to maintaining product deliveries (including inventory management) in challenging supply chain conditions.
- Greater appreciation of the demands on senior management and staff (including wellbeing and stress management) in a high growth, significant change, inflationary environment, operating under material supply chain constraints.
- Increased focus on ED&I initiatives across the Group (see page 47 for more detail).
- Greater focus on the interplay between incentives and key strategic imperatives for the Group (e.g. the linkage between supply chain constraints and inventory management).
- Promotion of the Power Solutions technology roadmap and its linkage to GMS manufacturing capability.
- Investor comments feed into strategic decision-making and Board priority actions.

SECTION 172 STATEMENT

2: "DEEP-DIVE" STRATEGIC REVIEW

Stakeholders involved:
Shareholders, employees, customers/suppliers.

A. Why?

- To undertake an in-depth review of the strategic positioning of the Group, assessing options to reposition the business portfolio in light of customer growth opportunities, ongoing supply chain constraints, "people" factors and macro-economic challenges.
- To carefully consider TT's portfolio of business units and the extent to which they operated in the right market segments, with appropriate levels of investment/resource, aligned with TT's growth strategy.
- To address challenging market conditions and share price pressures across TT's industry sector.

B. Scope

- The Board engaged external advisers to undertake a detailed assessment of TT's strategic growth plan and its business operations and valuation potential.
- The Board considered options to grow key customer accounts (and ensure continuity of supply in challenging market conditions), linked to the Group's technology road map and corporate purpose.
- The Board focused on the protection of jobs and providing salary increases/financial support to the lowest paid part of the workforce in an attempt to minimise the burden of the global cost-of-living crisis.

C. Board decisions/Key outcomes

- Completion of the Ferranti acquisition in January 2022, to enhance TT's Power Solutions capabilities in aerospace & defence.
- Prioritisation of key customer accounts/areas of greatest growth opportunity, with appropriate levels of investment being directed towards ensuring continuity of supply (including inventory management).
- Focus on ensuring appropriate incentivisation of key talent, for recruitment/retention purposes, in a competitive marketplace.
- Financial assistance provided to the lower paid parts of TT's workforce by delivering initiatives such as market-tested salary increases, an energy support scheme (for UK employees below certain salary levels) and a Salary Finance Loan scheme.

3: PENSION SCHEME BUY-IN/RCF REFINANCING

Stakeholders involved:
Employees, pension holders (current and future), regulators.

A. Why?

- To de-risk the cost/liability profile of TT's Defined Benefit scheme and take the opportunity (created over a number of years by the collaborative efforts of the Company and Scheme Trustee) to insure the scheme liabilities with a bulk annuity insurer.
- To ensure that the Pension Scheme buy-in arrangements were concluded in a way that would materially benefit TT and its stakeholders (including current and future pension holders), with no stakeholder groups being disadvantaged.
- To re-finance the Group's existing debt facility, well in advance of the scheduled maturity date of November 2023, to give a further four years of facility cover, taking advantage of positive lending conditions at the H1 stage, removing potential re-financing risk and providing headline facility cover (when combined with the existing Private Placement facility) at a level considered appropriate for the Group's future borrowing needs.

B. Scope

- The Board recognised that TT's Defined Benefit scheme had operated effectively in the past few years, in close cooperation with the trustees, thereby mitigating liability risks associated with the scheme. The combination of the scheme investment strategy, Company cash contributions and liability management exercises, had materially reduced the scheme buy-in deficit to a position where a buy-in was feasible.
- Following the completion of an extensive data cleansing exercise, the Board recognised that 2022 represented an optimal time to launch a buy-in transaction for the Defined Benefit scheme and worked with the scheme trustees and advisers to ensure that all relevant regulatory and transactional hurdles were addressed, including the interests of current/future pension holders and TT's wider employee base.
- The Board monitored the macro-economic environment throughout the year and took the decision in H1 to launch the refinancing of the Group's existing RCF, on favourable commercial terms, anticipating the potentially adverse impact of geopolitical uncertainty on debt markets in the H2 period (see page 32 for more details).

C. Board decisions/Key outcomes

- Decision to run a competitive bidding process (with the scheme trustees) to identify a preferred insurer to lead the transaction for the bulk annuity insurance buy-in.
- Execution of the transaction for the bulk annuity insurance buy-in arrangements in November 2022.
- Completion of the new RCF facility in June 2022.

4: SUSTAINABILITY/ESG

Stakeholders Involved:
Shareholders, employees, customers/suppliers, regulators.

A. Why?
- To ensure that TT's ESG strategy, progress to date and future plans (particularly on Scope 1, 2 and 3 initiatives) is effectively communicated and understood by TT's stakeholder groups.
- To ensure that ESG targets are properly reflected in site-level and Divisional objectives, and short-term incentive plans (for Executive Directors and the wider management teams).
- To provide consistent data across the Group to track and monitor progress on key ESG targets.
- To ensure compliance with the new TCFD regulatory requirements.

B. Scope
- The Board now receives monthly reports on the Group's environmental and safety performance.
- The Board requested the internal audit team to undertake a review of the Group's Scope 1 & 2 emissions data.
- CEO and CFO participated in climate risk and opportunities scenario analysis workshop.

C. Board decisions/Key outcomes
- The outputs of the progress made by TT in the past year on its ESG programme is set out in detail in the People, environment and communities section on page 38. This section also includes TT's key ESG priorities for the coming years.
- Appointment of external consultants to facilitate detailed consideration of TT's positioning on the new TCFD regulatory requirements.
- Expansion of Executive Director STIP targets for 2023 (as agreed by the Remuneration Committee) to have ESG items separated from "strategic objectives", accounting for 10% of the annual bonus award (see the Remuneration Report for more details).
- Flow down of ESG targets into short-term incentive objectives for the wider management teams.

RISK MANAGEMENT

ROBUST PRACTICES IN SUPPORT OF OUR BUSINESS MODEL

RISK MANAGEMENT

The Board of Directors is responsible for risk management and internal controls, supported by the Audit Committee and informed by the executive Risk Committee. The Board defines risk appetite and monitors the management of significant risks to ensure that the nature and extent of significant risks taken by the Group are aligned with overall goals and strategic objectives.

The Risk Committee supports the Board and the Audit Committee in monitoring the exposure through regular reviews, including reviewing the effectiveness of risk management processes and controls. The Internal Audit function is operated under a directed co-sourced arrangement with PwC to enhance the levels of resource and expertise available to the Group in specific areas, with its activities under the direction of the Executive Leadership Team (ELT) and the Audit Committee. We now have a dedicated in-house Head of Internal Audit & Risk in post who is supported by an internal compliance team. The team are currently in the process of refreshing our Control Framework to further strengthen control compliance across the business.

The Head of Internal Audit & Risk assists the Risk Committee by advising management on improvements to the overall risk management framework, facilitating the risk review process and providing independent experience and input to the process.

Risk management processes and internal control procedures are established within business practices across all levels of the organisation. Risk identification, assessment and mitigation, including climate-related risks, are performed both bottom up with more detailed assessment at operational level, as well as through top-down assessment of strategic and market risk at the Executive management and Board level. All of our manufacturing sites perform an annual self-assessment against the control framework and the results inform the internal audit programme of work and internal audit plan risk assessment.

Risk management and internal controls provide reasonable but not absolute protection against risk. The Board acknowledges and recognises that in the normal course of business, the Group is exposed to risk and that it is willing to accept a level of risk in managing the business to achieve its strategic priorities.

Risk appetite is not static and, as part of its risk management processes, the Board regularly considers its risk appetite in terms of the tolerance it is willing to accept in relation to each principal risk based on key risk indicators to ensure it continues to be aligned with the Group's goals and strategy.

During the year we reviewed the Group risks and performed a horizon-scanning exercise to ensure that we have considered all material and emerging risks in our Group risk register. Each principal risk is considered as to whether or not it currently falls within the Group's appetite for that risk. As part of the year-end risk assessment with the Board, it was confirmed that all of the principal risk areas continue to be within Board and Executive management's appetite for that risk.

OUR RISK MANAGEMENT FRAMEWORK

Corporate level steering
Top-down oversight; set risk appetite; monitor significant risks; alignment with strategic objectives at corporate level

Board of Directors
Primary responsibility for risk oversight; setting strategic objectives; and defining risk appetite

Audit Committee
Oversees risk management and internal control processes

Risk Committee
Provides framework for managing risks; regular reviews of principal risks; and risk management processes

Risk and Assurance function

Divisional level steering and reporting
Risk identification assessment and implementation of risk management action plans and actions

Business units/site level steering and reporting
Implement and embed risk management at operational level

Operational steering and implementation
Bottom-up identification, assessment and mitigation of risk at operational level

RISK PROFILE

At the direction of the Board, Executive management performed a robust assessment of the principal and emerging risks facing the Group, taking into account those that would threaten the business model, future performance, solvency or liquidity, as well as the Group's strategic objectives. This process includes a bottom-up analysis of key risks at a divisional level, including climate-related risks. All principal risks identified by this process may have an impact on the Group's strategic objectives within the next six to twelve months. Executive management and the Risk Committee perform further analysis to prioritise these risks, with a focus on those principal elements posing the highest current risk to the achievement of the Group's objectives or the ongoing viability of the business. Risks assessed as higher priority are consolidated into a Group risk register. Risks included on the register are monitored closely by the Board in terms of both prioritisation and mitigation strategies.

It is recognised that, whilst these "top risks" represent a significant proportion of the Group's risk profile, Executive management and the Risk Committee continue to monitor the entire universe of potential risks to identify new or emerging threats as well as changes in risk exposure and a risk horizon-scanning exercise is performed annually.

The risk horizon scanning exercise includes consideration of the emerging risks facing TT as an electronics manufacturing business and as a result if any new emergent risks require inclusion on the Group risk register. As a result of the risk horizon scanning exercise no new emerging risks were identified that were not already captured in the Group risk register which flows through to our principal risks detailed in this report. The Risk committee reviews the Group risk register at each meeting to ensure that the risk profile is appropriate and includes all relevant risks including emerging risks as appropriate.

The assessment of principal risks during the year has identified that, while there have been some significant changes in the external environment, the Group has remained robust and resilient with mitigating activities undertaken. This is reflected in the table of principal risks.

The Group has long been conscious of the ESG agenda which has been reported to the Board through our People, Social, Environmental and Ethics Committee (PSEE) which is attended by the Senior Independent Director. There continues to be a risk that a negative perception of our ESG profile could impact on our ability to attract new talent to the business, build relationships with our customers, positively impact the communities in which we operate, and attract investment from potential shareholders.

The risks in relation to these areas are captured in two principal risks, "sustainability, climate change and the environment" and "health and safety". TT Electronics is committed to achieving its sustainability objectives, reducing carbon emissions, and improving efficiency and we have extended our climate reporting in line with TCFD reporting requirements to include climate scenario analysis. We have set out our approach and our progress in these areas in the Our people, environment and communities section of this report from page 38.

The Board monitors the Company's internal control systems and has reviewed their effectiveness in 2022. The review process considered all material controls including, (i) the information relating to the general controls environment as outlined in the Internal Audit reports submitted to the Audit Committee at each meeting; (ii) financial controls; (iii) compliance controls; (iv) the key outputs of the controls framework programme; and (v) management actions in relation to internal and external audit findings.

The Board found that the Group operates a sound system of internal control and did not recommend any specific actions.

MACROECONOMIC ENVIRONMENT AND SUPPLY CHAIN

There continues to be challenges as a result of the geopolitical environment and disruption to the supply chain. However, we have grown our order book to record levels throughout 2022 and going into 2023 reflecting our successful positioning in structural growth markets, new project wins and multi-year revenues.

The ongoing focus on strategic direction and markets has significantly improved the Group's overall resilience to these external factors.

The Group continued to experience challenges in relation to supply chain lead times, component shortages and costs, and mitigating this has been a significant focus for all divisions in 2022. A robust process and controls environment, alongside forward-looking indicators and supply chain tools, has supported this process. The Group has also taken strategic decisions to purchase additional materials, building inventory in certain key areas to enable delivery against a strong customer order book.

IMPACT OF COVID-19

During 2022, most of our business have, consistent with broader society, learned to operate in a more "business as usual" manner as regards COVID-19.

China continued to adopt a zero tolerance approach to COVID-19 through most of 2022, which had an ongoing impact on supply chains and logistics out of China. The relaxation of these rules saw high levels of infection impact the country in December and this may continue through 2023.

Our COVID-secure working practices and pro-active demand management continues to keep our employees safe whilst managing the needs of our customers.

VIABILITY STATEMENT AND PROSPECTS

In accordance with the UK Corporate Governance Code, the Directors have assessed the viability and long-term prospects of the Group over the period to December 2025, taking into account the Group's current position and the potential impact of the principal risks and uncertainties set out on pages 69 to 72 of the Strategic report. Based on this assessment, the Directors confirm that they have a reasonable expectation that the Group will be able to continue in operation and meet its liabilities as they fall due over the period to December 2025.

TT operates in markets with structural growth dynamics. We engineer and manufacture power, sensing and connectivity solutions to address our customers' challenges in the healthcare, aerospace & defence, and automation & electrification markets. These benefit from the trends for improved healthcare, for increased aircraft fuel efficiency and safety, and demand for sustainable solutions to improve energy efficiency. By positioning ourselves in the right markets, by creating differentiated capabilities through our R&D investment, and by attracting and developing the right talent we have a strategy to create sustainable value over the long term.

While the Directors have no reason to believe the Group will not be viable over a longer period, the period over which the Directors consider it possible to form a reasonable expectation as to the Group's longer-term viability, is the three-year period to 31 December 2025. This is encapsulated in the five-year period business plan prepared annually and reviewed by the Board and aligns with the business cycle including product development and order intake trends. The Directors believe that this presents investors and other key stakeholders with a reasonable degree of confidence while still providing a longer-term perspective.

In making this statement, the Directors have carried out a robust assessment of the principal risks facing the Group, including those that would threaten its business model, the underlying mitigation planning, the assessment of future performance, solvency and liquidity, and the Group's internal controls environment.

In performing the assessment, the Directors have further stress-tested the Group's financial projections for the period covered by the viability statement, testing it for "business as usual" risks (such as profit growth and working capital variances), the combined impact of severe but plausible events, as well as a "reverse" stress test to understand the conditions which could jeopardise the future viability of the Group. This work included assessing against financial covenants and facility headroom.

This severe but plausible events' stress testing included consideration of the potential impact of the Group's principal risks and uncertainties outlined on pages 69 to 72. This stress testing specifically included the impact of the following principal risks: general revenue reductions; contractual risks; people and capability; supplier resilience; and health and safety. Principal risks which were not specifically modelled were either considered not likely to have an impact within the viability period or their financial effect was covered within the overall downside economic risks implicit within the stress testing.

The Group's wide geographical and sector diversification helps minimise the risk of serious business interruption or catastrophic reputational damage. Furthermore, the business model is structured so that the Group is not overly reliant on any single customer, market or geography.

While this review does not consider all of the risks that the Group may face, the Directors consider that this stress testing-based assessment of the Group's prospects is reasonable in the circumstances of the inherent uncertainty involved.

PRINCIPAL RISKS AND UNCERTAINTIES

Technology investment and R&D

Targeted and complementary M&A

Margin enhancement

Integration of ESG

RISK DESCRIPTION	POTENTIAL IMPACT	MITIGATING ACTION	CHANGE IN THE YEAR
GENERAL			
General revenue reduction Reduction in demand and orders due to economic downturn, geopolitical instability or disruption to operations (pandemic or other business interruption event) **Sponsor** Richard Tyson **Link to strategy**	– Decelerating sales growth affecting operating profit	– Monitor the wider economic conditions of our markets – Timely financial reporting to monitor performance and provide a basis for corrective action when required – Ongoing optimisation of our cost base and strategic moves creating a more resilient portfolio – Business continuity and crisis management planning – Management structures in place to enable a rapid response to changing circumstances	**2021** **2022** Risk stabilised. There continue to be challenges as a result of the geopolitical environment and disruption to the supply chain. However we have grown our order book to record levels throughout 2022 and going into 2023 reflecting our successful positioning in structural growth markets, new project wins and multi-year revenues.
COMMERCIAL			
Contractual risks Potential liabilities from defects in performance-critical products that often operate in extreme environments **Sponsor** Richard Tyson **Link to strategy**	– Reputational impact – Deterioration in customer relationships – Liability claims – Reduction in revenue, profitability and cash generation	– Quality control procedures and systems in place and appropriate levels of insurance carried for key risk – Group guidelines on acceptable levels of contractual liability are reinforced – Continuing to enhance and deepen expertise in contract management across the Group	**2021** **2022** No change.

RISK DESCRIPTION	POTENTIAL IMPACT	MITIGATING ACTION	CHANGE IN THE YEAR
COMMERCIAL			
Research and development Delay in new product development which is intended to support revenue growth **Sponsor** Mike Leahan **Link to strategy**	– Increased cost in product development – Delay in achieving projected revenue – Inability to meet the latest requirements due to a step change in technology	– Close collaboration with key customers – Active monitoring of costs and milestones – Target R&D more effectively – Implementation of standard project management disciplines	2021 2022 No change. R&D spend is one of our key capital allocation priorities and we continue to work in partnership with our customers to bring new, innovative products to market.
OPERATIONAL			
People and capability Ability to attract and retain high-quality and capable people **Sponsor** Sarah Hamilton-Hanna **Link to strategy**	– Loss of key personnel – Potential business disruption – Breakdown of communication and misalignment	– Remuneration structure designed to support retention – Succession planning processes embedded within the businesses – Campaigns to increase performance and development of communication between managers and employees to ensure alignment to objectives – Regular talent reviews across all Divisions and Group – Using a feedback loop utilising surveys to encourage regular objectives and performance discussions. See Our people on page 38	2021 2022 Risk stabilised. The US continues to present challenges in recruiting talent which has resulted in salary inflation but we have seen attrition stabilise through the year.
Supplier resilience Potential failure of critical suppliers; product delivery delays; inability to meet customer commitments **Sponsor** Mike Leahan **Link to strategy**	– Reduction in revenue, profitability and cash generation	– Regular review of key supplier financial health and product quality – Monitoring of relevant commodity and precious metals pricing – Review of spend patterns to identify opportunities – Inventory build on key components where considered necessary to mitigate some of the supply chain risk – Supply Chain Council in place	2021 2022 Risk stabilised. Investment in inventory to support increased customer demand and extended material lead times and shipment delays.

RISK DESCRIPTION	POTENTIAL IMPACT	MITIGATING ACTION	CHANGE IN THE YEAR
OPERATIONAL			
IT systems and information IT security breaches or disruption, unauthorised access or mistaken disclosure of information **Sponsor** Derek Winskill **Link to strategy**	– Reputational impact, business disruption and potential deterioration in customer relationships	– Regular analysis of cyber security and data management – IT strategy reviewed by management and the Board – Information security policies updated recently – Investment through recruitment of additional IT security and enterprise resource planning (ERP) specialists – Processes and tools put in place to support cyber security certifications – Disaster recovery plans in case of system failure – Annual penetration testing – Internal vulnerability scanning	**2021** **2022** Risk stabilised. Cyber controls firmly established to mitigate cyber risk.
M&A and integration Realisation of financial benefit of acquisitions **Sponsor** Mike Leahan **Link to strategy**	– Failure to realise the expected benefits of an acquisition or post acquisition performance of the acquired business not meeting the expected financial performance at the time acquisition terms were agreed could adversely affect the strategic development, future financial results and prospects of the Group	– Full financial and other due diligence is conducted to the extent achievable in the context of each M&A opportunity – A detailed business case including forecasts is reviewed by the Board for each opportunity – Integration risk and planning is reviewed and undertaken as part of every acquisition – Lessons learned activities are built into future plans	**2021** **2022** Risk stabilised. Ferranti acquisition in Oldham in January 2022 is embedded within the TT business and has successfully secured a seven-year design and development contract for power converters for a new business jet. The award builds on the existing relationship between TT and this customer and strengthens our order book.
Health and safety The manufacturing industry is inherently dangerous. Managing the impact on our employees, sites and the environment of these risks **Sponsor** Sarah Hamilton-Hanna **Link to strategy**	– Incidents occurring due to unsafe manufacturing processes. Failure to manage the impact of these risks could negatively impact our employees, lead to regulatory fines, reputational damage and lost production	– Health, Safety and Environmental Council responsible for Group-wide best practice sharing, monitoring and improvements and strategy setting – Regional best practice teams established – Processes and roadmaps in place to minimise the risk of incidents – HS&E compliance self-assessment and external global H&S audit on a rolling three-year cycle across the sites	**2021** **2022** No change.

OPERATIONAL

RISK DESCRIPTION	POTENTIAL IMPACT	MITIGATING ACTION	CHANGE IN THE YEAR
Sustainability, climate change and the environment Our manufactured products or other activities or decisions of the Group, including in relation to climate-related risks, may not be judged by our customers, employees, communities and investors as being sustainable **Sponsor** Sarah Hamilton-Hanna **Link to strategy**	– Failure to appropriately manage the environmental impact of our operations and products – Reputational impact and potential deterioration in our relationships with our stakeholders	– Health, Safety and Environmental and Sustainability Councils responsible for sharing Group-wide best practice, monitoring improvements and strategy setting – PSEE Committee responsible for reporting Group progress against the development and monitoring of our strategy and associated KPIs – Continued investment in M&A, business development and new product introduction in areas where the solutions contribute to a more sustainable world – Progress made in reducing our carbon emissions through transitioning to renewable energy contracts	**2021** **2022** No change. We are committed to achieving our sustainability objectives, reducing carbon emissions, and improving efficiency and we are extending climate reporting to be consistent with the TCFD reporting requirements. During 2022, we reduced our Scope 1 & 2 emissions by 23%; these are now down 54% from our 2019 baseline. The reduction was primarily related to a site relocation, the implementation of energy reduction plans across our sites and grid emissions in Mexico. During the year we made progress assessing our Scope 3 emissions including partnering with the Carbon Disclosure Project (CDP) to measure carbon emissions in our supply chain. Our TCFD statement can be found on page 55.
Legal and regulatory compliance Intentional or inadvertent non-compliance with legislation including laws and regulations covering export control, anti-bribery and competition **Sponsor** Lynton Boardman **Link to strategy**	– Reputational impact – Civil or criminal liabilities leading to significant fines and penalties or restrictions being placed on the ability to trade – Reduction in revenue, profitability and cash generation	– Cross-divisional export compliance group established and anti-bribery programme in place – Export control policy, procedure and training all in place and Denied Party Screening undertaken – Approach involves risk assessment, policy, training, review and monitoring – Whistleblower process in place to ensure issues can be raised, investigated and managed	**2021** **2022** No change.

GOING CONCERN

The Group's business activities, together with the factors likely to affect its future development, performance and position are set out within the Strategic Report on pages IFC to 75.

The Strategic Report analyses the financial position of the Group, its cash flows, liquidity position and borrowing facilities. In addition, note 21 to the financial statements includes the Group's objectives, policies and processes for managing its capital; its financial risk management objectives; details of its financial instruments and hedging activities; and its exposures to credit risk and liquidity risk.

The Group has experienced continued improvement in trading momentum and strong growth on our 2021 results. The structural growth markets we have selected to focus on have moved back towards their long-term growth trajectory, the benefits of our strategic repositioning and focus on building close relationships with our clients can be seen in both the order book and financial performance of the Group.

The Group's financial position remains strong, at 31 December 2022 it had:

- £267.2 million of total borrowing facilities available (comprising committed facilities of £226.0 million and uncommitted facilities of £41.2 million representing overdraft lines and an accordion facility of £32.6 million). The Group's primary source of finance is the £147.4 million committed revolving credit facility (RCF) which was signed in June 2022 to replace the already existing RCF; at 31 December 2022 £103.6 million of this facility had been drawn down. The Group's RCF is payable on a floating rate basis above GBP SONIA, USD SOFR or EURIBOR depending on the currency of the loan and will mature in June 2026 with a one-year extension option which expires in May 2023. In February 2023 £15.0 million of uncommitted accordion facility was converted into committed RCF extending the total committed facilities to £241.0 million. In December 2021, the Group issued £75 million of fixed rate loan notes with three institutional investors; the issue is evenly split between 7- and 10- year maturities with an average interest rate of 2.9% and covenants in line with our bank facility.
- A leverage ratio (banking covenant defined measure) of 2.0 times at 31 December 2022 compared to the RCF (and PP loan notes) covenant maximum of 3.0 times. Interest cover (banking covenant defined measure) of 7.4 times compared to the RCF (and PP loan notes) covenant minimum of 4.0 times

The Group has prepared and reviewed cash flow forecasts across the business over the twelve-month period from the date of the approval of these financial statements, considering the Group's current financial position and the potential impact of our principal risks on divisions.

The Group's financial projections contain key assumptions surrounding revenue and operating profit growth in 2023. Under the Group's base case financial projections, the Group retains significant liquidity and covenant headroom throughout the forecast period, with both metrics improving from the position as at 31 December 2022.

The Group's financial projections have been stress tested for "business as usual" risks (such as profit growth, supply chain pressure and working capital variances), and the impact of the following principal risks: general revenue reduction, contractual risks, research and development, people and capability, supplier resilience and health and safety (occurring both individually and in unison). Principal risks which were not specifically modelled were either considered not likely to have an impact within the going concern period or their financial effect was covered within the overall downside economic risks implicit within the stress testing. Under the stress tested modelling, the liquidity headroom within the group remains adequate throughout the forecast period. Financial covenants continue to be in compliance under the stress tested model and management have a number of mitigating actions which could be undertaken if required.

The Group's downside stress test scenario has been sensitised for supply chain challenges and capacity constraints which shows a reduction in revenue and operating profit compared to the latest forecast. Despite this further reduction these projections show that the Group should remain well within its facilities headroom and within bank covenants for the 12 months following the approval of these financial statements. A "reverse" stress-test was also modelled to understand the conditions which could jeopardise the ability of the Group to continue as a going concern including assessing against covenant testing and facility headroom. The stress testing also considered mitigating actions which could be put in place. Mitigating actions included limiting capital expenditure and reducing controllable costs including items such as discretionary bonuses and pay rises. The reverse stress test is deemed to have a remote likelihood and help inform the Directors' assessment that there are no material uncertainties in relation to going concern.

The Group's wide geographical and sector diversification helps minimise the risk of serious business interruption or catastrophic reputational damage. Furthermore, the business model is structured so that the Group is not overly reliant on any single customer, market or geography.

The Directors have assessed the future funding requirements of the Group with due regard to the risks and uncertainties to which the Group is exposed and compared them with the level of available borrowing facilities and are satisfied that the Group has adequate resources for at least twelve months from the date of signing. Accordingly, the financial statements have been prepared on a going concern basis.

NON-FINANCIAL INFORMATION STATEMENT

Our non-financial information statement is set out below in compliance with Sections 414CA and 414CB of the Companies Act 2006. It is intended to guide our stakeholders to where relevant non-financial information can be found in this Annual Report and on our website.

ENVIRONMENTAL MATTERS

	OUR APPROACH AND KEY POLICIES	OUTCOMES IN 2022	FURTHER INFORMATION
Stakeholders impacted: Employees, customers and suppliers, community, investors	Our purpose statement is linked to the development of our internal culture and to what we do for our customers. All suppliers receive our policy on social and environmental practices **Key policies:** Statement of Values and Business Ethics Code.[1] Health, Safety and Environmental Policy. Corporate and Social Responsibilities – Supplier Expectations policy	Investment in R&D at 3.7 per cent of revenue in our product businesses[2] to bring new and improved products to market. Target of 50% reduction in Scope 1 & 2 emissions achieved in 2022 Data collection capabilities expanded to include Scope 3 indirect emissions 11 sites have switched to renewable energy tariffs AA rating achieved in 2022 MSCI ESG Ratings assessment	See Our strategy on pages 20 to 21 See Our people, environment and communities on pages 38 to 62 See Environment on pages 50 to 60 See Principal risks and uncertainties on pages 69 to 72

SOCIAL MATTERS

	OUR APPROACH AND KEY POLICIES	OUTCOMES IN 2022	FURTHER INFORMATION
Stakeholders impacted: Employees, community	We are committed to having a positive impact on the world around us through our products, the way we do business and by reducing our environmental footprint. **Key policies:** Statement of Values and Business Ethics Code.[1] Community and Charity Support, Our Guiding Principles. Health, Safety and Environmental Policy.	Many of our employees volunteer to develop local STEM partnerships to promote careers in electronics and related fields. We run summer internship programmes, UK graduate programmes and young and mature apprenticeships. Our "Hours for giving" programme enables employees to take five hours' paid leave per year to support local causes. In 2022 more than 3,600 hours were taken under the programme.	See Our people, environment and communities on pages 38 to 62 See Principal risks and uncertainties on pages 69 to 72

	OUR APPROACH AND KEY POLICIES	OUTCOMES IN 2022	FURTHER INFORMATION
EMPLOYEES			
Stakeholders impacted: Employees	We strive to keep our employees healthy and safe, give them a sense of pride and belonging, and empower them to think big. **Key policies:** The TT Way values. Statement of Values and Business Ethics Code.[1] Health, Safety and Environmental Policy. ED&I policy and roadmap. Whistleblower Policy.[1] Gender Pay Gap Report.[1] Employee assistance programme	Two three-day lost-time health and safety incidents.[2] A gender balanced permanent workforce with 53 per cent women and 47 per cent men at 31 December 2022. ED&I 101 training for all employees ED&I policy for the Board introduced TT Women's Leadership Programme launched BE Inspired recognition scheme. New HSE Training Academy launched 26 out of 28 sites achieved zero harm	See Our people on pages 38 to 49 See Annual Report on Remuneration on pages 122 to 135 See Principal risks and uncertainties on pages 69 to 72
RESPECT FOR HUMAN RIGHTS			
Stakeholders impacted: Employees, customers and suppliers, community	Our Human Rights Code is taken from the industry standard (Responsible Business Alliance Code of Conduct) and covers expected standards for the treatment of all workers associated with TT. The Code is supported by our Modern Slavery Policy. **Key policies:** Statement of Values and Business Ethics Code.[1] Modern Slavery Policy.[1] Human Rights Code	No human rights violations have been identified during 2022. We reaffirm annually our commitment to opposing slavery through the publication of our Modern Slavery Statement.	See Our people, environment and communities on pages 38 to 62
ANTI-CORRUPTION AND ANTI-BRIBERY			
Stakeholders impacted: Employees, customers and suppliers, community, investors	We do not tolerate fraud, corrupt practices or behaviour not in line with our standards. We have one ethical standard worldwide which seeks to create an environment where our business can flourish within an appropriate compliance and risk management framework and in line with our TT Way values. **Key policies:** Statement of Values and Business Ethics Code.[1] Whistleblower Policy.[1]	Mandatory ethics training is provided for relevant employees on an annual basis. Any ethical concerns can be reported to management or to our anonymous whistleblower reporting facility. Reports are investigated in detail and any significant concerns are reported to the Audit Committee. No fines, penalties or settlements for corruption reported in 2022.	See Our people, environment and communities on pages 38 to 62 See Principal risks and uncertainties on pages 69 to 72

1 Documents are on the TT Electronics website (www.ttelectronics.com).
2 Group KPIs – see pages 34 to 35 for more information.

The table above corresponds to our key stakeholder groups set out on pages 36 to 37. These stakeholder groups are key to the long-term sustainability of our business and inform the Board's engagement activities. The Strategic report also includes a description of our business model (see pages 12 to 13), our principal risks and how we manage them (see pages 69 to 72) and our KPIs, including our non-financial KPIs, (see pages 34 to 35) and the reasons why they are important.

The 2022 Strategic report, from pages IFC to 75, has been reviewed and was approved by the Board of Directors on 7 March 2023.

Richard Tyson
Chief Executive Officer

Mark Hoad
Chief Financial Officer

GOVERNANCE AT A GLANCE

A SNAPSHOT OF OUR LEADERSHIP

BOARD STATISTICS

Board attendance (%)

100

NED independence (%)*

100

Female representation (%)

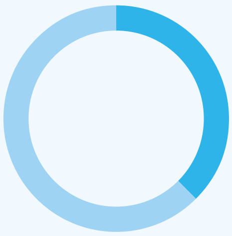
38

Site engagement activities

4

* excluding Chairman

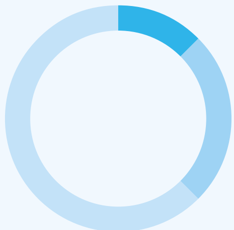
BOARD DIVERSITY – GENDER



Our Board split

- **3** – Women
- **5** – Men

BOARD COMPOSITION

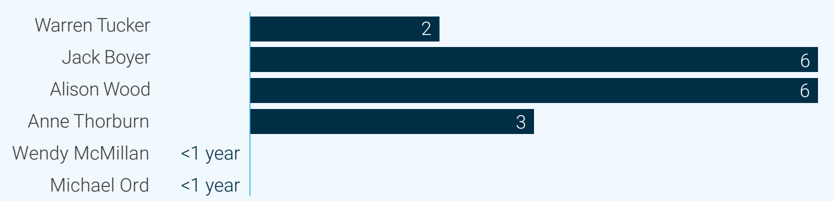


8 Board members

- **1** – Independent Non-executive Chairman
- **2** – Executive Directors
- **5** – Independent Non-executive Directors

SKILLS AND EXPERTISE

BOARD TENURE IN YEARS



LEADERSHIP STRUCTURE

Board

Audit Committee

Committee report on page 95

Nominations Committee

Committee report on page 90

Remuneration Committee

Committee report on page 101

Chief Executive Officer

Chief Financial Officer

Executive Leadership Team

- Reviews business performance and agrees and implements any actions as necessary
- Responsible for monitoring and driving delivery of the Group's key strategic priorities
- Acts as a forum to raise and debate significant operational issues

Disclosure Committee

- Reviews potential existence of and manages the disclosure of inside information
- Maintains project insider lists

People, Social, Environmental and Ethics Committee

- Health and safety
- Environmental
- Human Resources
- Employee engagement with the Board
- Local communities
- Ethics

Read more on page 88

Risk Committee

- Provides a framework for managing risks
- Monitors risk appetite and exposure through regular reviews of principal risks
- Reviews the effectiveness of risk management processes and controls
- Provides an appropriate level of reporting on the status of risk management
- Assesses wider emerging risks

Senior Leadership Team

- Reviews and discusses key strategic and operational matters
- Information-sharing between a wider group of senior executives
- Considers and scrutinises cross-divisional topics

Diversity & Inclusion Committee

- Reviews and develops Equality, Diversity and Inclusion (ED&I) Policy and strategic priorities
- Provides an ED&I framework
- Information-sharing across the business units

Delegation

Reporting

Councils

Research & Development	Business Development	Operations
Supply Chain	HSE	Sustainability

A BLEND OF SKILLS AND EXPERIENCE

THE RIGHT TEAM

Warren Tucker
Chairman

Joined: 2020

Current external appointments:
- Non-executive director and chair of the audit committee of Tate & Lyle plc (UK Listed)
- Non-executive director and chair of the audit committee of BCP V Modular Services Holdings Limited (operating globally as Modulaire)
- Trustee on the board of Magna Learning Partnership

Relevant skills and experience:
- Strategy/Growth
- M&A/Financing
- Equity and debt Capital Markets
- Financial and Risk Management
- International Business
- Manufacturing/Engineering
- Operations/Supply Chain
- Aerospace & Defence Sector
- Investor Relations

Past appointments:
- Non-executive director of Reckitt Benckiser Group plc and the Foreign, Commonwealth and Development Office
- Chief financial officer of Cobham plc

Richard Tyson
Chief Executive Officer

Joined: 2014

Current external appointments:
- Non-executive director of Videndum plc (UK Listed)
- Governor of St Swithuns' Independent School for Girls in Hampshire

Relevant skills and experience:
- Leadership/Management
- M&A/Integration
- Strategy/Growth
- Operational Excellence
- Supply Chain
- Manufacturing/Engineering
- International Business
- Product Technology
- Risk Management
- Aerospace & Defence Sector
- Investor Relations

Past appointments:
- Member of the Executive Committee and President of the Aerospace & Security division of Cobham plc

Mark Hoad
Chief Financial Officer

Joined: 2015

Current external appointments:
- Non-executive director of De La Rue plc (UK Listed)

Relevant skills and experience:
- Strategy/Growth
- Leadership/Management
- Financial Management
- International Business
- Restructuring
- Transformation
- M&A/Financing
- Equity and Debt Capital Markets
- Investor Relations
- Risk Management
- Aerospace & Defence Sector

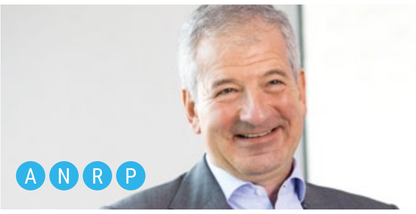
Past appointments:
- Group finance director of BBA Aviation plc

BOARD ATTENDANCE 2022

Attendance 2022	Board	Audit Committee	Nominations Committee	Remuneration Committee
Warren Tucker	7 of 7		4 of 4	4 of 4
Richard Tyson	7 of 7			
Mark Hoad	7 of 7			
Jack Boyer	7 of 7	3 of 4	4 of 4	3 of 4
Alison Wood	7 of 7	4 of 4	4 of 4	4 of 4
Anne Thorburn	7 of 7	4 of 4	4 of 4	

OUR COMMITTEE KEY

N Nominations Committee
R Remuneration Committee
RI Risk Committee
A Audit Committee
P People, Social, Environmental and Ethics (PSEE) Committee
Chair of the Committee



Jack Boyer OBE
Senior Independent Non-executive Director

Joined: 2016

Current external appointments:
– Non-executive director of Ricardo plc (UK listed)
– Chair of the University of Bristol
– Non-executive director of the Department of Education
– Member of the Board of the Henry Royce Institute for Advanced Materials

Relevant skills and experience:
– Strategy/Growth
– Corporate Finance and Investment
– M&A
– Engineering/Technology/Innovation
– International Business
– Manufacturing/Engineering
– Product Technology
– Operations/Supply Chain
– Aerospace & Defence Sector
– Medical Sector

Past appointments:
– Non-executive director of Elcogen Group plc, Mitie Group plc and Laird plc
– Chairman of Ilika plc, AIM-listed Seeing Machines Limited and the Academies Enterprise Trust

Alison Wood
Independent Non-executive Director

Joined: 2016

Current external appointments:
– Non-executive chair of Galliford Try Holdings plc (UK listed)
– Senior independent director and chair of remuneration committee of Oxford Instruments plc (UK Listed)
– Non-executive director of British Standards Institution (BSI)

Relevant skills and experience:
– Strategy/Growth
– Remuneration Policy-Setting
– M&A/Financing
– International Business
– Regulatory
– Talent and Succession
– Risk Management
– Investor Relations
– Aerospace & Defence Sector

Past appointments:
– Global director corporate development & strategy for National Grid plc
– Group strategic development director for BAE Systems plc
– Non-executive director of Capricorn Energy plc, Cobham plc, e2v technologies plc, BTG plc, THUS plc and Costain Group plc

Anne Thorburn
Independent Non-executive Director

Joined: 2019

Current external appointments:
– Senior independent director and chair of the Audit Committee of Diploma PLC (UK Listed)
– Board member and chair of the audit committee of SPT LabTech Limited

Relevant skills and experience:
– Strategy/Growth
– Financial Management
– Risk Management
– Audit and Internal Control
– M&A/Financing
– International Business
– Operations/Supply Chain
– Medical and Industrial Sectors

Past appointments:
– Chief financial officer of Exova Group plc
– Group finance director of British Polythene Industries plc
– Non-executive director of BTG plc

Wendy McMillan
Independent Non-executive Director

Joined: 2023

Current external appointments:
- Chief executive of Safety Sector, Halma plc

Relevant skills and experience:
- Strategy/Growth
- M&A/Financing
- Integration
- Corporate Finance & Investment
- Technology/Innovation
- Transformation
- Operational Excellence
- International Business
- Talent/Succession
- Leadership/Management

Past appointments:
- Global Commercial Finance Director of Dyson
- Member of Executive Committee and Managing Director for Arqiva
- Independent non-executive director of the Industry and Parliament Trust

Michael Ord
Independent Non-executive Director

Joined: 2023

Current external appointments:
- Group Chief Executive of Chemring plc (UK Listed)

Relevant skills and experience:
- Strategy/Growth
- Transformation
- Technology/Innovation
- Manufacturing/Engineering
- Product Technology
- Risk Management
- Leadership/Management
- Aerospace & Defence sector

Past appointments:
- Managing director of business units of BAE Systems plc
- Trustee of The Education & Training Foundation

Lynton Boardman
General Counsel and Company Secretary

Joined: 2012

Relevant skills and experience:
- A qualified solicitor, Lynton has many years of experience as general counsel and company secretary in international companies listed on the London Stock Exchange. His expertise includes corporate law and governance, international operations and M&A.

Past appointments:
- Solicitor with Simmons & Simmons, Macfarlanes and Burges Salmon LLP
- Head of legal (Europe, Middle East and Africa) at Syngenta Crop Protection
- General counsel and company secretary of QinetiQ Group plc

CHAIRMAN'S INTRODUCTION TO GOVERNANCE

GOVERNANCE SUPPORTING OUR GROWTH AMBITIONS

WHAT'S INSIDE

A governance platform for enhanced strategic decision-making

In 2022, the Group was faced with navigating a path through a series of unprecedented business challenges (particularly supply chain interruptions) and yet delivered both record order book expansion and excellent revenue and profit growth. Our robust governance structures have provided a solid platform to support our business recovery and growth ambitions. This has allowed us to devote more board time to core strategic priorities for the Group and address key operational imperatives in areas such as Health and Safety, Sustainability and ED&I. We have also focused our attention on ensuring that TT's corporate purpose and values link effectively to our culture. A great example of how this has operated in practice is shown by the way we have supported our lower paid employees in 2022 in meeting the challenge of the "costs of living" crisis by targeted assistance payments and loan options.

The Strategic Report highlights the key decisions that the Board has taken in 2022 in driving forward the business, which are reinforced in the sections on stakeholder engagement (on page 36), our approach to people, environment and communities (on page 38), and our s172 statement (on page 63). These sections outline the heightened focus on "people" initiatives throughout the year, whilst also ensuring that TT's sustainability agenda remained at the heart of our thinking. Of equal importance was the opportunity taken by the Board at the start of the year to conduct a detailed review of the core growth dynamics of TT's operations, including whether there were better ways of demonstrating the underlying value. This exercise led the Board to conclude that TT has positioned itself in markets with very good structural demand

KEY GOVERNANCE HIGHLIGHTS FOR 2022

- Increased focus on staff and customer engagement, prioritising face-to-face meetings and NED site visits, in support of delivering operational improvement, talent/succession progression and enhanced decision-making, as well as strengthening the linkage of TT's purpose and values to Group strategy
- Review and confirmation of TT's strategic direction, focusing on the pursuit of revenue and profit growth, talent/succession and prioritisation of key initiatives, including ED&I, Sustainability and People-based programmes
- Building on the outputs of the 2021 external Board evaluation exercise, steps were taken to further promote diversity at the Board level and across the wider Group, reinforcing TT's coherent and stable governance structures
- Following a thorough external recruitment exercise in 2022, Wendy McMillan and Mick Ord were appointed as new Non-executive Directors in January 2023.

drivers, having significant organic and inorganic opportunities for the business to pursue over the medium term. The Board has put in place measures to monitor the delivery of this organic potential in 2022, which revealed strong progress in year, as demonstrated by the excellent organic growth delivered across the Group at year end. In addition, the Board has progressed the initiatives set out below in year to promote TT's growth agenda:

- Continued strengthening of the capital structure, through the refinancing of the Group RCF, now extended for a further four years, to complement the US Private Placement transaction delivered at the end of 2021 (as described in more detail in the Strategic Report on page 64);
- The de-risking of our UK Pension Scheme obligations, with the launch of the bulk annuity insurance buy-in transaction for the UK Defined Benefit scheme, working with the scheme trustees and advisers to achieve transaction execution in November 2022;
- Completion of the Ferranti Power and Control acquisition in January 2022, coupled with a targeted focus on expanding operational capacity at key sites including Plano, Kansas City, Suzhou and Kuantan (as described in more detail in the Strategic Report on pages 27 and 31); and
- The increased focus on talent management and succession planning (as described in more detail on this page and in the Nominations Committee Report on page 92).

Board dynamics – promoting diversity
TT has continued to benefit from an extended period of Board continuity, with no changes having been made in the composition of the Board and its principal Committees during 2022. The honest, open and collegiate way in which the Board operates lies at the heart of our governance structures and how we operate as a collective group.

Throughout 2022, we have had two women on the Board, who also chaired our Audit and Remuneration Committees and represented 50% of our Non-executive Directors. Nevertheless, following the proposed changes to the UK Listing Rules in 2023 to promote ED&I , the Nominations Committee embarked on a recruitment exercise to appoint one or more additional NEDs, with a key consideration being gender and ethnic diversity at the Board level in the context of these new Listing Rules requirements. This recruitment exercise culminated in the appointment of Wendy McMillan and Mick Ord to the Board in January 2023, which takes the female composition of our Board to 37.5%. It is my belief that the appointment of Wendy and Mick to the Board, both of whom have exceptional track records with blue chip UK listed companies, enhances the diversity perspective at the Board level and provides TT with a wider range of experience and capability in sectors that are close to TT's business operations. For more detail on the approach we are taking to increasing diversity at the Board level, and TT's path to compliance with the new Listing Rues requirements – see page 92 of the Nominations Committee report.

Enhanced stakeholder engagement
One of the main conclusions identified from last year's external Board evaluation exercise was the need to maintain the strong focus on stakeholder engagement in 2022. As post-COVID travel restrictions to TT's principal sites (outside China) were lifted in 2022, the Board took steps to engage with a wide range of stakeholder groups, in an attempt to better understand the impact of external macro-economic factors on the Group's core business and ensure the effective linkage of the Group's culture and purpose to the company's strategic plan. Wherever possible, meetings were held face to face, and with a range of important stakeholder groups, including TT staff and senior management, customers and shareholder representatives. These key stakeholder events in the 2022 Board schedule included the following:

- A Board visit to the Oldham facility, to meet senior management and staff working in the Ferranti business acquired in January 2022;
- A Board visit to one of GMS Suzhou's key customers, Waters, including a site tour and Q&A session with senior management, which provided a deep insight into TT's technology and supply chain positioning;
- A NED visit to TT's Minneapolis and Cleveland facilities in the US, attended by the Chairman and Chair of the Audit Committee, to meet senior management/staff and better understand TT's customer opportunities in the value-added manufacturing services and medical/power solutions sectors;
- A NED "pulse call" with the GMS Suzhou senior management team, conducted by video conference, to gain a greater insight into operations at TT's largest Asia-based facility;
- Various face-to-face sessions conducted by the NEDs throughout the year with site leaders and divisional/functional heads to discuss business dynamics and operational challenges (through Board dinners and ad hoc meetings);
- Face-to-face dialogue with key advisers (including TT's brokers and financial advisers) on key areas of strategic planning and investor relations, together with targeted engagement with investors involving (at separate times) the CEO, CFO, Chairman, Audit Committee Chair and Remuneration Committee Chair (see page 36 for more detail); and
- As part of the annual Board cycle, the Chairman met with a number of shareholders who accepted his invitation to discuss TT's progress.

The Board believes that these meetings have been important in setting the Group's strategic direction, across various regions (with different cultural approaches), reflecting factors such as cost inflation pressures, continued COVID business interruption (particularly in Asia), staff retention/hiring challenges and the global "cost of living" crisis, without losing sight of TT's corporate purpose. Some examples of how these factors have impacted the Board's decision-making in 2022 are set out in our s172 Statement on page 63 and elsewhere throughout the Strategic Report. In addition, further information on our employee engagement framework, including the role of our SID in managing feedback on stakeholder engagement with the Board, is set out on page 42.

UK Corporate Governance Code compliance

TT is committed to achieving and maintaining the highest standards of corporate governance. Throughout the year, the Group was compliant with all of the relevant provisions set out in the UK Corporate Governance Code 2018 (the Code), other than provision 38 in aligning our Executive Directors' pension payments with the wider workforce, for which the Group became compliant on 1 January 2023. The future Remuneration Policy, to be put to a shareholder vote at the 2023 AGM, seeks to align both existing and future Executive Director pension provision to those available to the wider UK workforce. The reason for this non-compliance with provision 38 of the Code is that the Company has existing contractual agreements with the Executive Directors at a different rate to the wider workforce which required adjustment over time, the Executive Directors having previously agreed that their pension provision will align to the wider UK workforce from 1 January 2023. The Code is available to view at the website of the Financial Reporting Council, www.frc.org.uk. The table below sets out where details and explanations of the application of the principles of corporate governance can be found in this annual report.

Conclusion

In a year of unprecedented external challenges, TT has once again demonstrated its resilience and adaptability in delivering for our customers, supporting our talented group of employees and achieving a strong set of financial results. The Board has played a key role in setting the tone and building upon our strong culture to give TT the best possible opportunity to deliver sustainable future growth, focusing investment on key priority areas. Our embedded governance structures, coupled with the clear objective of delivering improvement in areas such as ED&I, stakeholder engagement and sustainability, have been at the heart of our strategic positioning throughout the past year.

I am grateful to my Board colleagues, the executive team and our committed group of outstanding employees for delivering another year of record order book growth and strategic progress, which (supported by our new Board colleagues) creates a solid foundation for the year ahead.

UK CORPORATE GOVERNANCE CODE

COMPLIANCE STATEMENT

1. Board leadership and Company purpose	**Read more on page**
A. Board effectiveness, long-term value and sustainability	6-11, 81-83
B. Purpose, values, strategy and culture	20-21, 40-42, 85
C. Governance framework	77
D. Stakeholder engagement	36-37
E. Workforce policies and practices	38-49
2. Division of responsibilities	
F. Roles and responsibilities	87-88
G. Leadership structure	77
H. External appointments	89
I. Board policies and processes	87-89
3. Composition, succession and evaluation	
J. Appointments, succession planning and ED&I	90-91
K. Skills, experience, knowledge and length of service	76
L. Performance evaluation	93
4. Audit, risk and internal control	
M. Financial reporting, internal and external audit functions	95, 97, 98
N. Fair, balanced and understandable	98
O. Internal controls and risk management	66-68
Remuneration	
P. Policies and practices	106-111
Q. Directors' Remuneration Policy table	114-120
R. Remuneration outcomes and performance targets	122-129

LEADERSHIP AND COMPANY PURPOSE

BOARD ACTIVITIES

During the financial year the Board discussed and implemented the following key actions:

STRATEGY

- Managing growth and addressing challenges raised by global geopolitical events
- Strategic planning for future growth
- Site rationalisation activity – completion of transfer of Lutterworth operations to Bedlington and Covina operations to Kansas, sourcing a new site for the transfer of Ferranti operations, establishing a new site in Plano, USA
- Development of divisional strategic growth plans
- Divisional Technology Roadmaps
- Customer site visits

ESG/ENGAGEMENT

- Sustainability planning and progress (including continued development of our Sustainability Council, and our global dashboards); MSCI AA rating
- Site visits – Oldham, Cleveland and Minneapolis
- Employee engagement at sites visited and a video conference engagement session with Suzhou leadership team
- M&A integration activity (Ferranti Power and Control)
- Internal audit review on Sustainability

PEOPLE

- Recruitment and retention processes
- ED&I planning/development at board and senior management level, including Board-level policy
- Workforce engagement on remuneration and wider employee engagement activities
- Cost of living initiatives
- Talent management and succession planning

IR

- Regular IR updates on share price progression and movements in major shareholdings
- Investor feedback analysis

FINANCING

- Refinancing of the Revolving Credit Facility
- Regular review of existing and emerging financial risks
- Pension buy-in review
- Tax/Treasury reviews

OPERATIONS

- Customer engagement (i.e. record order book/deeper customer relationships and opportunity pipeline)
- Board-level CRM and Net Promoter Score review
- Contract wins and commercial bids at each meeting
- Review of supply chain challenges
- Global geopolitical and fiscal events

COMPANY PURPOSE, STRATEGY AND VALUES

The Board's main role is to provide oversight and leadership of the Group, to determine and ensure the implementation of the Group's strategy, and to maintain the highest standards of corporate governance. Underpinning these aspects of the Board's responsibilities lies the principal aim of ensuring the sustainable, long-term success of the Company.

The Board understands the relationship between the Company's purpose, strategy and values and their importance to the long-term success of the Group. Along with strategy, purpose and culture are regular discussion points at Board meetings.

The Company's purpose statement is: We solve technology challenges for a sustainable world.

The Board considers that this purpose is an appropriate reflection of the Group's culture, strategic direction and impact on the world.

RELATIONSHIP BETWEEN PURPOSE, STRATEGY AND VALUES

WHY?

Our corporate **purpose** describes **why we do what we do** and aligns the whole of the Company.

WHAT?

Our **strategy** defines **what we do** for both our employees and our wider stakeholders. The Company's strategy is clearly defined and regularly reviewed by the Board. The multi-year strategic plan is discussed in detail and is approved annually, based on the Company's activities; its progress on delivering strategic priorities; and challenges identified within the business and in the wider macroeconomic environment.

HOW?

The Company's **values**, culture and behaviours drive **how we execute our relationships** with internal and external stakeholders and our **strategic vision**. Our TT Way values (see page 86) describe our culture and set out how we expect our employees, from the top down, to conduct business and act with integrity, transparency and professionalism.

Good governance sets the tone for the culture of TT. The Board and Executive Directors strive to promote an atmosphere of openness and trust throughout the Group.

BOARD OVERSIGHT OF CULTURE MATTERS – OUR TT WAY VALUES

WE DO THE RIGHT THING

From ethics within our workforce and safety matters, to consideration of our wider impact on the environment and our communities, we pride ourselves on doing the right thing and encourage others to do the same. Our customers benefit from our focus on providing cleaner, smarter and healthier solutions to technology challenges.

- Statement of Values and Business Ethics Code
- Whistleblowing reports
- Safety metrics
- Employee support during cost-of-living crisis
- Integration of ESG and sustainability matters into decision-making and business practices as a strategic priority
- Net Zero Scope 1 & 2 target by 2035 and other environmental impact reduction work
- Anti-bribery and corruption policies
- Modern Slavery policy
- Global supplier standards for social and environmental practices
- Human Rights Code
- Gender Pay Gap reports
- ED&I Policy

WE BRING OUT THE BEST IN EACH OTHER

Our people are our greatest asset. We know that supporting development, promoting wellbeing, ED&I and collaborating with our colleagues leads to better performance for our people and our business.

- Leadership programmes and conferences
- Succession planning/talent reviews
- Remuneration schemes and employee benefits
- Cross-divisional working and information sharing
- ED&I initiatives including our Women in Leadership programme, strong focus on LGBTQ+ initiatives and awareness programmes, for example, Black History Month

WE ACHIEVE MORE TOGETHER

Throughout the business, our people are encouraged to share their ideas and feed back to improve the way we work. Our culture of openness and transparency is demonstrated through the reporting systems we have in place and the two-way conversations we have with our employees, our customers and our suppliers.

- Best practice sharing across the Group
- Ensuring transparency in reporting systems
- Employee engagement survey (next event scheduled for 2023)
- Voice of the Customer surveys
- SID (Jack Boyer) reports back from the PSEE Committee to the Board on stakeholder engagement processes
- Group-wide incentives

WE CHAMPION EXPERTISE

Our talented team of design, engineering and manufacturing experts operate in a supportive culture that champions knowledge, skills, innovation, problem solving and service. We cannot achieve our purpose without passionate support for technical expertise in the business – from R&D and manufacturing to marketing and sales.

- Focus on capabilities – power, connectivity, sensing, and manufacturing and engineering
- R&D investment as a percentage of sales target
- Targeted and complementary M&A to expand technology capabilities
- BE Inspired awards for individual achievements
- Focus on training and apprenticeship initiatives

WE GET THE JOB DONE, WELL

TT's strong business performance is an indicator of getting the job done, but our success is based on a culture of pride within our organisation to do the best job we can. From the boardroom to our manufacturing sites, decision-making is based on achieving the best results the TT Way.

- Strategic decisions for long-term success
- Strong capital discipline and financing to ensure continued availability of funds to invest in the business
- Successful integration of acquisitions
- Customer feedback and Voice of Customer surveys

LEADERSHIP

The Board
Subject to the Company's Articles of Association, UK legislation and any directions given by special resolution, the Board manages the Company's business. The Board has reserved certain specific matters to itself for decision. These include financial policy (including tax and treasury matters) and policy relating to acquisition and disposal.

The Board appoints its members, and those of its principal Committees, having received the recommendations of the Nominations Committee. It also reviews recommendations of the Board Committees and the financial performance and operation of the Group's businesses. It regularly reviews the identification, evaluation and management of the principal risks faced by the Group, including emerging risks, and the effectiveness of the Group's system of internal control as set out on pages 66 to 72.

Board and Committee meetings are scheduled in line with the Company's financial calendar, thereby ensuring that the latest operating data is available for review and sufficient time and focus can be given to matters under consideration. During the year, there were seven principal Board meetings on scheduled dates, for which full notice was given. Three additional meetings were held in the year to progress the Board's work on strategic planning, customer bid approvals and authorisation of the Pension Scheme buy-in transaction. The Board has held two principal meetings to date during 2023. The NEDs meet, without the Executive Directors present, at the end of each scheduled Board meeting, as a standing agenda item.

During 2022, there was a sense of returning to "business as usual". The Board returned to face-to-face meetings at our offices and sites around the world, but we have continued to enjoy the benefits of online meetings and communicating with our colleagues and advisers across the globe without the environmental costs of travelling for every meeting.

The main events in the Board calendar are the approval of the half-year and full-year results, the Board site visits, the review of the multi-year strategic plan and the approval of the budget towards the end of the year. At each meeting during 2022 the Board discussed strategic issues (principally focused on key site rationalisation projects, the Divisional opportunity pipeline, climate-related risk and opportunities, and the status of integration activity on recent acquisitions) together with operational, financial, human resources, legal, governance and investor relations items.

The Directors reviewed, throughout the year, the opportunities and risks to the future success of the business by receiving and discussing information from both internal and external sources regarding the issues affecting the business, the wider industry and the macroeconomic environment. The non-standard areas of focus for the Board in 2022 are shown on page 84.

Leadership structure
Details of TT's Board of Directors are set out on pages 78 to 80 of this report. The leadership structure chart on page 77 provides further information on how leadership at the Board level is discharged. Most importantly, the Board comprises a majority of independent NEDs, with the division of responsibilities between the Chairman and Chief Executive Officer having been clearly articulated. The Board believes that its composition, the structure of its principal Committees and the processes it has in place to discharge its primary areas of responsibility, meet the requirements of "Board Leadership" and "Composition" under the Code.

The Board has established a number of Committees, each with its own delegated authority defined in terms of reference. The Board reviews these terms periodically (the last occasion being in November 2022), and receives reports and copies of minutes of Committee meetings. The Board appoints the members of all principal Board Committees, having received the recommendations of the Nominations Committee.

A NED (Jack Boyer) has been nominated to be a member of the PSEE Committee with the purpose of receiving information about the Company's engagement with its key stakeholders. As such, he is the designated NED for the purposes of engagement with the workforce under the Code. This includes the outcomes of our employee engagement activities as described on page 42 and sustainability initiatives, including climate-related risk described from page 50. The designated NED on the PSEE Committee reports this information directly to the Board following each Committee meeting. The key activities covered by the PSEE Committee are described in more detail in the leadership structure chart on page 77.

DIVISION OF RESPONSIBILITIES

Chairman, Chief Executive Officer and Senior Independent Director
The division of responsibilities between the Chairman and the Chief Executive Officer has been defined, formalised in writing, and approved by the Board:

Roles and responsibilities

Chairman	Chief Executive Officer	Senior Independent Director
Maintains responsibility for: – The leadership and effectiveness of the Board, and for setting its agenda; – Ensuring all Directors receive accurate, timely and clear information on financial, business and corporate matters so they can participate in Board decisions effectively; – Facilitating the effective contribution of NEDs; – Ensuring constructive relations between Executive and Non-executive Directors; – Ensuring effective communication with shareholders; and – Ensuring the performance of individual Directors, the Board as a whole, and its Committees are evaluated at least once a year.	**Maintains responsibility for:** – The operations of the Group; – Developing Group objectives and strategy, having regard to the Group's responsibilities to its shareholders, customers, employees and other stakeholders; – Successful implementation and achievement of strategies and objectives, as approved by the Board; – Managing the Group's risk profile, including its HS&E/Sustainability performance; – Ensuring the Group's businesses are managed in line with strategy and approved business plans, and complying with applicable legislation and Group policy; – Ensuring effective communication with shareholders; and – Setting Group human resource policies, including management development and succession planning for the senior management team.	**Maintains responsibility for:** – Reviewing the performance of the Chairman – Providing a sounding board for the Chairman on strategic matters/ succession planning – Supporting the Board on the delivery of key objectives – Acting as an intermediary for Board members and/or an alternative point of contact for investors (as required)

DIRECTORS' INTERESTS

The Directors of the Company held interests (directly or through their connected persons) in the following numbers of the Company's ordinary shares of 25 pence each on 1 January 2022, 31 December 2022 and 6 March 2023:

The interests of the Directors in the Company's share options and Long-Term Incentive Plan are shown in the Directors' remuneration report on page 129.

	6 March 2023 Ordinary shares	31 December 2022 Ordinary shares	1 January 2022 Ordinary shares
Warren Tucker	60,075	60,075	60,075
Richard Tyson	1,006,666	1,006,666	910,454
Mark Hoad	779,446	779,446	711,149
Jack Boyer	95,514	95,514	95,514
Alison Wood	–	–	–
Anne Thorburn	60,000	60,000	60,000
Wendy McMillan	–	–	–
Michael Ord	–	–	–

Directors

All Directors have access to the advice and services of the Group General Counsel and Company Secretary and are offered training to fulfil their role as Directors, both on appointment and subsequently. There is an agreed procedure for any individual Director to take independent professional advice at the Company's expense if they consider it necessary.

In accordance with the provisions on conflicts of interest in the Companies Act 2006, the Company has put in place procedures for the disclosure and review of any conflicts, or potential conflicts, of interest which the Directors may have, and for the authorisation of such conflicts by the Board. All new external appointments taken on by Directors in 2022 were pre-approved by the Board before the effective date of the appointment. In deciding whether to authorise a conflict or potential conflict, the Directors must have regard to their general duties under the Companies Act 2006. The authorisation of any conflict, and the terms of authorisation, may be reviewed at any time and, in accordance with best practice, we conduct a review of Director conflicts of interest annually.

Each member of the Board, including the SID, has the right to include items on the Board agenda or the agenda of the Committees they sit on.

Rules for the appointment and replacement of Directors are set out in the Company's Articles of Association. Directors are appointed by the Board on the recommendation of the Nominations Committee. Directors may also be appointed or removed by the Company by ordinary resolution at a general meeting of holders of ordinary shares. The office of a Director shall be vacated if his or her resignation is requested by all the other Directors, not being fewer than three in number. Further details of the activities of the Nominations Committee are set out on page 90.

There are no agreements between the Company and its Directors or employees providing for compensation for loss of office or employment that occurs as a result of a takeover bid except that provisions of the Company's share plans may cause options and awards granted under such schemes to vest on takeover, subject to the satisfaction of any performance conditions. Further details of the Executive Directors' service contracts can be found in the Directors' Remuneration Policy. Copies of the Executive Directors' service contracts and letters of appointment of the NEDs are available for inspection by any person at the Company's registered office, during normal business hours on any weekday (other than public holidays) and at the AGM from 15 minutes before the start of the AGM until its conclusion.

The Group maintains Directors' and Officers' Liability insurance. The Directors of the Company also benefit from a qualifying third-party indemnity provision in accordance with Section 234 of the Companies Act 2006 and the Company's Articles of Association. The Company has provided a pension scheme indemnity within the meaning of Section 235 of the Companies Act 2006 to Directors of associated companies.

RELATIONS WITH SHAREHOLDERS

The full list of engagement activities and our relations with shareholders during the year are set out on pages 36 to 37.

GOING CONCERN

The Directors have reviewed the budgets for 2023 and the projections for 2024 and 2025 developed during the 2022 annual strategic planning cycle. They have assessed the future funding requirements of the Group as outlined on page 73 of this report. Based on this, the Directors are satisfied that the Group has adequate resources to continue in operational existence for 12 months from the date of approval of these financial statements. For this reason, they continue to adopt the going concern basis in preparing the financial statements.

COMPOSITION, SUCCESSION AND EVALUATION

NOMINATIONS COMMITTEE REPORT

MEMBERSHIP

- Warren Tucker (Chair)
- Jack Boyer
- Alison Wood
- Anne Thorburn
- Wendy McMillan (joined January 2023)
- Mick Ord (joined January 2023)

CONTENTS

PRINCIPAL RESPONSIBILITIES

– Regularly review the structure, size and composition of the Board as a whole and make recommendations for any changes to the Board.

– Review the overall leadership needs of the organisation by considering succession planning for the NEDs (having due regard to their length of service), Executive Directors and members of the ELT, and make recommendations to the Board.

– Manage the search for, and selection of, suitable candidates for the appointment of replacement or additional Directors and nominate candidates for the approval of the Board.

KEY ACTIVITIES DURING THE YEAR

– No changes were made to the composition of the Board or Committees during 2022.

– Detailed review of the new FCA Listing Rules requirements for Board and senior management ED&I targets.

– First-time adoption of a Board diversity policy (to complement TT's existing Group diversity policy).

– NED recruitment process initiated, factoring in diversity considerations, culminating in the appointment of Wendy McMillan and Mick Ord in January 2023.

– Succession planning review conducted at Executive Director and ELT levels (plus a management layer below).

– In-depth review of talent ("high potential" and talent gaps) at a senior management level.

Q&A

Q

What prompted the Committee to launch a NED recruitment exercise in 2022?

As we highlighted in last year's annual report, the 2021 Board evaluation exercise did not identify an immediate need to launch a recruitment exercise for additional Board members; however, it was agreed that this issue would be kept under review by the Nominations Committee in 2022, particularly given our stated goal of maintaining a diverse range of inputs into Board decision making. During the past year, the Committee has continued to reflect on whether the existing structure of the Board is likely to meet TT's future needs, with reference to the Group's core areas of operations and the anticipated skill sets required in the coming years. Based on this analysis, together with the publication of the new FCA Listing Rule 9.8.6(9) on board diversity and the fact that two of our NEDs are now in their seventh year as Directors (including the associated transition process), it was decided to initiate an externally facilitated recruitment exercise in 2022, for one or more NEDs. This process represented the key priority for the Committee in the past year.

Q

What did the Committee learn from this NED recruitment exercise?

Following the publication of LR 9.8.6(9), the Committee reviewed the extent to which listed companies (operating both within and outside the FTSE 350) already met these new FCA requirements, based on the most current information available. This analysis concluded that, whereas many FTSE 350 companies have taken significant steps in recent years to increase the level of female and ethnic minority board representation, this has not been the case for FTSE SmallCap companies, which are generally less diverse in terms of board composition and often competing to access a smaller talent pool. Following on from last year's Board evaluation exercise, it was well understood that TT's female representation on the Board stood at 33 per cent, which was notably higher than for many FTSE SmallCap comparator companies. Nevertheless, the Committee agreed that 2022 would be an opportune time to reconsider the diversity profile of the Board and as a result, an external recruitment firm was appointed to assess TT's Board-level requirements for the future and develop a diverse list of potential NED candidates.

Q

How far has TT progressed in terms of achieving compliance with the new Listing Rules requirements on ED&I?

The conclusion of this NED recruitment exercise in 2022 (which is described in more detail in the section below) resulted in the appointment of Wendy McMillan and Mick Ord as new NEDs and we were delighted to welcome them both as new members of the Board in January 2023. This means that the level of female representation on the TT Board currently stands at 37.5 per cent, which is marginally below the FCA stated target of 40 per cent. We also adopted a Board-level diversity policy for the first time in 2022 (to complement TT's existing Group-level diversity policy) and have provided numerical data on the gender diversity profile of the Board and senior management in the table set out on page 49.

We recognise that to date, we have not met the FCA's stated future target that at least one member of the Board should come from an ethnic minority background; nor are the positions of CEO, CFO, Chair or SID held by a woman. However, each of the incumbents in these roles have been in post for a significant period of time and the positions of Audit and Remuneration Committee Chairs are both held by women. It is worth noting that LR 9.8.6(9) only came into force in 2022 for listed companies having a financial year beginning on or after 1 April; as such, the Committee's focus in 2022 has been to meet these new FCA targets as far as possible, in advance of formal implementation in 2023. It is perhaps more important to recognise that the Committee's overall objective in this recruitment exercise has been to enhance the Board's diversity of perspective and secure NEDs capable of contributing fully to the strategic debate, with experience and capability in sectors that are close to TT's business operations. In that sense, we firmly believe that in Wendy and Mick, we have secured the best candidates for the new NED roles, who will help us significantly in progressing TT's strategic development. Nonetheless, the Committee understands the intent behind LR 9.8.6(9) and remains committed to maintaining its focus on increasing the diversity of thinking/decision-making at the Board level, whilst also developing a path to full compliance with LR 9.8.6(9) in the future as part of its succession planning activities.

2022 REVIEW

The Committee's main focus in 2022 has been to manage the process for recruiting one or more new NEDs, which ultimately led to the appointment of Wendy McMillan and Mick Ord in January 2023. The Q&A section above provides background information on the data-gathering exercise which led to the Committee's decision to launch a formal recruitment process in 2022. This decision was taken in the context of the Committee's regular review of Board composition/diversity; the publication of LR 9.8.6(9) and the fact that two of our NEDs are now in their seventh year as Directors (with the associated transition process during their final years in office) were additional relevant factors. The search process was conducted following the appointment of an external recruitment firm, Russell Reynolds, whose expertise was drawn upon in developing a detailed role specification and subsequently, a diverse list of potential NED candidates. There are no connections between TT, its directors and Russell Reynolds that require disclosure in relation to this recruitment exercise. The Committee's strategy was to leverage the Company's position as a purpose-driven organisation, with a clear commitment to "solving complex technology challenges for a sustainable world", to appeal to a wide range of candidates from different backgrounds. Each candidate was assessed against the agreed role specification, with the recruitment process being designed to reduce the perceived risks associated with appointing individuals from non-traditional backgrounds, which included taking references at an earlier stage (and on a more extensive basis) than is typically the case. Another key criterion in the recruitment process was to address the ways in which each candidate might contribute to increasing the Board's diversity of perspective and add fully to the strategic debate, based on experience and skill sets.

The shortlisted group of candidates were interviewed individually by each of the NEDs and the CEO. The Committee retained an open mind at all stages of the recruitment process as to whether one or more candidates would ultimately be offered NED positions with the Company.

As stated in the Q&A section above, the Committee was mindful of the requirements of LR 9.8.6(9) throughout the recruitment exercise, notwithstanding the fact that these targets only come into force for TT in the 2023 reporting round. The extent of TT's compliance to date with LR 9.8.6(9) is also summarised in the Q&A section, it being noted that a Board-level diversity policy was also adopted for the first time in 2022 and we have provided numerical data on the gender diversity profile of the Board and senior management in the table set out on page 49.

The Committee held four meetings in 2022, at which (in addition to the recruitment exercise described above) the Committee undertook a detailed review of TT's talent management programme, which covered the senior management team (operating at ELT level and a layer below), together with selected members of the wider leadership group. Attention was also focused on "high-performing" individuals across the organisation, who had been identified as possessing the capability to progress into senior management roles over the medium to long term. This review exercise identified several candidates across the business with the potential for promotion to ELT and/or Executive Director roles in the future, with talent development also being highlighted as a key priority area for the Group going forward. The Committee agreed, as part of this process, to find ongoing opportunities for the NEDs to meet with key individuals identified in the Group-wide succession plan, on a face-to-face basis (wherever possible).

In addition to the activities referenced above:

– All Board members completed a conflicts of interest questionnaire, which involved tracking the number of external appointments held by each Director, including the number of chairmanships and executive director roles held, to avoid suggestions of "over-boarding". No points of concern were identified by the Committee from this process; and

– The Committee assessed its performance in 2022 by reviewing key activities during the year against its terms of reference. It was concluded that the Committee had performed satisfactorily and was structured appropriately to provide effective support to the Board.

BOARD COMPOSITION

Throughout 2022, the Board comprised two Executive Directors (Richard Tyson and Mark Hoad) and four NEDs. There were no changes in Board composition during 2022, nor in relation to the membership of Board Committees. As described above, Wendy McMillan and Mick Ord were appointed as new NEDs in January 2023. We provide full details of each Director's Board and Committee meeting attendance on page 78 and Directors' biographies, including the Committees they serve on and chair, which can be found on pages 78 to 80.

At the time of his appointment as Chairman, Warren Tucker was considered to be independent in accordance with the provisions of the Code. All the remaining NEDs are also considered to be independent as defined by the Code.

In accordance with the Company's Articles of Association and the Code, Directors must offer themselves for re-election at the forthcoming AGM. This practice will continue in the future, to ensure compliance with the requirements of the Code and the Company's Articles of Association. Following formal performance evaluation, the Board has concluded that the performance of each Director continues to be effective and to demonstrate commitment to the role. The Notice of AGM sets out details of the key areas of contribution made by each of the Directors in providing leadership to the Company.

EQUALITY, DIVERSITY AND INCLUSION (ED&I)

In 2020, the Company introduced its ED&I strategy to the workforce, setting out our three-step multi-year programme to enable the Company to understand the needs of its diverse workforce and embed ED&I as an integral part of the Company's strategy (see page 47 for further information). The Board (through the PSEE Committee) receives updates on the progress of the initiatives launched pursuant to the Company's ED&I strategy and monitors the achievement of targets set in line with the strategy.

As stated in the Q&A section above, a Board-level diversity policy was adopted for the first time in 2022, which requires the Committee to have regard to issues such as culture and diversity when reviewing recruitment practices and succession planning. This ED&I Board policy will assist the Committee in overseeing a diverse pipeline for senior management and Board positions.

At all times during 2022, the Committee has sought to ensure that the Board is balanced and effective, with diverse skills, knowledge and experience, as highlighted in the Directors' biographies on pages 78 to 80. The Committee attaches a high degree of importance to diversity at all levels across the Group and is committed to recruiting the best talent available, based on merit, and assessed against an objective criteria of skills, knowledge, independence and experience. However, we do not advocate a forced approach to diversity at any level of the organisation. The extent of TT's compliance to date with LR 9.8.6(9) is set out in the Q&A section above. Female representation on the Board currently stands at 37.5 per cent, which the Committee believes will have a positive impact on the Board's governance processes and sends out a strong message across the Group of the importance of a diverse workforce to the future success of the business.

A table setting out data on the gender diversity profile of the Board and senior management is set out on page 49.

For more detail on TT's approach to ED&I across the organisation, see page 47 of the Our people section.

BOARD AND COMMITTEE PERFORMANCE EVALUATION

In accordance with the Code, the Board has conducted an evaluation of its performance and that of its principal Committees during 2022. Following the external evaluation exercise undertaken in 2021, the Board decided to undertake an internal assessment in 2022 (using the procedure used most recently in 2020), without the assistance of external facilitators. The Bo ard allotted part of a scheduled meeting in year to conduct the evaluation exercise, using the Board objectives for 2022 (as outlined in last year's annual report) and the outputs of the previous year's evaluation exercise to frame the discussion, which involved all Board members.

The 2022 evaluation exercise highlighted the positive Board dynamics experienced by the NEDs and the Executive Directors alike. It was concluded that the Board was effective in discharging its responsibilities and operated as a high-performing unit, which continued to benefit from a "low ego/high trust" culture. In particular, it was noted that:

– The issues raised from the external review in 2021 had been incorporated into the Board's operations, with good progress made on the priority items and incremental improvements achieved, despite the challenging economic environment.

– The NEDs are highly committed, both to TT and the Executive team, with a strongly inclusive dynamic in the strategic discussions.

– Each member of the Board is seen as being appropriately provocative and challenging on key issues (at different times and using their own unique approaches); likewise, the Executive team is regarded as very transparent and open. The importance of maintaining TT's unique and positive culture is very much understood and promoted by the Board.

Key positives for 2022 included: (i) the delivery of two wide-ranging strategy reviews (involving good data points, positive use of advisers and healthy debate); (ii) the Board continuing to focus on the key strategic topics (pitched at the right level); (iii) changes in external governance requirements (eg ED&I) being appropriately controlled and addressed; (iv) timely progression of talent reviews and reward discussions in year; (v) outstanding Board-level support for an efficient NED recruitment process; and (vi) good levels of engagement on succession planning.

– The evaluation process confirmed that the Board had continued to deliver on its prior year objective of increasing the level of face-to-face dialogue, which had resulted in a more in-depth understanding of day-to-day operational issues, thereby directly benefiting the strategic review process.

– The evaluation process also highlighted that each Board member possessed the requisite skills and experience in each of the core areas relevant to TT's operations, recognising that the appointment of the two new NEDs in January 2023 would further enhance the skill sets and experience around the Board table. Accordingly, the Board concluded that the composition of the Board (and its Committees) remained fit for purpose, with diversity of experience, approach, mindset and thinking around the Board table.

In summary, the Board concluded from the evaluation exercise that it (and its Committees) had performed well on all fronts in 2022 and that the performance of each Director was highly effective, whilst giving due commitment to his or her role.

Discussion points and areas of focus
The 2022 evaluation review highlighted several developmental areas for further consideration, which included the following:

– The Board recognised the need to ensure that strategic planning remained at the centre of the Board's thinking, with the recommendation that more time be allocated on the Board agenda for strategic reviews and discussion.

– The Board concluded that good progress had been made on succession planning in 2022; nevertheless, this remained a priority objective for the year ahead, with the need to attract/retain top talent forming a key part of Board's responsibilities.

The review exercise recognised the positive gender and cultural diversity at the Board level (and a range of different styles and approaches that allowed the Board to work effectively as a group), whilst also acknowledging the lower levels of ethnic diversity. The Board also recognised the approach taken in year to address gaps in diversity within its senior leadership ranks, which included the recruitment of two new NEDs in early 2023.

Having considered these issues in detail, the overall outcome of TT's evaluation exercise was that the Board was operating in a very effective manner and that the structure of the Board remained fit for purpose, given the diversity of experience, approach, mindset and thinking around the Board table.

2023 BOARD OBJECTIVES

Following the conclusion of the 2022 Board evaluation exercise, the Board objectives for the year ahead were agreed, which are set out below:

- NEDs and Executive Directors to continue to operate in an engaged, constructive, open, supportive and challenging manner.
- Creation of more time on the Board agenda to focus on strategic development and execution, including one meeting dedicated to the development of strategic positioning at both a Group and Divisional level.
- Achieving the successful integration of the newly appointed NEDs onto the Board, to allow meaningful input on key strategic topics from the start of their appointment (whilst also avoiding increased pressure on Executive Directors' time, wherever possible).
- Increased focus on HR priorities, including succession/retention, talent management and ED&I.
- Continued focus on ensuring employee, sustainability and wider stakeholder engagement through face-to-face meetings (wherever possible).

DIRECTORS' PERFORMANCE EVALUATION

In accordance with the Code, the performance of individual Directors was evaluated during 2022.

For the NEDs, the output from a private meeting held between the Chairman and the Executive Directors formed the basis for individual appraisals held by the Chairman with each NED. This also provided an opportunity to discuss any issues which had arisen from either their individual assessments or those of the Board and its principal Committees. For the Chairman's performance, the other NEDs, led by the Senior Independent Director, and, with input from the Chief Executive Officer and Chief Financial Officer, met privately to discuss this, with the outcomes being fed back to the Chairman by the Senior Independent Director for discussion.

At the beginning of the year, we set each Executive Director challenging performance objectives, and reviewed progress against these as the year progressed.

Both of the Executive Directors take part in the Group's performance management programme which, together with a review of progress against agreed goals and objectives, is used to assess performance and to set clear objectives and developmental plans for the following year (which are closely aligned with the Group's strategic priorities and values). The Chief Executive Officer meets with the Chief Financial Officer at the beginning of each year to discuss and review performance against objectives.

The Chairman conducted the performance evaluation of the Chief Executive Officer, taking account of the output from the Group's performance management programme together with feedback provided by the other NEDs at a private meeting held to discuss this and any other matters which the NEDs wished to raise.

Warren Tucker
Chair, Nominations Committee
7 March 2023

AUDIT, RISK AND INTERNAL CONTROL

AUDIT COMMITTEE REPORT

MEMBERSHIP

Anne Thorburn (Chair)

Jack Boyer

Alison Wood

Wendy McMillan

CONTENTS

PRINCIPAL RESPONSIBILITIES

- Monitor the integrity of the financial statements (including significant reporting/accounting issues, going concern/viability statements, and fair, balanced and understandable reporting process) and the Group results announcements.
- Recommend appointment and remuneration of the Auditor, assess effectiveness and monitor provision of non-audit services.
- Assess content of the Auditor's independence report in providing both audit and non-audit services, including the Auditor fee structure.
- Review the remit, planned scope of activities, performance and effectiveness of the Internal Audit function.
- Review changes to accounting policies and procedures, decisions of judgement affecting financial reporting and compliance with accounting standards and company law (including FRC recommendations).
- Review risk management/assurance processes, including the principal risks and internal control findings highlighted by management or internal/external audit.
- Monitor the Company's systems and controls for the prevention of bribery and fraud.
- Review Group whistleblowing arrangements and procedures.

KEY ACTIVITIES DURING THE YEAR

- Key areas of accounting judgement considered in detail, including: (i) consideration of items excluded from adjusted profit; (ii) goodwill and the annual impairment review, including the impairment identified in the IoT Solutions cash generating unit (CGU); (iii) Group tax rates and provisions; and (iv) going concern and viability.
- Performance assessment of the external Auditor and overall audit quality and effectiveness (in the second full year following Deloitte's appointment), identifying areas of potential improvement for the audit teams, including opportunities for accelerating certain audit workstreams earlier in the year in an attempt to reduce the workload associated with the year-end sign-off process.
- Detailed consideration of findings from the risk/assurance reviews undertaken by the Internal Audit function, including structuring the 2022 programme to align with key Group-level risks.
- Strengthening the Internal Audit function, including the creation of a new Internal Compliance team (based in the UK and US) with a remit to deliver further improvements in the Control Framework programme.
- Reviewing the progression of the proposed BEIS Audit/Governance reforms, including an assessment of the key areas of focus for TT, to ensure a smooth path to compliance with the new rules, once enacted.
- Ongoing review of climate-related risks (and associated TCFD disclosures), in light of the new regulatory requirements.

Q&A

Q

How is the Internal Audit function structured? In the Committee's view, does the Internal Audit team have an appropriate range of skills and capabilities to meet the ongoing needs of the business?

We have a designated Head of Internal Audit and Risk, who sits within our Group Finance function and acts as the conduit through which the Committee exercises oversight of risk management and assurance activities across TT, including the operation of the Group Control Framework. We see this as a key role within TT and were delighted to recruit a highly experienced individual in 2022, from one of the "Big 4" accountancy firms, with specialist expertise in the risk/assurance area in the context of UK listed companies. This appointment was made as part of our succession planning programme, with the predecessor in role having taken on a senior Finance position within one of the Divisional teams.

2022 also saw the creation of a new Internal Compliance team (comprising two separate roles, one based in the UK and the other in the US), with a focus on providing updates to the Control Framework (to ensure it continues to reflect best practice), together with awareness training and compliance reviews. The internal team will also complement some of the more operational aspects of the internal audit programme, with TT's co-sourced internal audit partner (PwC) continuing to deliver site audits, as well as focusing on more highly specialised compliance areas (such as IT and Sustainability). We believe that this structure provides the Committee with an optimal structure to exercise oversight over the Group's core risk management and assurance activities, particularly with regards to the proposed implementation of the BEIS Audit/Governance reforms.

Q

What is the Committee's view on the progress made in 2022 on the risk and assurance front?

The Internal Audit plan each year is structured to reflect the priority areas in the Group-level risk framework (see page 67 for more details). This allows the Committee to focus its attention on TT's higher revenue-generating sites (at least once every three years), whilst also providing scope to assess higher risk areas of operation (including functional activities) on an "as needed" basis. The outputs of the 2022 Internal Audit programme revealed a good level of compliance across the Group, with the majority of audit actions being principally confined to "lower risk" items and with very few "overdue" issues having been noted. Challenges are often associated with recently acquired business units, where the higher levels of compliance associated with a UK listed company environment typically take time to adapt to.

This will remain a key area of focus for the Internal Audit team going forward, as well as ensuring that the Control Framework is suitably modified (where appropriate) so as not to impose an undue administrative burden on smaller teams working on lower risk business activities. The Committee takes a keen interest in ensuring that the Internal Audit plan aligns carefully to TT's Risk Framework and took an active role in developing the scope of both the Sustainability and IT Security reviews in year.

Q

To what extent have the BEIS proposals on Audit and Governance reform been part of the Committee's agenda during 2022?

As stated in last year's report, TT takes its governance responsibilities extremely seriously and welcomes the opportunity to enhance its audit, internal controls and wider governance processes in the interests of its stakeholder groups. The Committee has continued to track the BEIS reform proposals during 2022, having provided a formal response to the consultation exercise the year before. We remain of the view that the BEIS recommendations are helpful in the round and should not present too much of an additional burden for TT, given the governance environment and Control Framework structure we already have in place.

However, recognising the likelihood that the BEIS reforms will be adopted in 2023 (coming into force for the 2024 reporting season), the Committee has already started to look at key initiatives to further strengthen the Group's policies and procedures in certain areas. These include the creation of the Internal Compliance function to support work on the effectiveness of internal controls; more extensive fraud prevention/detection assessments; updating our enterprise assurance mapping; and (building on existing work on distributable reserves at the holding company level) consideration of the distributable reserve position across the Group's operations. Based on the size of our individual business units, we do not believe that any of our Group subsidiaries will be designated as Public Interest Entities for the purposes of the BEIS reform proposals.

PROCEDURAL AND GOVERNANCE MATTERS

Meetings of the Committee are structured on the following basis:

– The CFO, the Group Financial Controller, the Company Secretary and Auditor representatives attend each Committee meeting, at which they present reports and provide analysis on key areas of accounting judgement. At the request of the Committee, the Chairman and the CEO also attend for part of the scheduled Committee meetings.

– The Head of Internal Audit and Risk presents on the progress of the internal audit plan (undertaken in conjunction with PwC under the co-sourced partnering arrangement) and provides updates on the Group's risk management framework, to allow members to review principal risks and the effectiveness of risk management processes.

– The Committee meets with the Auditor at the close of each meeting, without Executives being present. The Committee also has the opportunity to meet with the internal audit function at each meeting on the same basis.

In relation to Governance considerations:

– The Committee Chair, Anne Thorburn, fulfils the Code requirement of at least one member of the Committee having recent and relevant financial experience (as a former CFO of several listed companies and as audit committee chair of Diploma PLC since 2015).

– The structures and methodologies that were put in place in 2020 to address the COVID-19 "stay-at-home" measures were relaxed in the current year, with a significantly greater amount of audit work being undertaken on a "face-to-face" basis; however, these remote working practices remained available during 2022 to ensure that both internal and external audit activities could be fully completed. The existence of a co-sourced internal audit arrangement with PwC, and the use of Deloitte as external Auditor, meant that local teams were able to access our sites in China to perform both internal and external audit activities, despite the ongoing restrictions during the year in relation to travel into and out of China.

– The Committee undertook an evaluation of external Auditor performance in 2022, which included input from the heads of finance across the Group's operations. Through this process, several limited areas for improvement were identified and shared with the Auditor; however, this process indicated an improvement in overall Auditor performance in 2022.

– The Committee assessed its performance in 2022 by reviewing key activities during the year against its terms of reference. It was concluded that the Committee had performed satisfactorily in the year and was structured appropriately to provide effective support to the Board.

2022 REVIEW

The Committee held four scheduled meetings during 2022. A summary of the key financial reporting and judgement issues considered by the Committee in 2022 is set out in the table on page 99. In addition, as part of the Committee's planning for the 2022 year-end audit process, a detailed assessment was undertaken (in conjunction with the external Auditor) of the FRC's key areas of focus, as outlined in its "Key matters for 2021/22 report and accounts" document.

The Q&A section on page 96 sets out details of the core areas of activity for the Committee in 2022. In addition, the following specific audit matters were considered by the Committee for the reporting period: (i) consideration of items excluded from adjusted profit; (ii) goodwill and the annual impairment review, including the impairment identified in the IoT Solutions cash generating unit (CGU); (iii) Group tax rates and provisioning (with the Committee concluding that, as a result of processes first adopted in 2021, the level of judgemental analysis applied in this area for the current year had been significantly reduced); and (iv) the going concern and viability position for the Group (reflecting current year trading, the new US PP arrangement and the RCF refinancing).

The Committee also reviewed the outputs of the internal audit projects conducted during 2022, which are undertaken both on a site-specific basis (with each principal TT site being reviewed at least once every three years) and for targeted functional areas, which for 2022 included IT Security, SAP deployment, TT's Shared Services functionality and Sustainability initiatives. The Committee has continued to pay close attention in the past year to the progress made in developing the Group-wide Control Framework programme and its application in driving business performance across TT (as described in more detail in the Q&A section on page 96), particularly in the context of the Group's migration to a shared service environment and the financial integration of acquisitions having only recently adopted the Control Framework. For further details of TT's risk management and internal controls structures see pages 66 to 72.

During 2022, the Risk Committee continued to conduct a detailed review of possible emerging risks (in consultation with the Internal Audit function), which were not currently addressed in the Group risk register but could have application in the future to an international business operating in TT's sector. The outputs of this analysis were discussed further at both the Board and Audit Committee level, which included a review of the risk appetite of the Group. For further details of the Board's approach to assessing the Group's risk appetite, see page 66.

In the fourth quarter, the Committee undertook a workshop review of the Group's climate-related risks and opportunities, with particular reference to the new TCFD disclosure requirements.

KEY JUDGEMENTS

Management has confirmed to the Committee that it was not aware of any material uncorrected misstatements or immaterial misstatements made intentionally to achieve a particular presentation. The Committee confirms that it is satisfied that the external Auditor has fulfilled its responsibilities with diligence and professional scepticism.

After reviewing the presentations and reports from management and consulting where necessary with the Auditor, the Audit Committee is satisfied that the financial statements appropriately address the critical judgements and key estimates (both for the amounts reported and the disclosures).

FAIR, BALANCED AND UNDERSTANDABLE

In accordance with the Code, the Board requested the Committee to advise it on whether it believed the Group's Annual Report, taken as a whole, is fair, balanced and understandable, and provides the information necessary for shareholders to assess the Company's position and performance, business model and strategic plan. Procedures are in place to facilitate the appropriate and timely review of the drafts of the Annual Report and specifically to highlight evidence of a fair and balanced representation, which supports input and challenge from all independent NEDs, the external Auditor and other external advisers. On careful review of the Annual Report for the year ended 31 December 2022, and the basis for the statement made by the Board on "Fair, balanced and understandable" on page 139, the Audit Committee recommended to the Board that, taken as a whole, the Annual Report is fair, balanced and understandable and provides the information necessary for shareholders to assess the Company's position and performance, business model and strategic plan.

AUDITOR'S INDEPENDENCE, OBJECTIVITY AND EFFECTIVENESS

The Audit Committee assesses the independence of the Auditor annually to ensure suitable policies and procedures are in place to safeguard the Auditor's independence and objectivity, having regard to length of tenure, provision of non-audit services and the existence of any conflicts of interest. The Committee has formally reviewed the independence of the Auditor as part of the 2022 review. Deloitte has provided a statement to the Committee confirming it remains independent within the meaning of the relevant regulations and in accordance with its professional standards.

The Committee also reviewed the quality and effectiveness of the audit programme during the year, as described on page 97.

POLICY ON NON-AUDIT SERVICES

The Company has an established policy regarding the provision of non-audit services by the external Auditor, which was last refreshed in 2021. This policy provides that non-audit services may be obtained from the most appropriate source, having regard to expertise, availability, knowledge and cost as confirmation that they comply with the whitelist of permitted services as set out in the Revised Ethical standard 2019. Non-audit services where fees are expected to exceed £25,000 should be approved, in advance, by the Chair of the Audit Committee or, in her absence, by another member of the Audit Committee. Any arrangement with the auditor that includes contingent fee arrangements is not permitted. There is also a restriction that fees for non-audit services will not exceed 50% of the annual audit fee which is more stringent than the FRC imposed cap of 70% of the average audit fees paid for the audit of the parent and its controlled subsidiaries in the last three years. This limit will only be exceeded in unusual circumstances and only with the pre-approval of the Audit Committee. The overriding preference of the Committee is not to engage the Auditor for additional non-assurance services, unless there are compelling reasons to the contrary, such as capability, time or cost.

In 2022, the total fees paid to Deloitte were £1.7 million, including £0.1 million for their review of the Company's interim results, while no other non-audit service fees were paid to Deloitte in the year. Accordingly, during 2022, non-audit service fees paid to Deloitte represented six per cent of audit service fees paid to them during the same period.

SIGNIFICANT ISSUES CONSIDERED IN RELATION TO THE FINANCIAL STATEMENTS

The main areas of judgement and estimation are set out in the accounting policies on pages 158 to 163. The Committee received and reviewed reports from management and the external Auditor setting out the significant issues in relation to the 2022 financial statements, as outlined on page 99. They discussed these issues with management during the year and with the external Auditor at the time the Committee reviewed and agreed the external Auditor's Group audit plan; when the external Auditor reviewed the half-year results in August 2022; and also at the conclusion of the audit of the financial statements. The Committee is satisfied that the significant assumptions used for determining the value of assets and liabilities have been appropriately scrutinised and challenged, and are sufficiently robust.

SIGNIFICANT ISSUES

SIGNIFICANT ISSUE	COMMITTEE ACTIONS/WORK UNDERTAKEN
Adjusted profit (see Note 7) The Group reports non-trading income or expenditure outside of adjusted profit when the size, nature or function of an item or aggregation of similar items is such that separate presentation is relevant to an understanding of its financial position.	The Committee challenged the items that were excluded from adjusted profit and were satisfied that these were in accordance with the Group's disclosed accounting policy and gave a true and fair view of the Group's underlying financial position. The Auditor explained to the Committee the work they had conducted and the results of their audit procedures on significant items recorded outside adjusted profit.
Provisions – Taxation (see Note 8) Current tax provisions held in respect of tax risks are included within current tax liabilities depending on the underlying circumstances of the provision.	Management confirmed to the Committee that the provisions recorded at 31 December 2022 represent its best estimate of the potential financial exposure faced by the Group. The Committee reviewed each significant provision and challenged the basis of management's judgement and concurred with the estimates. The Auditor explained to the Committee the work they had conducted during the year, including how their audit procedures were focused on those provisions with the highest level of judgement on recognition criteria and/or measurement.
Goodwill and impairment review (see Note 14) The Committee has reviewed management's computation of the present value of future cash flows from the five-year plan and outer years. These have been compared to the carrying amounts in order to test for impairment, (refer to Note 13 to the Group Financial Statements) and an impairment identified in the IoT Solutions Cash Generating Unit (CGU).	The Committee considers management's conclusion that no impairment charges for goodwill and acquired intangibles are required for 2022 other than that identified in the IoT Solutions CGU. The Committee noted that the impairment includes assets associated with the Virolens project and reviewed the revised growth assumptions used in the five year plan, challenging management's assumptions and concurring with them. The Committee reviewed the reasonable possible change disclosure for the IoT Solutions CGU and challenged management's assumptions and sensitivities. The Committee confirmed both the disclosures and assumptions were appropriate.
Going concern and viability (see Note 1d) The Committee considered the outcome of management's reviews of current and forecast net debt positions and the various financing facilities and options available to the Group, including the risk and potential impact of unforeseen events.	The Committee reviewed the going concern and viability assessment over the three-year period based upon the 2023 budget and the strategic plan to 2025. The Committee confirmed that the application of the going concern basis for the preparation of the financial statements continued to be appropriate. The Auditor explained to the Committee the work they had conducted and the results of their audit procedures on going concern and viability.

COMMITTEE ACTIVITIES IN 2022

FINANCIAL REPORTING

- Monitored and reviewed the Group's financial statements and results announcements.
- Reviewed significant financial reporting and accounting issues.
- Reviewed going concern and viability statements, including appropriate sensitivity analysis.
- Reviewed the fair, balanced and understandable process for the financial reports.
- Reviewed and discussed 2022 H1 and year-end accounting issues.

GOVERNANCE

- Reviewed the outputs of the ongoing BEIS consultation on Audit and Governance Reform.
- Reviewed Terms of Reference.
- Received and considered whistleblowing matters reported through the Group's multi-lingual, anonymous ethics and integrity portal.
- Undertook an evaluation on the effectiveness of the Committee.
- Considered new areas of audit disclosure under UK legislation/regulation.

INTERNAL AUDIT AND RISK AND ASSURANCE

- Received a report at each meeting on progress on the internal audit and risk assurance plan.
- Reviewed internal audit planned activity and resource.
- Agreed the remit of the internal audit programme of work.
- Considered the results of the 2022 internal audit activities.
- Reviewed and approved the 2023 internal audit plan.
- Conducted the annual review of the Group's internal audit function.
- Assessment of controls designed to protect against fraud.
- Ongoing monitoring of the Group's internal controls environment throughout the year.

EXTERNAL AUDIT

- Discussed and approved the external audit plan and audit fee.
- Reviewed external Auditor planned activity.
- Reviewed and confirmed both the independence of the external Auditor as part of the 2022 review, and non-audit fees.
- Assessed the quality and effectiveness of the audit programme, including the performance of the Auditor relative to prior year.

Anne Thorburn
Chair, Audit Committee
7 March 2023

INTRODUCTION TO OUR:

REMUNERATION COMMITTEE REPORT

MEMBERSHIP

Alison Wood (Chair)
Warren Tucker
Jack Boyer
Michael Ord

CONTENTS

PRINCIPAL RESPONSIBILITIES

– Determine the Remuneration Policy for Directors for approval at least every three years.

– Determine remuneration packages and terms and conditions of employment for the Executive Directors, senior managers and the Chairman of the Board.

– Approve the design, performance measures, targets and outturns of incentive schemes for the Executive Directors and senior managers.

– Set Remuneration Policy within the wider context of remuneration trends across the workforce.

– Produce an annual report of the implementation of the Directors' Remuneration Policy in respect of the last financial year and for the current year.

KEY ACTIVITIES DURING THE YEAR

– We sought to support our employees with the increased cost of living which disproportionately impacts our lowest earners through a variety of pro-active actions, including an additional cost of living support payment to eligible UK employees.

– In addition, we provided our lowest paid UK colleagues with higher salary increases in April 2022 and increased our salary review budgets for 2023.

– We undertook a thorough review of remuneration design as part of our Remuneration Policy review which will be put to a shareholder vote at the 2023 AGM. We reviewed the most appropriate incentive structures and quantum, the use of and types of performance measures in our incentives, and developments in governance practices.

– We consulted both our major shareholders (and their representative bodies) and employee stakeholders on the proposed changes to our Remuneration Policy and its implementation in 2023. We reflected on both shareholder and employee feedback in finalising the changes to the Remuneration Policy, how it will be implemented for 2023 and the changes required to wider incentives to ensure alignment of culture and focus.

– We considered remuneration outcomes to ensure they remain fair, appropriate, and in line with our remuneration principles and Company performance.

– Our Short-Term Investment Plan (STIP) awards are ahead of on-target reflecting the strong profit growth in extremely challenging circumstances with multiple headwinds for the Executive team to manage. Cash flow performance was creditable but held back by investment in working capital to support increased growth and customer demand.

– Long-Term Incentive Plan (LTIP) awards granted in 2019 vested in 2022 at 27.4 per cent primarily reflecting the impact of the pandemic on the momentum of the business during the three-year performance period and the halt in progress during 2020 as a result of the temporary pause in growth of our end markets.

Q&A

Q

It has been another busy year, what has pleased you the most about 2022?

The year has featured many highlights and positive actions. The COVID-19 pandemic tested the resilience of our organisational culture and the strength of our TT Way values. Our embedded values were central to our approach during the pandemic, leading to a series of actions to make our workplaces safe and secure and to protect and support employees who ensured delivery for our customers. We have brought our values to the fore once again this year in seeking to support our employees with the impact of higher inflation on costs of living with appropriate regional responses, whilst continuing to manage the impact of COVID-19 to our employees in Asia. Most notably, cost of living has been a significant challenge in the UK, disproportionately impacting our lower paid employees. Our response has focused on the active provision of a range of support measures encompassing financial, physical and mental health. Lower paid UK employees also received a one-off additional payment to support the winter months. Further details are outlined in my annual statement on page 103.

Despite the cost of living challenge, our employees have continued to support their local communities and fundraise for local and national causes. The ongoing resilience, contribution, and dedication of our employees in all regions has been remarkable over this prolonged period of uncertainty. We will continue to focus on supporting them as they are critical to the long-term sustainability and success of TT.

Q

External events continue to make markets and economic conditions volatile and uncertain. How does the Committee approach target setting in these times?

Target setting is a critical component of the Committee's activities to ensure alignment of strategic progress, stakeholder outcomes, and the continued motivation and aspiration of the Executive team. The effect of volatile and uncertain economic conditions where significant events and headwinds could make performance targets feel unachievable or, in different times too easily achievable, reduces stakeholder and leadership alignment.

As a Committee, we ensure stretching performance goals are set taking account of the latest information at the time they are set. Typically this includes: internal and external forecasts relating to the Group's performance; the key risks associated with the forecasts, notably ongoing economic and societal uncertainty; and the Board's expectation of the development of the Group. In setting the performance targets for 2023, the Committee has considered the setting of stretching performance targets that encompass a wider range of outcomes to limit any motivational impact of unforeseen external events.

The Committee remains mindful of the need for stakeholder alignment and the perception of windfall gains. To ensure that performance outcomes remain appropriate, the Committee continues to be willing to exercise both upwards and downwards judgement and discretion when determining remuneration outcomes for the Executive Directors where appropriate.

Q

What were the primary considerations informing the review of the future Remuneration Policy?

Our role as a Committee is to encourage enhanced performance and to reward contribution to the long-term success of the Group, from which our stakeholders benefit. The future Remuneration Policy is intended to apply for the coming three years, which is expected to be a period of continued uncertainty, given the current geopolitical and economic context. Our Remuneration Policy review was guided by our remuneration principles alongside the following three objectives:

(i) To better reflect the strategic importance of ESG within our remuneration;

(ii) To enable a wider choice of performance measures in incentives; and

(iii) To ensure remuneration packages remain appropriately positioned in respect of the high calibre individuals required to deliver the Group's strategic priorities and lead a Company of our scale and complexity.

Our stakeholder consultation indicated broad support for these objectives. In particular, stakeholders were complimentary about our proposal in respect of increasing the strategic focus on ESG matters to ensure longer-term sustainable value creation.

Q

The Committee undertook significant engagements with stakeholders in the creation of the future Remuneration Policy. How did their feedback shape the final Policy proposal?

Ahead of the consultation in 2022, the Company led a review of our existing Remuneration Policy and remuneration design with support from the Committee's appointed independent remuneration consultants. This review included an examination of the strategic alignment of a range of remuneration structures/approaches alongside corporate governance developments. The outcome of this review was discussed by Committee members, initially on a confidential one-to-one basis and then as a Committee, to define the proposed changes put to consultation.

The Committee values the input of stakeholders and consulted with a broad range in the second half of the year, including our key shareholders, the main shareholder representative bodies and employees whose remuneration most closely aligns with that of the Executive Directors.

The majority of feedback was supportive of the aims of the Policy and positive in respect of the changes proposed. It was interesting to note that stakeholder feedback was principally focused on how the Policy would be implemented in 2023 rather than the changes to the Policy. The key feedback themes and how the Committee, with the support of the appointed independent remuneration advisor, incorporated them into the finalised proposals in early 2023 are set out on page 106.

The Committee believes that both the future Remuneration Policy and its implementation align remuneration with the principle of delivering long-term, sustainable value creation for our stakeholders; and will help to retain, align and motivate the Executive Directors who are critical to the ongoing development of the Company.

The Committee thanks our stakeholders for their engagement, support and constructive dialogue which helped to shape and refine the final proposal.

ANNUAL STATEMENT

On behalf of the Board, I am pleased to introduce the Directors' remuneration report for the year ended 31 December 2022. The report sets out our philosophy, together with the key activities and decisions made by the Remuneration Committee during the year. The report is split into the following sections:

i. This annual statement which contains a summary of the activities of the Remuneration Committee during the year, including the key remuneration decisions taken by the Committee and the context within which these decisions were reached.

ii. At-a-glance summaries of the key remuneration outcomes for the year, the future Remuneration Policy and proposed Executive Director remuneration for 2023.

iii. The future Directors' Remuneration Policy, to be proposed to shareholders at the 2023 AGM (the future Policy or the 2023 Policy).

iv. The annual report on remuneration which details the implementation of the current Policy in the year ended 31 December 2022 and the proposed implementation of the future Policy for the current financial year. The current Policy operated as intended during 2022 with no changes.

CONTEXT FOR THE YEAR

The operating context to our performance has continued to be affected by significant external events and challenges which continue to be shaped by the COVID-19 pandemic and more recently, by the conflict in Ukraine. Despite this difficult external environment, the Executive team has navigated the Group with agility, speed and resilience to deliver another year of great progress. Our performance has been underpinned by numerous proof points of our strategy delivering in 2022 as we continue to unlock the potential of TT. The dedication and commitment of our employees continues to be a key differentiating factor of our competitive advantage and our operating performance.

The Committee's focus for the year has been on the wider workforce and responding to the impact of inflation on our employees and affordability pressures arising from the cost of living. As outlined in the Q&A the Company has undertaken a range of activities across its geographic footprint displaying the strength of our values and how they inform our decision-making.

In the UK, this support included:

– Partnering with a financial wellbeing partner to provide: (i) a financial fitness questionnaire and online education resources; (ii) emergency access to pay advances thereby reducing the need for payday loans; (iii) access to longer-term debt and reconciliation of existing employee debt to reduce interest repayment charges; and (iv) the ability to set up savings accounts direct from payroll to build rainy day savings.

– Delivering an additional cost of living support payment of £300 to all UK employees on salaries up to £40,000.

– Running frequent communications on our voluntary benefits programme which incorporates discount on a range of retailers to help offset some of the cost of living changes.

– Improving communication and raising employee awareness of our pan-UK health cash plan and Employee Assistance Programme (EAP) which: (i) enables employees to recover some day-to-day healthcare costs such as for vision and dental costs; (ii) ensures access to GPs via a virtual video call; and (iii) offers assistance with a range of counselling services from financial through to mental health.

– Delivering sessions focused on the all-employee ShareSave scheme and retirement savings to ensure employees are aware of the choices available to them, including participation, pausing contributions and withdrawal.

– Reviewing and increasing the budget for 2023 salary reviews with distribution, once again, being weighted to our lowest paid workers and increases averaging in the range of 6.5 to 7 per cent.

Against this backdrop the Committee has assessed remuneration outcomes and undertaken a review of the Remuneration Policy to ensure the continued alignment of remuneration with the delivery of the Company strategy.

BUSINESS PERFORMANCE

The year has once again tested and proven the success of our strategy to become a higher-quality, better-balanced business aligned to structural growth markets. Our business development success in customer partnering has seen new project wins and deeper, more embedded relationships with key partners that are longer term and more collaborative. The effect of which we are seeing in our record order book and very strong organic growth. We have also progressed well on our sustainability agenda, which has remained central to strategic decision-making, particularly when we consider the opportunities presented by the move to a lower carbon world.

Sustainability actions also continue to improve our safe and supportive workplaces in which individuals can bring their best and authentic selves to work every day. Our focus on ED&I (rollout of our global Inclusive Leadership workshops to over 900 leaders, completion of our first Women's Leadership Programme, targeted workshops on microaggressions, allyship and menopause as well as calendar events focused on key ED&I topics) has created a culture that is not only more deliberate about ensuring a more inclusive environment but more focused on building a diverse workforce that can help us achieve our business aims. We believe this provides our people a greater voice and platform, especially when it comes to sustainability, their safety and well-being. The Committee was also pleased to see significant talent development actions during the year and the establishment of a Global HSE framework and operational toolkits. Our progress against our 2035 net zero for Scope 1 and 2 emissions target has continued with improvements in the environmental sustainability of our facilities through established site carbon reduction plans and investment in renewable energy.

Across the Group, operational execution has been impressive despite ongoing supply chain issues characterised by lengthy lead times, material availability and cost inflation. At the same time, our site rationalisation programme has been completed, with additional benefits being realised and more still to come through. There has been strong organic revenue growth of 20% at constant currency and we started 2023 with excellent visibility from our record order book. We are well positioned to deliver further growth in 2023 and improved margin and cash performance.

Free cash flow in the year was managed in the context of the material supply chain challenges, and significant working capital investments to protect customer delivery and to serve additional customer demand. The actions to fully de-risk the UK DB pension scheme assisted our in-year free cash flow by £6m and provides an equivalent annual improvement to free cash flow in future years.

Overall, performance has been very strong in challenging circumstances:

- Adjusted profit before tax was £40.4 million, up by 28 per cent; significantly ahead of the market consensus.
- Free cash outflow was £13.1 million as we invested to support high organic growth will keeping leverage within our 1-2x target range.
- Adjusted EPS was 18.2 pence, up by 26 per cent.

PERFORMANCE-RELATED REMUNERATION FOR 2022

The Committee adopts a holistic and rigorous approach to decision-making, determining Executive Directors' remuneration in the context of our core remuneration principles of: aligning pay with performance; ensuring the appropriate level of motivation and focus required to deliver the Group strategy; and reviewing remuneration outcomes in the context of our stakeholder experience.

The Committee believes that the following remuneration outcomes are a fair reflection of strong business performance and excellent growth in the context of the macro-economic challenges arising from geopolitics, supply chain constrains, increased inflation and the ongoing impacts from the pandemic, and the personal performance of the Executive Directors. In respect of short-term incentive remuneration outcomes for the wider workforce, awards continue to recognise performance and the attainment of relevant business performance measures in 2022. This ensures alignment with the approach for the Executive Directors.

- The 2022 STIP design for Executive Directors was 50 per cent Group adjusted profit before tax, 25 per cent Group free cash flow and 25 per cent based on the achievement of strategic objectives. Financial performance targets in the STIP exclude movements in foreign exchange. Performance against the financial measures of adjusted profit before tax and free cash flow were between on-target and the maximum, and below threshold respectively. Combined with the significant progress against the Group's strategic objectives, the calculated outturn on the STIP performance measures for 2022 is 61% of the maximum. The Committee believes that this is an appropriate outcome, reflecting the stretching budget set, the strong revenue and profit performance, resilient cash flow performance whilst investing to support high organic growth, and the Group's strategic performance. Eighty per cent of the award will be paid in cash and 20 per cent deferred into shares in accordance with the current Remuneration Policy. Details of the short-term incentive performance targets and performance achieved are presented on page 125.
- The 2019 LTIP awards vested in March 2022. The awards were based on two equally weighted measures, absolute adjusted EPS and relative TSR performance. As reported last year, the impact of the pandemic on the business momentum and progress linked to this award meant that the threshold EPS performance measure was not met. TSR performance over the three-year period was ahead of median which meant that this half of the awards vested at 54.8 per cent. Further details are presented on page 128.
- The 2020 LTIP awards are due to vest in March 2023 based on a sole TSR performance measure. The TSR performance period ends in March 2023 and is anticipated to vest close to the threshold performance targets. The final vesting will be disclosed in next year's Directors' remuneration report.
- The Committee did not exercise judgement or discretion in respect of the remuneration outcomes for 2022.

2022 EXECUTIVE REMUNERATION AT A GLANCE

BUSINESS PERFORMANCE

£40.4m	£13.1m	Outperforming	Above median rank
Adjusted profit before tax[1]	Group free cash outflow[1]	Strategic performance	Total shareholder return[2]

1 Target and actual performance are assessed at constant budget exchange rates.
2 TSR performance measure of the 2019 LTIP award (performance period of 11 March 2019 to 10 March 2022).

PERFORMANCE OUTCOMES

Short-term incentive plan

61.2%	0%	61.2%
Formulaic outcome (% of maximum)	Committee judgement/discretion (% of maximum)	Final outcome (% of maximum)

Financial objectives (% weighting)

Objective		Achieved	Not achieved
Adjusted profit before tax (50%)	KPI	41%	9%
Group free cash flow (25%)	KPI		25%

Strategic objectives (% weighting)

Objective		Achieved	Not achieved
ESG development (10%)	KPI	7%	3%
Group Strategy development (7.5%)	KPI	7%	0.5%
People talent development (7.5%)	KPI	6%	1.5%

Long-term incentive plan

27.4%	0%	27.4%
Formulaic outcome (% of maximum)	Committee judgement/discretion (% of maximum)	Final outcome (% of maximum)

Performance dimensions (% weighting)

Dimension		Achieved	Not achieved
Total shareholder return (50%)[1]	KPI	27.4%	26.6%

1 In line with the disclosures in the 2020 Annual Report and Accounts, 100% of the 2020 LTIP is based on relative TSR performance. The full value of the vested award will be included in the 2023 single figure of remuneration.

Achieved   Not achieved

TOTAL REMUNERATION FOR 2022

Richard Tyson, Chief Executive Officer

- **44.9% –** Salary and benefits
- **6.2% –** Pension
- **31.9% –** Short-term incentive
- **17.0% –** Long-term incentive

51.1% fixed   48.9% variable

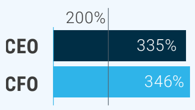
Mark Hoad, Chief Financial Officer

- **46.0% –** Salary and benefits
- **6.3% –** Pension
- **32.2% –** Short-term incentive
- **15.5% –** Long-term incentive

52.3% fixed   47.7% variable

ALIGNMENT WITH STAKEHOLDERS

Share ownership requirement:
200% of salary for Executive Directors.



Short-term incentive
Awards subject to a 20% mandatory deferral into shares with a two-year holding period.

Long-term incentive
Awards delivered in shares and subject to mandatory two-year holding period.

Workforce alignment
Executive remuneration set in the context of wider workforce remuneration.

Remuneration principles flow through the Group to ensure alignment.

Post-employment share ownership
Shares to the value of 100% of salary to be held until two years after cessation of employment.

REMUNERATION POLICY REVIEW

During the year significant thought has been given to the design of our 2023 Policy. This centred on ensuring the alignment of remuneration with the next phase of the Company strategy, in particular: that incentive structures and performance measures are strategically aligned, that the Committee has sufficient flexibility in incentive design to support the evolution of the strategy over the next three years, and that arrangements are able to attract, retain and motivate high calibre individuals that are required to deliver the Group's strategic priorities and lead a Company of our scale and complexity.

Whilst we have undertaken a full review of our Policy, we concluded that the existing pay for performance principle has served us well and we consider the proposed changes to be evolutionary. In reviewing the Policy we have consulted with our major shareholders, investor bodies and employees. We were encouraged that the majority were supportive of both our reasons for evolutionary change and the changes to the 2023 Remuneration Policy with some specific constructive suggestions. In finalising the changes we reviewed stakeholder feedback and endeavoured to incorporate their views. The Committee thanks our stakeholders for their engagement, support and constructive dialogue which helped to test the rigour of our approach and improve the final proposals. The Committee believes that the changes ensure that the Policy remains "fit for purpose" to align both stakeholders' and our Executive Directors' focus and interests to deliver the next phase of the strategy.

The main changes to the Policy, which are set out in detail in the Remuneration Policy Report, are summarised as follows:

– To align the pension provision for Executive Directors (existing and new) to those available to the majority of the workforce in which the Executive is employed. From 1 January 2023 the Executive Directors pension provision reduced from 15 per cent to 7 per cent of salary.

– To better reflect TT's wider role in the global ESG arena and the importance of our sustainability strategy, we are increasing the flexibility within our remuneration to introduce a separate ESG component into the STIP and more clearly enabling the ability to introduce ESG measures into the LTIP during the Policy period.

– To enable a wider choice of performance measures in incentives by increasing the flexibility with respect to performance metrics used in both the STIP and LTIP, and to increase flexibility of metric weightings in the STIP.

– To ensure remuneration packages remain appropriately positioned in respect of the high calibre individuals required to deliver the Group's strategic priorities and lead a Company of our scale and complexity by increasing variable, performance related pay, rather than fixed remuneration, with an increase in STIP opportunity of 25% of salary to 150% of salary. This change is also fundamental to enabling additional focus on ESG in our incentives. To further improve stakeholder alignment and Executive Director shareholding the STIP deferral into shares will increase from 20 per cent to 30 per cent.

EXECUTIVE DIRECTOR REMUNERATION FOR 2023

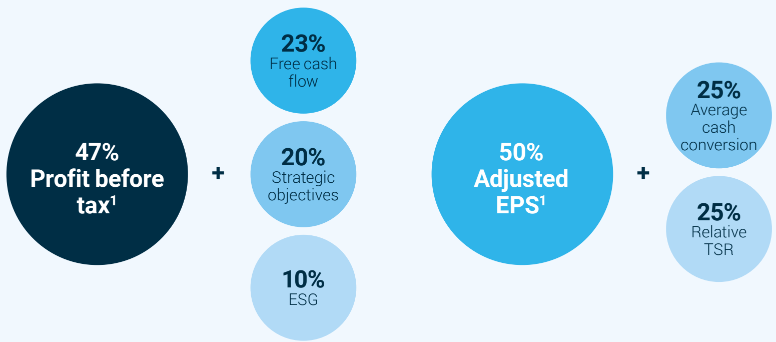
The implementation of the 2023 Remuneration Policy was a core component of our stakeholder consultation and provided the opportunity for more detailed stakeholder discussion and feedback. That feedback, as outlined in the Q&A, positively tested our thinking and improved our plans for Executive Director remuneration in 2023. The key themes and outcomes from consultation were as follows:

Stakeholder theme	Incorporation of feedback
Setting stretching targets to reflect the increase in Executive Director STIP opportunity from 125% to 150% of salary	Targets will be appropriately stretching reflecting the increase in maximum opportunity
Wider market practice has shown some companies have faced difficulties in setting appropriate ESG performance measures in the STIP, and shown the potential tension between ESG targets and the need to continue to drive financial performance	ESG targets in the STIP will be strategically aligned and outturns will be subject to an underpin alongside the strategic objectives
Feedback showed divergent views on LTI design and that no one approach to performance measures would fully satisfy our broad shareholder base. Most notably, feedback concerned: (a) whether TSR should or should not be included as a performance measure in long-term incentives; and (b) where included, the differing preferences for its prominence and weighting in the plan design.	Reflecting the majority view, a cash-based performance measure will be included, reflecting the increased strategic importance of strengthening the balance sheet. To maintain strategic and stakeholder alignment the Committee currently anticipates that the 2023 LTIP awards will be subject to performance against EPS (50% weighting), TSR (25% weighting) and operating cash conversion (25% weighting).

OUR 2023 EXECUTIVE DIRECTOR REMUNERATION FRAMEWORK

Short-term incentive plan

Long-term incentive plan[2]



Performance measure and weighting
47% – Adjusted profit before tax[1]
23% – Group free cash flow[1]
20% – Strategic objectives
10% – ESG objectives

Performance measure and weighting
50% – Adjusted EPS[1]
25% – Average operating cash conversion
25% – Relative TSR

1 Target and actual performance are assessed at constant budget exchange rates.
2 LTIP performance measures and weightings shown represent anticipated design for 2023.

What they measure

– Operational performance encompassing our strategic priorities of strategic business development and operational excellence.

– Cash flow performance, encompassing our cash conversion and cash generation for capital reinvestment.

– Progress of the Group's strategy to deliver sustainable growth in stakeholder value.

What they measure

– Sustainable growth in the Group's profitability per share over three years.

– Long-term operational cash flow efficiency over three years, supporting cash generation for capital re-investment.

– The Group's share price and dividend performance relative to a peer group over three years.

The Committee was mindful of the stakeholder experience, particularly the context of the wider workforce and wider society, in finalising the following arrangements for 2023:

– When determining base salaries increases for the Executive Directors, the Committee reviewed the Company response to support our employees with the increase in cost of living and the planned salary increases for the wider workforce. For the UK, salary budgets have been increased and will, once again, deliver higher increases to our lower paid workers who are most impacted by higher inflation. UK workforce increases are expected to average in the range of 6.5 to 7.5 per cent. For the Executive Directors base salaries were increased at a rate lower than the workforce, by 5 per cent on 1 January 2023. Fees for the Chairman and Non-executive Directors were also increased by 5 per cent.

– Executive Directors' pension allowances reduced from 15 per cent to 7 per cent from 1 January 2023 to align with those available to the wider UK workforce.

– In keeping with the ambitions of the 2023 Policy, the STIP will evolve from prior years with the inclusion of a new, separate higher-profile ESG-based component to improve the strategic alignment. The STIP will also continue to focus on our momentum to grow our profitability and deliver good free cash flow of the Group. The STIP will be based on adjusted profit before tax (47%), free cash flow (23%), ESG (10%) and strategic objectives (20%). To enable the new ESG component and to ensure remuneration packages remain appropriately positioned to retain and attract high calibre individuals, the opportunity will increase by 25 per cent of salary to 150 per cent of salary with at least 30 per cent of any award deferred into shares for two years. Further details are included on page 122.

– LTIP awards are planned to be made in March 2023. The Committee anticipates that the 2023 LTIP awards will evolve from prior year to better reflect the strategic importance of delivering improved and stable operating cashflow to improve the leverage position in the longer term whilst continuing to recognise the importance of delivering sustainable earnings growth and relative total shareholder returns. Awards are anticipated to be subject to performance against EPS (majority weighting), TSR (minority weighting) and operating cash conversion (minority weighting). Award levels for the Executive Directors are expected to be 150 per cent of salary. LTIP awards will be subject to a two-year post-vesting holding period. Due to the ongoing uncertainty and to ensure performance targets are appropriately stretching, the setting of performance measures and targets are expected to occur at the date of grant. Details of the targets will be published in the RNS following the grant.

– All incentives are subject to malus and clawback provisions.

– In-employment shareholding guidelines apply (200% of salary) and post-employment shareholding guidelines (100% of salary) apply for two years.

2023 REMUNERATION POLICY OVERVIEW

Remuneration objectives and key principles
The Remuneration Policy supports and rewards the achievement of the Group's strategy to deliver profitable and sustainable growth over the short and longer term. This is driven and evaluated by how the Group performs against a variety of strategically aligned KPIs, both financial and non-financial. Our Directors' Remuneration Policy was last approved by shareholders at the AGM in 2020 and this overview outlines the proposed key changes which shareholder will be able to vote on at the 2023 AGM and how this would be applied.

As a Committee, we believe that the proposed evolution of the Policy will be "fit for purpose" to align both stakeholders' and our Executive Directors' focus and interests during the next phase of the Company strategy. In proposing the changes, we have sought feedback from our largest institutional shareholders, the major investor bodies and employees; feedback themes have been incorporated in our final proposals.

The Policy is set out in full on pages 112 to 121.

Executive Director remuneration for 2023

<table>
<tr><th colspan="2">Element</th><th>Maximum</th><th>2023</th><th>2024</th><th>2025</th><th>2026</th><th>2027</th></tr>
<tr><td rowspan="3">Fixed Pay</td><td>Salary</td><td>Market competitive. Increases set with reference to the wider workforce.</td><td>Salary paid.</td><td colspan="4" rowspan="3"></td></tr>
<tr><td>Benefits</td><td>Market competitive.</td><td>Benefits paid.</td></tr>
<tr><td>Pension</td><td>Aligned to those available to majority of local workforce.</td><td>Pension provision paid.</td></tr>
<tr><td rowspan="3">Variable Pay</td><td rowspan="2">Short-term incentive plan</td><td rowspan="2">CEO/CFO 150% of salary. 70% cash and 30% in deferred shares.</td><td rowspan="2">Annual performance conditions apply. Majority weighting on Group financial targets, minority to ESG performance and strategic objectives.</td><td>Cash element paid (70% of incentive).</td><td colspan="3"></td></tr>
<tr><td colspan="2">Two-year share deferral (30% of incentive).</td><td colspan="2"></td></tr>
<tr><td>Long-term incentive plan</td><td>CEO 150% of salary, CFO 150% of salary. Two-year holding period.</td><td colspan="3">Based on a variety of financial and/ or shareholder value creation and/ or ESG measures over a three-year performance periods.</td><td colspan="2">Two-year holding period.</td></tr>
<tr><td rowspan="3">Governance</td><td>Malus (withholding) and clawback (recovery)</td><td>All incentives.</td><td colspan="5">Malus: incentive plans allow for the Committee to exercise discretion and make adjustments to formulaic outcomes. Clawback: misstatement, serious misconduct, serious reputational damage, error in calculation and corporate failure.</td></tr>
<tr><td>Share ownership requirement</td><td>200% of salary.</td><td colspan="5">Executive Directors required to build and maintain the share ownership requirement.</td></tr>
<tr><td>Post-employment share ownership</td><td>100% of salary.</td><td colspan="5">Holding requirement for shares until two years after cessation of employment.</td></tr>
</table>

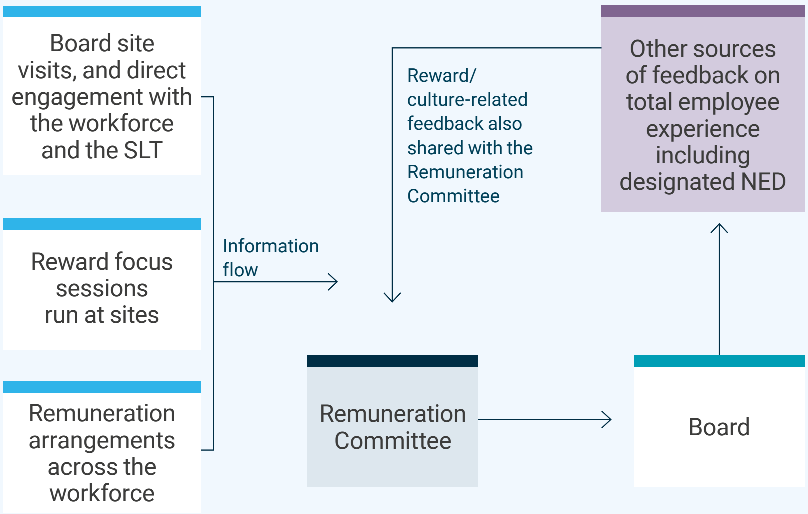
Outline of key Policy changes

Element		Current Policy	Proposed Policy	Rationale
Fixed Pay	Pension	Current policy for Executive Directors is up to 15% of salary.	The maximum contribution for Executive Directors will be aligned with those available to the majority of the workforce in which the Executive is employed.	The proposed change is consistent with the 2018 UK Corporate Governance Code and Investment Association guidance. Details in respect of reducing the pension of incumbent Executive Directors is explained below.
Variable Pay	Short-term incentive plan opportunity	The maximum opportunity for Executive Directors is 125% of salary.	The maximum opportunity for Executive Directors is *150%* of salary.	The proposed increase to the STIP potential ensures the package remains competitive against companies of a similar size, complexity and geographical spread, enables a greater focus on ESG and enables a greater proportion of the STIP to be delivered in deferred shares (see below).
	Short-term incentive plan performance measures	Based on a combination of financial and strategic performance measures with at least 75% of the incentive assessed against Group level financial measures.	Based on a combination of Group financial (majority weighting) and strategic and/or ESG performance measures (minority weighting).	The proposed change provides the Committee with greater flexibility to operate ESG-based performance metrics in addition to strategic metrics albeit ensuring that the majority of the STIP remains on Group-based financial measures.
	Long-term incentive plan performance measures	Awards vest based on a variety of financial and/or shareholder value creation measures.	Awards vest based on a variety of financial and/or shareholder value creation and/or ESG measures.	The proposed change provides the Committee with greater flexibility to introduce and operate long-term ESG-based performance metrics.
Governance	Short-term incentive plan deferral	20% of any earned incentive is automatically deferred pre-tax into shares for a period of two years.	*30%* of any earned incentive is automatically deferred pre-tax into shares for a period of two years.	The proposed change increases long-term alignment with shareholders and means that almost all of the increase to the STIP potential will be deferred into shares.

PAY IN THE WIDER WORKFORCE

- The Committee spends considerable time on matters relating to remuneration across the workforce. This provides important context to frame decision-making on Executive Director remuneration as well as ensuring that reward principles are consistently applied throughout the organisation and reward practices are aligned and complementary.
- TT Electronics' overarching remuneration is designed to underpin the Group's core purpose and delivery of strategic priorities. The framework is commonly applied across the Group and supports the people strategy to create an inclusive, equitable and performance-related organisational culture. Where practicable, remuneration practices are aligned with those of the Executive Directors to ensure alignment of focus and motivation.
- As described in this report, during the year the Committee focused on the response to the impact of inflation on employees and affordability pressures arising from the cost of living. The Committee expects this to remain a key agenda item for 2023.
- In addition to existing site employee forums, we built on the feedback from our 2021 pilot sessions with the workforce, focused on our remuneration principles and how these align with our remuneration arrangements, to deliver improved sessions across our UK footprint. Sessions are design to be open, transparent and enable constructive discussion on remuneration to enable clear and concise feedback of themes to the Committee.
- NED site visits (in-person for: Cleveland, Minneapolis, Oldham and virtual for Suzhou, China) continue to allow for open and frank dialogue directed by feedback and priority areas from our employees.

EMPLOYEE VOICE IN THE BOARDROOM

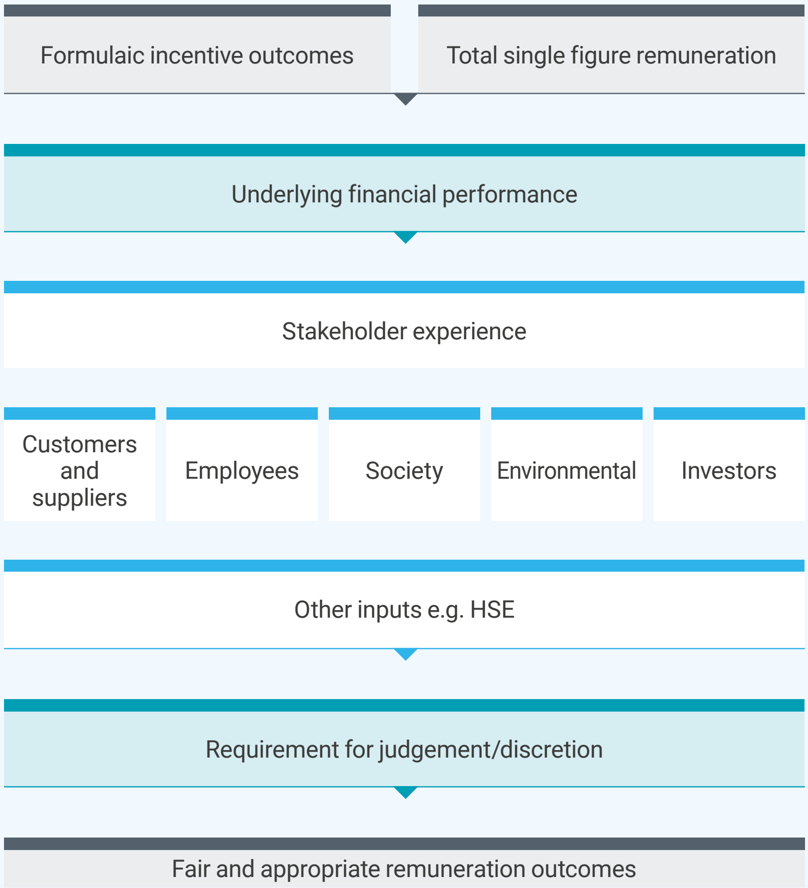


- For 2022, the median CEO pay ratio has decreased from 52:1 in 2021 to 43:1. This reflects our remuneration principles, with the majority of CEO remuneration based on variable performance-related pay and the wider workforce having the majority of remuneration based on fixed pay. In particular the decrease in ratio results from: (i) higher workforce earnings which include the additional payment to support employees manage the impacts of high inflation, and (ii) a lower STIP award to the CEO than in the prior year reflecting the challenging external environment and a low LTIP vesting which continues to reflect the pause in the growth momentum of the Company caused by the pandemic.
- Creating a safe and positive work environment where all employees can develop and build their expertise is of paramount importance to TT. We strive to build a supportive, diverse and engaging culture and place to work built around the TT Way. We are confident that our people policies and approaches to recruitment, training, development and remuneration are fair and free of bias.
- Across the Company we are broadly evenly split by gender; however, we acknowledge that there remain long-term objectives to further improve diversity amongst our professional and management roles. We continue to make progress by championing a female-friendly workplace and targeting our talent processes to improve our diversity. We have started to see improved representation of female employees in professional, manager and leadership roles. Details of our UK Gender Pay disclosures can be found on www.ttelectronics.com.

DISCRETION, INDEPENDENT JUDGEMENT AND STAKEHOLDER ENGAGEMENT

- As a Committee, we are willing to exercise judgement and discretion when determining remuneration outcomes for the Executive Directors.
- Before agreeing remuneration outcomes we reflect on whether the Company's overall performance and stakeholder experiences are appropriately represented by the financial and non-financial performance measures we have set. We also reflect on ESG matters, the demonstration of leadership qualities, living our values and conversations with our major shareholders where relevant.
- The Committee did not apply judgement or exercise discretion to performance-related remuneration in respect of 2022.
- In line with good practice, the Committee reviews its effectiveness on a regular basis. The Committee believes that the openness and transparency provided by the Company is of significant benefit to enable extensive and well-informed decision-making.
- During the year we engaged our investor and employee stakeholders to consult on our 2023 Remuneration Policy and how we intended to implement the Policy in the design of remuneration for 2023. The Committee thanks our stakeholders for their engagement, support and constructive dialogue which helped to test the rigour of our approach and improve the final proposals. We remain committed to stakeholder engagements.

Assessing remuneration outcomes



THE YEAR AHEAD

As the Company continues to develop, the Committee, working with management, will continue to assess and ensure our arrangements remain fit for purpose to unlock the potential of the Group. In particular, the Committee looks forward to assessing the successes of the changes of the 2023 Remuneration Policy and the evolution of performance measures in our incentives against the aims of the Policy review. The Committee remains mindful of the impact of high inflation on employees' cost of living and will ensure this remains an area of focus.

Alison Wood
Chair, Remuneration Committee
7 March 2023

REMUNERATION POLICY REPORT OVERVIEW

INTRODUCTION

The following pages detail the Directors' Remuneration Policy which we intend to apply, subject to shareholder approval at the 2023 AGM, and how it differs from that approved by shareholders at the 2020 AGM.

The Remuneration Policy supports and rewards the achievement of the Group's strategy to deliver profitable and sustainable growth over the short and longer term. This is driven and evaluated by how the Group performs against a variety of strategically aligned KPIs, both financial and non-financial. As a Committee, we believe that the proposed Policy will be "fit for purpose" to align both stakeholders' and our Executive Directors' focus and interests during the next phase of the Company strategy. In proposing the changes, we have consulted with our largest institutional shareholders, the major investor bodies and employees; feedback themes have been incorporated in our final proposals.

Summary of the key changes from the previous Policy
The key differences between the Policy approved by shareholders in 2020 and the 2023 Policy are as follows:

- To align the pension provision for Executive Directors (existing and new) to those available to the majority of the workforce in which the Executive is employed. This is currently 7 per cent of salary.
- To better reflect the wider role TT plays in the global ESG arena and the importance of our sustainability strategy, we are increasing the flexibility within our remuneration to introduce a separate ESG component into the STIP and more clearly enabling the ability to introduce ESG measures into the LTIP during the Policy period.
- To enable a wider choices of performance measures in incentives by increasing the flexibility with respect to performance metrics used in both the STIP and LTIP, and to increase flexibility of metric weightings in the STIP.
- To ensure remuneration packages remain appropriately positioned to attract and retain the high calibre individuals required to deliver the Group's strategic priorities and lead a Company of our scale and complexity by increasing variable, performance-related pay, rather than fixed remuneration, with an increase in STIP opportunity of 25% of salary to 150% of salary. This change is also fundamental to enabling additional focus on ESG in our incentives. To further improve stakeholder alignment and Executive Director shareholding the STIP deferral into shares will increase from 20 per cent to 30 per cent.

KEY POLICY OBJECTIVES

Our remuneration principles, shown below, informed the design of our current Remuneration Policy which aims to:

- Enable us to attract, retain and motivate high-calibre executive talent in a challenging and competitive business environment to promote the strategic and financial performance of the business;
- Deliver an appropriate balance between fixed and variable compensation for each Executive;
- Place a strong emphasis on performance, both short and longer term;
- Strongly align to the achievement of strategic progress and the delivery of sustainable value to shareholders; and
- Avoid creating excessive risks in the achievement of performance targets.

Remuneration principles
- Performance related: the majority of the Executive and Senior Manager remuneration packages should be determined based on the performance of the Group, maintaining an alignment of reward outcomes with stakeholder interests.
- Transparency and culture: to engender a fair and collaborative culture, total remuneration frameworks should be clear, openly communicated and easy to understand.
- Competitive: through a combination of base salaries and competitive performance-related incentive schemes, the Committee aims to provide competitive total remuneration in return for superior performance.

Alignment with the Code

The table below details how the Committee addresses the factors set out within Provision 40 of the Code, which align with our principles:

Clarity	Simplicity	Risk	Predictability	Proportionality	Alignment to culture
– The Remuneration Policy sets out the terms for remuneration including limits in terms of quantum, the measures which can be used and discretions which could be applied if appropriate. – We believe in being open and transparent. Detailed disclosures of the relevant performance assessments and outcomes are provided so stakeholders can assess whether remuneration paid to Executives is appropriate. We continually review feedback to enhance the clarity and transparency of the report. – We welcome stakeholder engagement and are committed to shareholder consultation, such as that undertaken over the past year.	– We are mindful to avoid overly complex remuneration structures. Our arrangements include market standard short- and long-term incentive designs, each of which are explained in detail. – No complex or artificial structures are required to operate incentive plans. – Participants in incentive plans receive annual communications to confirm award levels and performance measures. – Stakeholder engagements on remuneration changes help to ensure that proposals remain simple and easy to understand.	– The Committee undertakes an annual review of risks. Identified risks are considered with appropriate mitigation strategies or tolerance levels agreed. – The Committee considers that the structure of variable incentive arrangements does not encourage unnecessary risk taking. – The Committee considers the effective risk management throughout the delivery of variable incentive plans, applying reasonable discretion to override formulaic outturns as appropriate. – Clawback and malus provisions are in place across all incentive plans and are clearly communicated.	– Our Policy clearly outlines the maximum award levels and vesting outcomes applicable to our variable incentive plans. Possible reward outcomes can be easily quantified, and these are reviewed by the Committee. – Performance is reviewed regularly so there are no surprises at the end of performance periods. – Our approach to decision-making ensures pay outcomes are fair, proportionate and do not reward poor performance.	– There is a robust link between the delivery of strategic business objectives and performance outcomes in our variable incentive plans. Performance is assessed on a broad basis, including a combination of financial, operational, ESG and strategic progress which ensures there is no undue focus on a single metric which may be to the detriment of other stakeholders. – The Committee has appropriate discretion to override formulaic outturns if they are deemed inappropriate in light of the wider performance of the Group and considering the experience of stakeholders.	– Our remuneration principles underpin our Remuneration Policy for the Executive Directors and that of the wider workforce to ensure cultural alignment through the Group and that performance aligns with our TT Way values. – The Committee takes into account the stakeholder experience, particularly the context of the wider workforce and wider society, when determining remuneration outcomes for the Executive Directors. – Our remuneration principles place a strong emphasis on performance, both short and long term to deliver a sustainable business in the long term. This is a key part of our purpose and informs our approach to incentive design, target setting, operation of discretion and setting of non-financial strategic performance objectives.

2023 REMUNERATION POLICY

Operation and scope of Remuneration policy
The future Remuneration policy is intended to apply to the Executive Directors and Non-executive Directors from the close of the Company's AGM on 9 May 2023, subject to approval by shareholders.

The Committee has written this Policy principally in relation to remuneration arrangements for the Executive Directors, whilst taking into account the possible recruitment of a replacement or additional Executive Director during the operation of the Policy, which is intended to operate for the full three-year Policy term. However, the Committee may after due consideration, seek to change the Policy during this period if it believes it is appropriate to do so for the long-term success of the Company, after consultation with stakeholders and having sought shareholder approval at a general meeting.

The Committee reserves the right to make any remuneration payments and/or payments for loss of office (including exercising any discretions available to it in connection with such payments) notwithstanding that they are not in line with the Policy where the terms of the payment were agreed:

(i) before AGM 2014 (the date the Company's first shareholder-approved Directors' Remuneration Policy came into effect);

(ii) before the future Policy comes into effect, provided that the terms of the payment were consistent with the shareholder-approved Directors' Remuneration Policy in force at the time they were agreed; or

(iii) at a time when the relevant individual was not a Director of the Company and, in the opinion of the Committee, the payment was not in consideration for the individual becoming a Director of the Company. For these purposes "payments" includes the Committee satisfying awards of variable remuneration and, in relation to an award over shares, the terms of the payment are "agreed" at the time the award is granted.

Future Remuneration policy table
Subject to shareholder approval at the Company's 2023 AGM, the Remuneration Policy for each remuneration element will be as outlined in the following Policy tables. From time to time, the Committee may consider it appropriate to apply judgement and discretion in respect of the approved Policy. This is highlighted where relevant in the Policy, and the use of discretion will always be in the spirit of the approved Policy.

Salary			**No material change**
Purpose and link to strategy	Operation	Opportunity	Performance measures
To provide a core reward for the role. Set at an appropriate level to attract, motivate and retain high calibre individuals needed to deliver the Group's strategic priorities.	Salary is normally reviewed annually, typically effective from 1 January each year. Salaries are normally paid in the currency of the Executive Director's home country. The Committee considers a number of factors in setting salaries, including but not limited to: – Broader Company policy in respect of salaries applied to all employees. – Individual's role and scope, skills, experience and performance. – Competitiveness to independently sourced data compared to relevant comparator groups such as companies of similar complexity, sector and size. – Set at a level to ensure an appropriate level of basic fixed income and avoids excessive risk arising from over reliance on variable income.	There is no prescribed maximum annual increase although increases are generally aligned with the general increase received by the broader employee base in which the Executive operates and market movement. Higher increases may be made at the Committee's discretion in certain circumstances such as a significant change in responsibility, in the scale of their role or in the size and complexity of the Group. Larger increases may also be considered for progression if a Director has been initially appointed to the Board at a lower than typical salary. Current base salary levels are set out in the Directors' Annual Remuneration Report.	Not applicable, although the overall performance of the individual is taken into account when determining salary increases.

Benefits			**No material change**
Purpose and link to strategy	Operation	Opportunity	Performance measures
To provide market competitive and cost-effective benefits to attract and retain high calibre individuals	Executive Directors are eligible to receive benefits, which typically may include but are not limited to: – Cash allowance in lieu of company car benefit. – The provision of private medical insurance, health screening. – Life assurance, income protection and critical illness cover. In line with the policy for other employees, Executive Directors may be eligible to receive relocation or overseas relocation benefits and allowances as appropriate. Benefit provision is tailored to reflect geographic market practice in which the Executive Director is based and different policies may apply if Executive Directors are based in a different country.	There is no prescribed maximum as benefit costs can fluctuate depending on changes in provider cost and individual circumstances. Details of the current benefit costs are set out in the Directors' Annual Remuneration Report.	Not applicable.

Pension			**No material change**
Purpose and link to strategy	Operation	Opportunity	Performance measures
To provide a market competitive level of retirement income and assist attraction and retention.	Pension arrangements for Executive Directors are structured in accordance with the provisions available to the majority of the workforce in which the Executive is employed. Executive Directors in the UK are entitled either to join the defined contribution pension plan and/or to receive a cash pension in lieu of the pension contribution. In line with market practice, pensionable pay for Executive Directors in the UK includes basic salary only.	The maximum contribution for Executive Directors will be aligned with those available to the majority of the workforce in which the Executive is employed.	Not applicable.

Short-term incentive plan			**Change to opportunity, increased deferral into shares, greater flexibility to operate non-financial performance measures, such as ESG**
Purpose and link to strategy	Operation	Opportunity	Performance measures
To incentivise and recognise execution of the achievement of the business strategy on an annual basis. Rewards the achievement of stretching annual financial measures and strategic business targets aligned to business strategy.	Performance measures and targets are typically set at the Committee's discretion at the start of each financial year and are aligned with the strategic business priorities. Financial targets are set with reference to the budget. Incentive awards are assessed and determined by the Committee based on performance against the targets. 30 per cent of any earned incentive is automatically deferred pre-tax into shares for a period of two years. Deferred shares are eligible for dividend equivalents up to the date of vesting and release. Deferred awards (after any sales to pay associated tax withholdings) must be retained until the share ownership guideline and/or post-cessation of employment share ownership guidelines are met. The Committee may apply judgement in making appropriate adjustments to incentive outcomes to ensure they reflect underlying business performance and shareholder interests. Awards are subject to malus and clawback provisions.	The maximum opportunity for Executive Directors is 150 per cent of basic salary. For target performance, the incentive award will be 50 per cent of the maximum opportunity.	Based on a combination of Group financial (majority weighting) and strategic and/or ESG performance measures (minority weighting). The specific measures and weighting between measures will be determined each year to ensure alignment with Company strategy and budgets. The Committee may use its discretion to set financial measures that it considers appropriate in each financial year. Specific performance measures and weightings will be included in the relevant year's Annual Report on Remuneration.

Long-term incentive plan			**Greater flexibility to operate ESG performance measures**
Purpose and link to strategy	Operation	Opportunity	Performance measures
To incentivise and recognise delivery of longer-term sustainable business performance, aligning Executive Directors' interests with those of shareholders. In addition, to provide a retention element, encourage long-term shareholding and discourage excessive risk taking.	Award of shares, either as nil cost options or conditional awards, made annually with vesting dependent on the achievement of performance conditions measured over three years. Vested shares (after any sales to pay tax) are subject to an additional two-year holding period. Performance measures and targets are set at the Committee's discretion, there may be a single target range to be met at the end of the three-year period or annual target ranges to be met throughout the three-year period. Targets are set for each award with reference to the business plan. Awards are eligible for dividend equivalents up to the date of vesting and release. The Committee may apply judgement to adjust the formulaic vesting outcomes (either up or down) to ensure they reflect underlying business performance and shareholder interests over the performance period. Awards are subject to malus and clawback provisions.	The maximum award which may be granted under the LTIP in any one year is up to 150 per cent of basic salary for the Executive Directors. The amount that is paid out for achievement of threshold performance will be no more than 25 per cent of the maximum. The minimum vesting is zero.	Awards vest based on a variety of financial and/or shareholder value creation and/or ESG measures. The specific measures and weighting between measures will be determined each year to ensure alignment with Company strategy and business plan. The Committee may use its discretion to set measures that it considers appropriate each year. Specific performance measures and weightings will be included in the relevant year's Annual Report.

All-employee share plans			**No material change**
Purpose and link to strategy	Operation	Opportunity	Performance measures
To encourage employee share ownership and increase alignment with shareholders.	A number of all-employee share plans are operated across the Group. Executives are entitled to participate in all-employee share plans (Sharesave in the UK, Employee Share Purchase Plan in the USA) on the same terms as all other eligible employees.	In accordance with prevailing legislative and plan limits.	Not applicable.

Share ownership guidelines			**No material change**
Purpose and link to strategy	Operation	Opportunity	Performance measures
To align the interests of Executive Directors with those of shareholders.	Executive Directors are required to build and maintain significant shareholdings over time.	Executive Directors are required to build and maintain a shareholding in employment of 200 per cent of basic salary. Post-cessation of employment, Executive Directors are required to maintain for two years, a shareholding of half the in employment requirement or maintain their actual holding if lower. The post-cessation requirement will be calculated based on the basic salary at the leave date and applies to shares that vest (after any sales to pay tax) under the long-term incentive plan and the deferred share bonus plan (DSBP) following the 2020 AGM.	Not applicable.

Malus (withholding) and Clawback (recovery) — **No material change**

The Committee may apply judgement to adjust formulaic incentive outcomes (either up or down) prior to payment/vesting to ensure they reflect underlying business performance and shareholder interests. Malus and clawback events include material misstatement, misconduct of the participant, vesting/payments based on erroneous or misleading data, serious reputational damage and corporate failure.

The Committee may enact clawback up to three years from the vesting of share awards under the LTIP (2019 awards onwards) and the DSBP. Clawback of the cash incentive may be enacted up to two years after payment. In the event that clawback is enacted, the Committee has the discretion to require repayment or to reduce any unvested or unpaid award made under any Employees' Share Scheme or the short-term incentive plan. In addition, if a participant in the DSBP is subject to investigation then the vesting of their award may be delayed until the outcome of that investigation.

Future Remuneration Policy Table – Non-executive Directors (NEDs)

Non-executive Director fees			**No material change**
Purpose and link to strategy	Operation	Opportunity	Performance measures
To attract NEDs who have a broad range of experience and skills to oversee the implementation of our strategy.	NED fees (excluding those of the Chairman) are set by the Chairman and Executive Directors. The Chairman fee is set by the Committee. NEDs receive a basic fee paid monthly in respect of their Board duties. Further fees are paid in respect of Board committee chair fees and the role of Senior Independent Director. No additional fees are payable for membership of a Board committee. Fees are reviewed annually and set by reference to independently sourced data compared to relevant comparator groups such as companies of similar complexity, sector and size. Fee reviews are typically effective from 1 January each year. Fees are normally paid in the currency of the Non-executive's home country. Non-executives are eligible for the reimbursement of Company-related expenses (grossed up for tax where appropriate) relating to the performance of their duties including travel, accommodation and subsistence.	There is no prescribed maximum fee level, increases are generally aligned with the general increase received by the broader employee base and market movement.	Not applicable.

NOTES TO THE POLICY TABLE

Performance measures and targets
The Committee believes the choice of performance measures for the short-term and long-term incentive plans represent an appropriate balance between the short-term and long-term focus of the Group's strategic aims and key performance indicators, as well as an appropriate balance between internal and external assessment of performance. Performance measures for the short-term incentive are tied to the Company's delivery of key financial metrics and non-financial strategic objectives. The measures applicable to the LTIP reward the delivery of long-term returns to shareholders and the Group's financial performance being consistent with the Company's objective of delivering superior levels of long-term sustainable value to shareholders. When setting targets, the Committee takes into account a variety of factors, including but not limited to, market practice, market expectations and internal business plans, and forecasts. In setting the targets, the Committee ensures that they are sufficiently stretching and that there is an appropriate balance between incentivising Executive Directors to meet targets for the year, whilst ensuring that they do not drive unacceptable levels of risk and encourage inappropriate behaviours.

Consideration of remuneration arrangements throughout the Group
In setting the Policy the Committee considers the remuneration arrangement across the Group and the relativity of Executive Director remuneration. When considering annual salary adjustments, the Committee takes account of the expected increases for the broader employee base.

Remuneration arrangements across the Group are based on the same principles that remuneration should support the delivery of the business strategy and should be sufficient to attract, motivate and retain talent. Although the remuneration offered to the Executive Directors has a stronger emphasis on variable performance-related pay than that offered to other employees, to the extent practicable, remuneration practices are cascaded down the organisation, such that employees are aligned towards common goals.

The Group operates in a number of different geographic territories and has many employees who carry out a range of diverse roles. The ratio of fixed to variable pay differs by employee level and the structure of remuneration varies by local market, consisting:

– Salary and benefits (including pension/retirement) are tailored to the local market.

– Short-term incentive plans are operated across the Group, typically on differing metrics aligned to the Company strategy which may include financial performance, sales team KPIs, operational KPIs, HSE, ESG, individual or team performance.

– Long-term incentive plan awards are made annually to senior leadership roles across the Group, typically on the same terms as those for Executive Directors or as restricted share awards.

– All employee share plans are available to all UK and US employees.

The Committee consulted with a range of stakeholders in the formation and finalisation of the 2023 Policy. Stakeholders included our key shareholders, shareholder proxy bodies and our employees whose remuneration most closely aligns with that of the Executive Directors. This subset of employees were selected as being: (i) those with the most comprehensive understanding of the company strategy and the company's KPIs, (ii) whose remuneration would most likely be impacted by the proposals, and (iii) best place to provide constructive feedback on the proposals.

Recruitment Policy
When considering the recruitment of a new Executive Director, the Committee will apply the prevailing Remuneration Policy at the time of appointment.

The Committee will determine remuneration on a case-by-case basis depending on the role, the market from which they will operate, their skills and experience. Total remuneration levels will be set to attract the most appropriate candidate and will take into account remuneration levels amongst relevant comparator groups. Where appropriate, salaries may initially be set below mid-market levels to allow for future development in the role with the Committee retaining discretion to award increases in excess of those of the wider workforce to bring the salary to the market level over time.

Benefit and pension arrangements will be set in accordance with the terms of the approved Remuneration Policy in force at the time of appointment. The Committee may also agree that the Company will meet certain costs associated with the recruitment, for example legal fees, and the Committee may agree to provide relocation benefits.

It is anticipated that new Executive Directors will participate in short- and long-term incentive plans on the same arrangements as existing Directors. In certain circumstances, the performance measures associated with these awards, in the year of joining, may be granted with different measures and/or targets to the other Directors.

For an externally appointed Executive Director, the Company may offer additional remuneration that it considers necessary to buy out current entitlements from the existing employer that will be lost, as may be required in order to achieve a successful recruitment when the Committee considers these to be in the best interests of the Company and stakeholders. The Company is mindful of the sensitivity relating to recruitment packages and will seek to minimise buy-out remuneration. The overriding principle for any such remuneration would be that any replacement buy-out award should be of comparable commercial value to the terms, incentives and other compensation which have been forfeit. In order to facilitate buy-out arrangements, existing incentive arrangements will be used to the extent possible, although if necessary awards may be granted as permitted under the Listing Rules exemption 9.4.2.

For an internal executive Director appointment or a new Director following acquisition or merger, any variable pay element awarded in respect of their prior role may be determined according to the original terms, adjusted as relevant to take into account the appointment. In addition, any other ongoing remuneration obligations existing prior to appointment may continue on their original terms.

The Committee retains discretion to make appropriate remuneration decisions outside the standard Policy to meet the individual circumstances of recruitment when:

– an interim appointment is made to fill an Executive Director role on a short-term basis; or

– exceptional circumstances require that the Chairman or a Non-executive Director takes on an executive function on a short-term basis.

In the event that a Non-executive Director takes on an executive role for a temporary period, the Non-executive Director will be remunerated in line with the prevailing Executive Director Remuneration Policy in force at the time of appointment.

If appropriate, on the recruitment of a new Executive, the Committee may agree to an initial notice period in excess of 12 months, reducing to 12 months over a specified period.

Fees for a new Chairman or Non-executive Directors will be set in line with the approved Policy in force at the time of appointment. It is not intended that variable pay, day rates or benefits in kind be offered, although in exceptional circumstances such remuneration may be required in currently unforeseen circumstances.

The Committee will include in future Remuneration Reports details of the implementation of the Policy as utilised during the Policy period in respect of any such recruitment to the Board.

Service contracts/letters of appointment

Executive Directors service contracts are terminable by either party with 12 months' notice and allow for the Company to impose a six-month non-competition clause.

The Chairman and Non-executive Directors do not have service contracts but have letters of appointment with the Company. Notice periods are normally set at one month for the Chairman and Non-executive Directors.

Service contracts are available for inspection at the Company's registered office.

Loss of office policy

In the event that an Executive Director's employment with the Company terminates, the following policies and payments will apply.

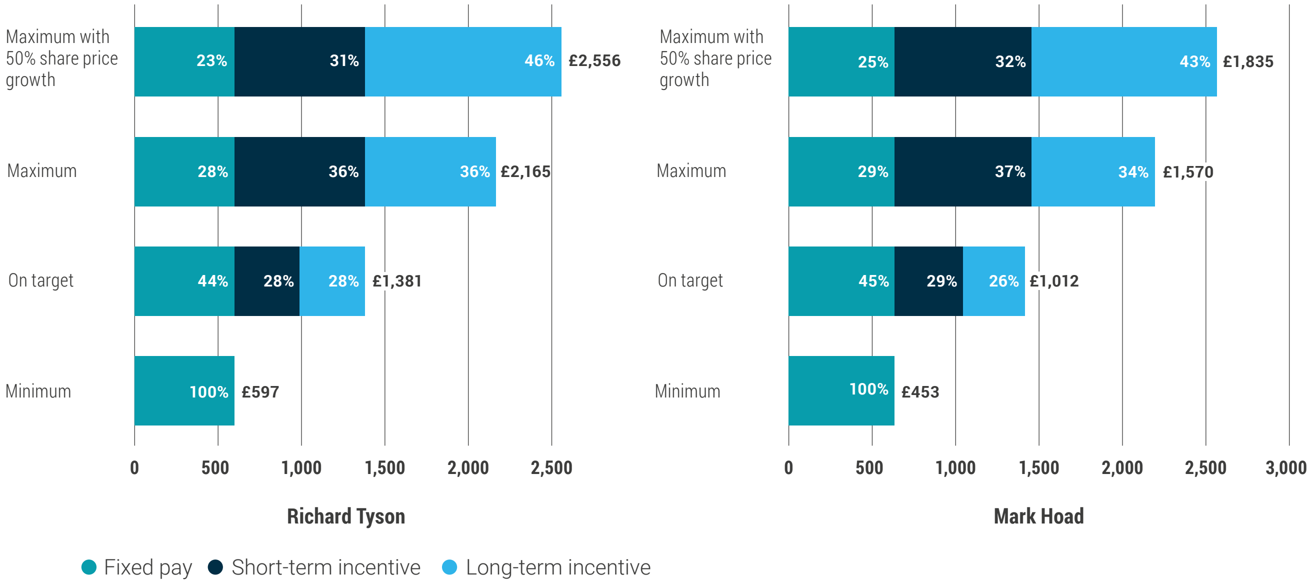
Element of Remuneration	Loss of office payment policy
Fixed Pay	Up to 12 months' annual salary payable. The contracts contain provision, at the Board's discretion, for payment in lieu of notice. In calculating any termination payment, the Board would take into account the commercial interests of the Company and apply usual common law and contractual principles. Generally, benefits will continue to apply until cessation. The Committee may make payments in connection with an existing legal obligation or in respect of any claim relating to the cessation of employment. This may include fees for outplacement assistance, legal and/or professional advice.
Short-term incentive plan	No award would generally be payable if on the date the payment is declared an individual is no longer employed by the Company, or has received or given notice to leave the Group. However, the Committee retains discretion to deem an individual a good leaver[1], in which case it may provide a time pro-rated award, determined against the relevant performance conditions. Any award would normally be payable at the normal payment date. In determining the level of short-term incentive to be paid, the Committee may, at its discretion, take into account performance up to the date of cessation or over the financial year as a whole based on appropriate performance measures as determined by the Committee.
Deferred share bonus plan	Deferred short-term incentive awards are governed by the plan rules which are subject to shareholder approval. Unvested awards will normally lapse unless the individual is deemed a good leaver[1] in which case the awards will vest in full on the original vesting date. The Committee retains discretion, in exceptional circumstances, to determine an early vesting date. In the event of change of control, awards will vest or may be exchanged for new awards.
Long-term incentive plan	Long-term incentive plan awards are governed by the plan rules which have been approved by shareholders. Unvested awards will normally lapse unless the individual is deemed a good leaver[1] in which case the awards will normally vest on the original vesting date, subject to the satisfaction of the relevant performance conditions and be pro-rated for time. The Committee retains discretion to determine that awards vest at cessation (for example in the case of death) and/or to disapply time-based pro-ration. In the event of change in control, and unless participants agree with the acquiring company to exchange their awards, awards will vest subject to the satisfaction of the relevant performance conditions and be pro-rated for time. However, the Committee has discretion to disapply time proration.

1 For example: death, disability, redundancy, retirement, or other circumstances at the discretion of the Committee.

External appointments

Executive Directors, with the prior approval of the Board, may accept one external appointment as a Non-executive Director of another company. Experience as a board member of another company is considered to be valuable personal development, which is of value to the Company. The retention of any related fees by the Executive Director or remission to the Company will be determined on a case-by-case basis.

Illustration of total remuneration opportunity
The following charts illustrate the future total remuneration for each Executive Director in respect of the proposed remuneration opportunity to be granted under the future Remuneration Policy for approval at the 2023 AGM. The charts indicate the minimum, on-target and maximum remuneration that could be received. Underlying assumptions follow the charts.



All scenarios:

- Base salary and pension to be paid in 2023.
- Benefits in kind received in 2022 as shown in the Single Total Figure of Remuneration table.
- Short-term incentive is based on 150 per cent of salary, as proposed under the future Remuneration Policy.
- Long-term incentive is based on the multiples for 2023 of 150 per cent and 135 per cent of salary for the CEO and CFO respectively.
- Dividend equivalents are not included in respect of deferred awards under the short-term incentive or awards under the long-term incentive plan.

Fixed:

- Fixed pay consists of salary, pension and benefits in kind as provided under the Remuneration policy.

On-target:

- For the short-term incentive 50 per cent of the maximum would be payable. For the long-term incentive 50 per cent vesting is assumed.

Maximum:

- It is assumed that the short-term incentive would be payable at maximum and the that the long-term incentive award would vest in full.

Maximum with share price growth:
Calculated as per the maximum but for the long-term incentive award which includes a 50 per cent share price growth assumption.

Discretion
The Committee has discretion in numerous areas of the Policy as set out in the report. The Committee may also exercise administrative and operational discretion under incentive plan and share plan rules. The Committee may make minor amendments to the Policy set out in this Policy Report (for regulatory, exchange control, tax or administrative purposes or to take account of a change in legislation) without obtaining shareholder approval for that amendment.

The Committee may vary or waive any performance condition(s) if an event occurs which causes it to determine that the original condition(s) have ceased to be appropriate, provided that any such variation or waiver is fair, reasonable and not materially less difficult to satisfy than the original condition would have been but for the event in question (in its opinion). The Committee may also adjust the calculation of performance targets and vesting outcomes (for instance for material acquisitions, investments or disposals and events not foreseen at the time the targets were set) to ensure they remain a fair reflection of performance over the relevant period. In the event that the Committee was to make an adjustment of this sort, a full explanation would be provided in the next Directors' Annual Remuneration Report. The Committee will also consider shareholder consultation in respect of material adjustments.

ANNUAL REPORT ON REMUNERATION

IMPLEMENTATION OF THE REMUNERATION POLICY FOR THE YEAR ENDING 31 DECEMBER 2023

A summary of how the Directors' Remuneration Policy will be applied, subject to the approval of the future Remuneration Policy, during the year ending 31 December 2023 is set out below.

BASIC SALARY

The Remuneration Committee agreed that it would be appropriate to increase the base salaries of the Executive Directors at a level lower proportionally than general increases across the broader workforce and significantly below inflation. Executive Director base salaries were increased by 5 per cent effective 1 January 2023. After a review, the budget for the Group's UK salary review has been increased and will, once again, be weighted to our lower paid employees. Following on from our cost of living actions in 2022 salary increases across the UK are expected to average 6.5 to 7.5 per cent depending on location, promotional increases and individual performance.

Executive	**2023**	2022	Increase
Richard Tyson	**£522,402**	£497,526	5%
Mark Hoad	**£391,876**	£373,215	5%

PENSION AND BENEFITS

The Executive Directors previously agreed that their contractual pension allowance of 15 per cent of salary would be aligned with those available to the wider UK workforce by 31 December 2022 by way of a single reduction. The revised pension allowance, in line with those available to the wider UK workforce, is 7 per cent of salary.

SHORT-TERM INCENTIVE PLAN

The Committee believes it is important that a significant proportion of Executive Director remuneration be performance related and that the performance conditions applying to incentive arrangements support the delivery of the Group's strategy. In line with the proposed new Policy, the intention is that the maximum short-term incentive opportunity for 2023 will be increased from 125 per cent to 150 per cent of base salary. The bonus deferral into shares will increase from 20 per cent to 30 per cent of the earned bonus for a period of two years.

The Policy changes provide the Committee with greater flexibility to ensure the selection of performance measures that best reflect those critical to business needs. The split between financial (majority weighting) and non-financial (minority weighting) performance measures will remain broadly consistent with prior years, continuing to be principally focused on profit, cash flow and strategic progress. For 2023, a complementary, separate, and higher-profile component is proposed to be introduced to better reflect the strategic importance of ESG performance measures to sustainable shareholder value within our remuneration.

Performance measure	Weighting	Threshold opportunity (% of salary)	Maximum opportunity (% of salary)	Paid in cash	Awarded in shares
Adjusted profit before tax	46.7%	7%	70%		
Group free cash flow	23.3%	3.5%	35%		
ESG	10%	n/a	15%		
Strategic objectives	20%	n/a	30%		
Total	**100%**		**150%**	**70%**	**30%**

Targets are set taking account of internal and external forecasts relating to the Group's performance, the ongoing economic and societal uncertainty arising from the pandemic and reflecting the Board's expectation of the development of the Group. The majority of targets for the 2023 STIP are currently considered to be commercially sensitive; the targets and respective levels of achievement will be disclosed in the 2023 Directors' remuneration report.

Both the ESG and strategic objectives reflect the importance of sustainable value for all our stakeholders. The ESG objectives are focused on our environmental sustainability: (i) Scope 1 & 2 carbon emission reduction; (ii) evaluation of the material Scope 3 impacts; (iii) progress towards SBTi verification; and (iv) employee outcomes and support through the next phase of high inflation. The Committee considered that the people agenda continues to be an area of focus in 2023 and the strategic objectives encompass: (i) human capital management ensuring smooth employee succession and (ii) a strategic review of customer strategies and global supply chains to optimise organic growth opportunities.

To the extent that neither the threshold profit before tax or threshold free cash flow target has been met, the Committee will consider if appropriate, a reduction to the outcomes payable in respect of the strategic objectives and/or the ESG performance measures, up to and including a reduction to zero.

LONG-TERM INCENTIVE PLAN

LTIP awards are expected to be granted in March 2023. Vesting is intended to be based on performance against the following measures over the three-year financial performance period.

Performance measure	Weighting
Adjusted EPS compound annual growth on a constant currency basis over the three-year performance period	50%
Average operating cash conversion over the three-year performance period	25%
Relative TSR performance against the FTSE SmallCap (excluding Investment Trusts)	25%

The performance measures ensure the alignment of senior management and shareholder interests. The 2023 awards are intended to differ from those last year with the inclusion of a cash-based target to reflect the importance of delivering improved and stable cash generation to improve the leverage position over the longer term.

In light of the ongoing external volatility the setting of the final targets will be delayed until the date of grant, the detail of which will be published in the RNS following the grant. The setting of the performance target ranges for the 2023 awards will take into account the latest internal and external forecasts for the business, including both economic and political uncertainty and TT's principal risks.

The Committee will continue to consider the impact of any significant future portfolio development on the outstanding performance targets at the time of the capital deployment. Any further changes to the performance targets in these circumstances will be communicated to shareholders.

The awards, as a percentage of salary, are expected to be as follows:

Executive	**2023**	2022
Richard Tyson	**150%**	150%
Mark Hoad	**150%**	135%

For 2023 the Committee anticipate aligning the awards for the Executive Directors. This continues to ensure that the Executive Directors are adequately tied to the longer-term performance of the Company. The one-off increase in award to Mark Hoad recognises his strong contribution and his importance to the ongoing development of the Company and ongoing value creation for stakeholders. The Committee anticipate that future awards will be at the 2022 levels.

The Committee is mindful that share price falls can lead to the perception of windfall gains. The Committee will review the share price at grant when determining final award values. Discretion may be applied at grant or on vesting to manage any relevant windfall gain from the allocation.

The awards will vest on the third anniversary of grant to the extent the performance targets have been satisfied, followed by a two-year holding period.

SHAREHOLDING REQUIREMENT

No changes will be made to the shareholding requirements. Executive Directors are required to build and maintain a shareholding in employment of 200 per cent of basic salary. Post cessation of employment, Executive Directors are required to maintain for two years, a shareholding of half this requirement or maintain their actual holding if lower. During the two-year period, Executive Directors will be required to self-certify their holdings on an annual basis. In addition, it is anticipated that some vested shareholding will be subject to holding periods during the post cessation requirement.

FEES FOR NON-EXECUTIVE DIRECTORS

The Chairman's fee, NED base fee and NED additional fees increased by 5 per cent effective 1 January 2023, a level which is below the average expected increase for the wider UK workforce.

	2023	2022	Increase
Chairman	**£196,631**	£187,268	5%
Base fee	**£49,316**	£46,968	5%
Additional fees			
Senior Independent Director	**£8,610**	£8,200	5%
Audit Committee Chair	**£8,610**	£8,200	5%
Remuneration Committee Chair	**£8,610**	£8,200	5%

IMPLEMENTATION OF THE REMUNERATION POLICY FOR THE YEAR ENDED 31 DECEMBER 2022

Single figure for total remuneration (audited)

Directors' remuneration for the year ended 31 December 2022 was as follows:

£'000		Salary/ fees	Taxable benefits	Pension	Total fixed pay	Short-term Incentive[1]	Long-term Incentive[2]	Other[3]	Total variable pay	Single total figure
Executive Directors										
Richard Tyson	**2022**	**498**	**38**	**75**	**611**	**380**	**203**		**583**	**1,194**
	2021	485	37	73	595	589	119	3	711	1,306
Mark Hoad	**2022**	**373**	**34**	**56**	**463**	**285**	**137**		**422**	**885**
	2021	364	32	55	451	442	82	3	527	978
Chairman										
Warren Tucker	**2022**	**187**			**187**					**187**
	2021	183			183					183
Non-executive Directors										
Jack Boyer	**2022**	**55**			**55**					**55**
	2021	54			54					54
Anne Thorburn	**2022**	**55**			**55**					**55**
	2021	54			54					54
Alison Wood	**2022**	**55**			**55**					**55**
	2021	54			54					54

1. Executive Directors' short-term incentive awards are subject to deferral into shares in the Company. The STIP value includes the incentive paid in both cash and deferred into shares. In line with the current Remuneration Policy 20% of the 2022 award will be deferred into shares and 20% of the 2021 award was deferred into shares. Deferred awards are not subject to any further performance conditions.
2. LTIP values shown in the single figure include dividend equivalents. The 2022 single figure is comprised solely of the TSR element of the 2019 award; the 2021 figure is comprised of the EPS element of the 2019 award and the TSR element of the 2018 award. Further detail is contained on page 128. The value attributable to share price appreciation in the 2022 single figure value for the CEO and CFO was £(4,000) and £(3,000) respectively. The Committee did not exercise any discretion to vesting outcomes in relation to the impact of share price movements.
3. The 2021 single figure includes the exercise of the Executive Directors' 2018 Sharesave options. The value shown was the gain on exercise.

BASE SALARY/FEES

Base salaries for the Executive Directors were reviewed in December 2021 and were increased by 2.5 per cent with effect from 1 January 2022. Base fees for the Chairman, and the base fee and SID/Chair fees for the NEDs were also increased by 2.5 per cent with effect from 1 January 2022.

The increases were set at a level below those of the wider UK workforce which averaged between 3 and 4 per cent.

TAXABLE BENEFITS

The Executive Directors' taxable benefits consist of a car allowance and insurance benefits. Costs associated with insurance benefits reflect the circumstances of each Executive Director and typical increase with age.

PENSIONS

Employer contributions were paid at 15 per cent of base salary, as defined contribution pension and/or a cash supplement. Employer contributions for 2023 have reduced to 7 per cent of base salary in line with those available to the wider UK workforce.

SHORT-TERM INCENTIVE

Short-term incentive opportunity was capped at up to 125 per cent of salary. Performance was assessed against Group adjusted profit before tax (up to 62.5 per cent of salary) and Group free cash flow (up to 31.25 per cent of salary) measured at constant budget exchange rates and strategic objectives (up to 31.25 per cent of salary) as measured over the 2022 financial year.

Short-term incentive payments for 2022[1]

Performance measure	Threshold potential (% of salary)	Maximum potential (% of salary)	Required for threshold bonus (£m)	Required for maximum bonus (£m)	Outturn for incentive plan purposes (£m)	Achievement (% of salary)
Group adjusted profit before tax	6.25%	62.5%	31.1	35.3	34.7	51.5%
Group free cash flow	3.125%	31.25%	7.9	17.4	(14.7)	0%
Strategic objectives	n/a	31.25%	As outlined			25%
2022 short-term incentive award[2]		125%				76.5%

1 Short-term incentives are measured using constant budget exchange rates.

2 Short-term incentive award is part paid in cash (80%) and part in deferred shares for two-years (20%) in line with Remuneration Policy.

The Committee considers that the Executive Directors have delivered another year of strong leadership alongside making significant strategic progress. Company financial performance has been strong, with organic growth for the year of 20 per cent reflecting our successful positioning in structural growth markets and new project and customer wins. Adjusted profit before tax for the year is around the top end of range of analyst consensus expectations with leverage reduced back into the 1-2 times target range. All delivered against a challenging economic backdrop and ongoing impacts from the pandemic in our supply chains and associated freight costs, employment markets and inflation. The Group has good momentum, underpinned by a strong order book.

Our stakeholder experience has similarly been strong, lead by a strong focus on our values and purpose. Good customer outcomes have continued to be delivered and strategic partnerships deepened with agile navigation of the supply chain tightness. The Executive Directors have continued to focus on making the Company a great place to work and have pro-actively led the responses to protect employees and to provide support to employees through a range of cost of living actions.

Despite the strong performance of the Group, the STIP award amounted to 61 per cent of the maximum (i.e. 76.5 per cent of salary), reflecting the strong profit and strategic performance in the face of challenging headwinds. In line with the Remuneration Policy, 80 per cent of the award will be paid in cash and 20 per cent will be deferred into shares for two years.

STRATEGIC OBJECTIVES

The strategic objectives of the Executive Directors focused on the creation of sustainable value for all our stakeholders with a focus on ESG development, evaluation and development of the Group strategy to unlock value, and a focus on our people talent development. Performance against these objectives are set out in the table below.

Strategic objective	Target	Committee assessment	Maximum potential (% of salary)	Achievement
ESG development	**Environmental:** Make significant progress towards carbon net zero by 2035 by establishing a clear plan to deliver the achievement of long-term targets. **Social and Governance**: Roll out the Group's sustainability strategy and vision.	**Environmental:** In assessing the target the Committee noted: – significant progress delivered in accordance with plans to deliver on carbon net zero commitments by 2035 with a cumulative 54% reduction in Scope 1 & 2 carbon emissions since 2019 and against our commitment to deliver a 50% reduction in by the end of 2023; – that all sites have established carbon reduction plans and are working towards their annual carbon reduction targets; – in year total gross Scope 1 & 2 tCO_2 reduction of 23% or 3,574 tCO_2; Carbon intensity ratio reduced from 33.1 to 19.7 tCO_2e/£m; – the establishment and verification of plans to deliver our absolute Scope 1 & 2 tCO_2 2023 goal and to offset the impacts of our business growth and the associated increase in tCo_2, with a focus on countries where renewable energy is not available e.g. Mexico and China; – the significant capital investment in projects underway, including the installation of solar power in Kuantan, Malaysia. **Social and Governance:** In assessing the target the Committee noted: – improved site engagement through progress against improvement actions from the employee survey; – that 2022 salary budgets continued to target higher increases to our lower paid employees; – the Company's strong response to high inflation and cost of living impact on our employees, including the regional responses taken to reflect local employment market conditions and the multi-faceted approach taken in the UK where inflation has disproportionately impacted our lowest paid employees culminating in an additional cost of living payment; – the improvements in Board access to the workforce and key customers with an enhanced number of board visits during the year and virtual engagements with China; – the enhanced retirement security for 5,000 current and former UK employees and their dependants with the completion of an annuity buy-in of all UK defined benefit pension liabilities.	12.5%	✓✓✓ 8.75% of salary

Strategic objective	Target	Committee assessment	Maximum potential (% of salary)	Achievement
Group strategy and portfolio review	Agree the scope of the Group strategy and portfolio review with the Board and complete the review to unlock value potential and action the agreed outcomes.	In assessing the target, the Committee noted: – the completion of the strategic portfolio review including a full review of material actions to unlock potential value in the Group; – actions focused on organic growth in the near term to unlock value via actions to manage our employment cost base and the removal of UK defined benefit pension liabilities; – annualised cost savings of circa £4m offset by in-year cost phasing, external events and deterioration of macro market conditions; – the completion of the acquisition of Ferranti Power & Control business and the integration actions delivered.	9.375%	✓✓✓✓ 8.75% of salary
People development	Develop a clear plan for successors to ELT and SLT. Launch development programmes for Female leadership, interns and high potential employees.	In assessing the target, the Committee noted: – progress in succession development to ELT with succession plans in place. Optionality in succession plans being improved by further specific people development actions; – a completed review of key succession and retention plans with a series of succession-based promotions to smooth role transitions; – a review completed of the core operational leadership team and its expansion with a dedicated role to lead and enhance customer-centric growth opportunities; – roll out of line manager training across the business, along with inclusive leadership training to all managers to enhance engagement and line manager capability; – Completion of the first women's leadership programme, with strong feedback and ongoing support.	9.375%	✓✓✓ 7.5% of salary

✓ underperforming, ✓✓ performing, ✓✓✓ outperforming, ✓✓✓✓ stretch

LONG-TERM INCENTIVE

LTIP awards over conditional shares have typically vested depending on performance against two equally weighted measures over separate three-year performance periods with EPS performance assessed over a three-year period aligned with the Group's financial year and TSR performance assessed over a separate three-year performance period, ending on the third anniversary of the award date. Accordingly, the performance periods of the two performance conditions end in separate reporting years.

The 2019 LTIP awards had a TSR performance condition, shown below, that ended in March 2022 and is included in the single figure for total remuneration for 2022. The EPS performance condition within the award ended on 31 December 2021 and was previously included in the 2021 single figure for total remuneration.

The 2020 LTIP award, following shareholder consultation and as previously disclosed, has a sole TSR performance condition which will be disclosed in the 2023 single figure of remuneration.

Award year and performance measure	Threshold (25% vesting)	Maximum (100% vesting)	Outcome	Percentage of maximum achievement
2019 LTIP award[1]: Relative TSR performance against the FTSE SmallCap (excluding Investment Trusts)	Median rank	Upper quartile rank or above	59 percentile (Between median and upper quartile)	54.8%

1 2019 LTIP award (vested March 2022): The EPS performance period for this award ended on 31 December 2021; the vesting of the EPS component was not achieved and was included in the 2021 single figure for total remuneration. The TSR performance period ended in March 2022 and vested between the median and upper quartile performance targets as indicated in the above table. The vested value of the shares subject to the TSR performance measure is included in the 2022 single figure for total remuneration; shares at vesting were valued at 197.7p.

Other

No disclosures occurred during the period.

Malus and clawback

No malus or clawback events occurred during 2022.

LONG-TERM INCENTIVES GRANTED DURING THE FINANCIAL YEAR (AUDITED)

LTIP awards over conditional shares were granted to Executive Directors on 14 March 2022. Awards are subject to a three-year vesting period plus an additional two-year holding period.

Executive	Basis of award granted (% of salary)	Share price at date of grant (pence)[1]	Number of shares over which award was granted	Face value of award (£)	% of award that would vest at threshold performance	Performance period end date
Richard Tyson	150%	192.07	388,550	746,288	25%	14/03/2025
Mark Hoad	135%	192.07	262,321	503,840	25%	14/03/2025

1 The share price used to determine the number of shares granted was the average share price over the three trading days prior to grant.

The Committee is mindful that share price falls can lead to the perception of windfall gains. The share price used to calculate the number of shares under the 2022 award was 8 per cent lower than that of the 2021 award. The Committee did not believe that windfall gains would apply to this award as a result of the share price volatility at the time of grant but retains discretion to adjust formulaic incentive vesting outcomes to ensure they reflect underlying business performance and shareholder interests.

PERFORMANCE MEASURES FOR LTIP AWARDS GRANTED DURING THE FINANCIAL YEAR (AUDITED)

Awards granted to Executive Directors during 2022 are subject to the two equally weighted performance measures of EPS and TSR as follows:

Performance measures	Weighting	Threshold (25% vesting)	Maximum (100% vesting)
Adjusted EPS compound annual growth over the three-year period on a constant currency basis	50%	5%	12%
Relative TSR performance against the FTSE SmallCap (excluding Investment Trusts)	50%	Median rank	Upper quartile rank or above

The performance measures ensure the alignment of the Executive Director and shareholder interests. Target ranges for the 2022 awards were set taking into account the latest internal and external forecasts for the business, including both economic and political uncertainty and TT's principal risks. The Committee believed that the EPS growth targets pose a similar level of stretch to those of prior years, with maximum performance aligning with upper quartile growth forecasts and following the significant year of recovery in 2021 (the EPS base year over which growth is assessed). In line with previous awards, to better manage some of the uncertainty resulting from the pandemic and to ensure that EPS performance targets were appropriately stretching, the EPS performance targets will be measured on a constant currency basis.

DEFERRED SHORT-TERM INCENTIVE AWARDS

During the year the Executive Directors were awarded conditional shares as deferred bonus share plan awards in relation to the 2021 STIP outcome. Details of the awards are summarised in the table below. No performance conditions apply to these awards.

Executive	Date of grant	Number of shares awarded	Share price at date of grant (pence)[1]	Face value of award (£)	Date of vesting
Richard Tyson	14/03/2022	61,374	192.07	117,881	14/03/2024
Mark Hoad	14/03/2022	46,039	192.07	88,427	14/03/2024

1 The share price used to determine the number of shares granted was the average share price over the three trading days prior to grant.

EXECUTIVE DIRECTOR INTERESTS IN SHARES

The table below sets out details of outstanding LTIP and DBSP share awards held by the Executive Directors at 31 December 2022.

Executive	Scheme[1]	Date of grant	1 January 2022	Granted during the year	Lapsed	Vested	31 December 2022	Market value at 31 December 2022 (£)[2]	Market price at grant date (pence)	Vesting date
Richard Tyson	LTIP	11/03/2019	355,993[3]		258,505	97,488	–	–	202	11/03/2022
		13/03/2020	365,983[4]				365,983	636,810	196	13/03/2023
		16/03/2021	349,621[5]				349,621	608,341	208	16/03/2024
		14/03/2022		388,550			388,550	676,077	192	14/03/2025
	DSBP	16/03/2021	84,047[6]			84,047	–	–	208	16/03/2022
		16/03/2021	21,011[6]				21,011	36,559	208	16/03/2023
		14/03/2022		61,374			61,374	106,791	192	14/03/2024
Total outstanding							1,186,539	2,064,578		
Mark Hoad	LTIP	11/03/2019	240,340[3]		174,523	65,817	–	–	202	11/03/2022
		13/03/2020	247,085[4]				247,085	429,928	196	13/03/2023
		16/03/2021	262,265[5]				262,265	456,341	208	16/03/2024
		14/03/2022		262,321			262,321	456,439	192	14/03/2025
	DSBP	16/03/2021	63,047[6]			63,047	–	–	208	16/03/2022
		16/03/2021	15,761[6]				15,761	27,424	208	16/03/2023
		14/03/2022		46,039			46,039	80,108	192	14/03/2024
Total outstanding							833,471	1,450,240		

1 Awards granted under the LTIP are subject to the attainment of stretching performance conditions, awards granted under the DSBP in respect to STIP deferral are not subject to any further performance conditions.

2 Calculated as the total number of shares awarded multiplied by the share price on 31 December 2022 of 174 pence. The calculation does not take into account dividend equivalents or the likelihood of vesting.

3 The performance condition attached to 50% of the award is based on EPS. 25% of the shares subject to this part of the award will vest for EPS growth of 6% compound per annum, increasing on a straight-line basis to 100% vesting for EPS growth for the year ending 31 December 2021 of 13.5% compound per annum. The performance condition attached to the other 50% of the award is based on TSR performance against the FTSE SmallCap (excluding Investment Trusts) during the three-year performance period from the date of award. 25% of the shares subject to this part of the award will vest at median performance increasing on a straight-line basis to 100% vesting at the upper quartile of the comparator group.

4 The sole performance condition attached to the award is TSR performance against the FTSE SmallCap (excluding Investment Trusts) during the three-year performance period from the date of award. 25% of the shares will vest at median performance increasing on a straight-line basis to 100% vesting at the upper quartile of the comparator group. As previously disclosed, the award was granted shortly before the onset of the COVID-19 pandemic subject to equally weighted EPS and TSR performance conditions. Following consultation with shareholders, the EPS performance condition was removed and the full weighting was allocated to the existing TSR performance condition.

5 The performance condition attached to 50% of the award is based on EPS. 25% of the shares subject to this part of the award will vest for EPS growth of 10% compound per annum, increasing on a straight-line basis to 100% vesting for EPS growth for the year ending 31 December 2023 of 18% compound per annum. The performance condition attached to the other 50% of the award is based on TSR performance against the FTSE SmallCap (excluding Investment Trusts) during the three-year performance period from the date of award. 25% of the shares subject to this part of the award will vest at median performance increasing on a straight-line basis to 100% vesting at the upper quartile of the comparator group.

6 The Committee applied its discretion to defer the full 2020 STIP award into shares with 80% vesting on the first anniversary and the 20% vesting on the second anniversary.

TT ELECTRONICS PLC SHARESAVE SCHEME

Executive	Date of grant	1 January 2022	Granted during the year	Lapsed	Exercised[1]	31 December 2022	Market value at 31 December 2022 (£)[1]	Market price at grant date (pence)	Vesting date
Richard Tyson	29/09/2021	7,964				7,964	0	226	01/11/2024–30/04/2025
Mark Hoad	29/09/2021	7,964				7,964	0	226	01/11/2024–30/04/2025

1 The market value is the difference between the share price on 31 December 2022 and the option price of 174 pence multiplied by the total number of shares under the option (or £0 if this difference is negative).

PAYMENTS TO PAST DIRECTORS (AUDITED)

No payments were made in 2022.

PAYMENTS FOR LOSS OF OFFICE (AUDITED)

No payments were made in 2022.

STATEMENT OF DIRECTORS' SHAREHOLDING AND SHARE INTERESTS (AUDITED)

The Executive Directors are required to build and hold a shareholding of 200 per cent of salary. Executive Directors must retain 50 per cent of the net of tax value of any vested LTIP shares until the guideline is met. At 31 December 2022, the Executive Directors were compliant with the requirement.

Executive	Beneficially owned at 1 January 2022	Beneficially owned at 31 December 2022	Unvested share awards subject to Company performance conditions	Unvested deferred bonus share plan awards as at 31 December 2022	Outstanding share awards under all employee share plans as at 31 December 2022	Beneficially owned shareholding at 31 December 2022 as a % of salary[1]	Value of beneficially owned at 31 December 2022 (£)
Executive Directors							
Richard Tyson	910,454	1,006,666	1,104,154	82,343	7,964	335%	1,751,599
Mark Hoad	711,149	779,446	771,671	61,769	7,964	346%	1,356,236
Chairman							
Warren Tucker	60,075	60,075					
Non-executive Directors							
Jack Boyer	95,514	95,514					
Alison Wood	0	0					
Anne Thorburn	60,000	60,000					

1 Calculated using the share price as at close of business on 31 December 2022 of 174 pence and the basic salary as at the same date.

There have been no changes to shareholdings between 31 December 2022 and the date of this report.

Post cessation of employment, the Executive Directors are required to hold for two years the lower of half of the share ownership requirement or the shareholding at cessation.

The closing middle market prices for an ordinary share of 25 pence of the Company on 31 December 2021 and 31 December 2022 as derived from the Stock Exchange Daily Official List were 256 pence and 174 pence respectively. During 2022, the middle market price of TT Electronics plc ordinary shares ranged between 124.8 pence and 264 pence.

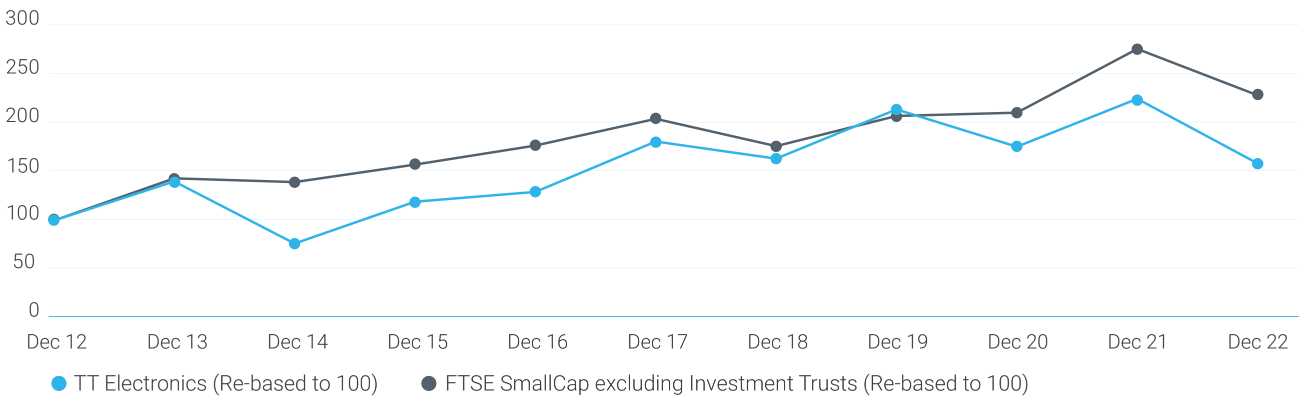
DIRECTORS' SERVICE CONTRACTS

Executive	Date of appointment	Date of current contract/letter of appointment	Notice from Company	Notice from individual	Unexpired period of service contract
Executive Directors					
Richard Tyson	01/07/2014	14/01/2014	12 months	12 months	Rolling contract
Mark Hoad	01/01/2015	09/12/2014	12 months	12 months	Rolling contract
Chairman					
Warren Tucker	06/05/2020	02/04/2020	1 month	1 month	Rolling contract
Non-executive Directors					
Jack Boyer	10/06/2016	10/06/2016	1 month	1 month	Rolling contract
Alison Wood	11/07/2016	11/07/2016	1 month	1 month	Rolling contract
Anne Thorburn	01/07/2019	12/06/2019	1 month	1 month	Rolling contract

PERFORMANCE GRAPH AND TABLE

The following graph shows the cumulative TSR of the Company over the last 10 financial years relative to the FTSE Small-Cap Index (excluding Investment Trusts). The FTSE SmallCap Index has been selected for consistency as it is the index against which the Company's TSR is measured for the purposes of the LTIP. In addition, the Company is a constituent of the Index.

The graph shows the value, by 31 December 2022, of £100 invested in TT Electronics plc on 31 December 2012 compared with the value of £100 invested in the FTSE SmallCap Index (excluding Investment Trusts).



TOTAL REMUNERATION FIGURES FOR THE CEO

The total remuneration figures for the Chief Executive Officer during each of the last 10 financial years are shown in the table below. The total remuneration figures include the short-term incentive based on that year's performance and LTIP awards based on three-year performance periods ending in the relevant year.

	2013	2014[1]	2014[2]	2015	2016	2017	2018	2019	2020	2021	2022
Total remuneration (£'000)	1,154	249	401	1,151	1,152	1,794	2,189	1,430	1,003	1,306	1,194
Short-term incentive (% of maximum)	53.0	0.0	25.0	90.8	100.0	100.0	93.3	64.0	45.8	97.1	61.2
LTIP vesting (% of maximum)	89.6	39.6	n/a	0.0	0.0	50.0	100.0	86.5	50.0	18.3	27.4

1 Relates to previous Chief Executive Officer who was in position until 30 June 2014.
2 Relates to current Chief Executive Office who joined on 1 July 2014.

WIDER WORKFORCE CONSIDERATIONS

TT Electronics is a diversified business that operates in 26 locations, across 7 countries with more than 5,000 people across our divisions. Our people are central to our success and we pride ourselves on being a great place to work with a strong purpose and culture where employees can be themselves, do their best work every day, and achieve their ambitions.

The Committee spends considerable time on matters relating to remuneration across the workforce. This ensuring that: (i) our reward principles are consistently applied throughout the organisation, (ii) that reward practices are aligned and complementary, and (iii) provides important context to frame decision-making on Executive Director remuneration.

Fair pay
As an international business we want to ensure that our people are paid fairly for their contribution. Our businesses operate in line with our principles, set our below, and in compliance with all local laws.

Pay should be appropriate and market competitive	Pay should be explainable, free from discrimination and easy to understand	Pay should enable employees to share in the success they create
Appropriate for the employee's role, responsibility, experience and skills.	Fixed pay will meet or exceed all legal minimum standards.	Employees are eligible to receive variable, performance-related pay.
Pay set in the context of local market conditions.	Pay should be free from bias and should not be impacted by gender, sexual orientation, ethnicity or other characteristics.	Performance-related payments are timely and in accordance with scheme rules.
	The business should be able to explain how employees' pay has been set and calculated.	Performance-related pay is free of bias and subject to good governance.
	Employees should be paid in full and on time.	

Employee engagement
We believe that creating environments where everyone is engaged and gets to be their best and do their best every day is key to the culture and success of the Company.

We value the opinions and insights of our people and frequently receive feedback through a variety of means, such as our engagement survey. Through our PSEE Committee, direct interactions with the workforce by the Committee and via feedback from our UK workforce engagement sessions on remuneration we ensure oversight of the implementation of our remuneration principles and understand key employee insights and feedback. Our UK workforce engagement sessions include overviews of Executive Director remuneration and how remuneration aligns through the organisation. These sessions allow for open and active discussion on all areas of remuneration. Additionally, during the year we engaged those employees whose remuneration most closely aligns with the Executive Directors as core stakeholders in the review of the future Remuneration policy.

Inflation and wider workforce remuneration
This year has seen exceptionally high inflation in a number of our locations, especially in the UK, with the lowest paid disproportionately impacted. The Company response to the impact of inflation on employees and affordability pressures arising from the cost of living has been a key area of focus for the Committee.

As detailed in this report, the Company has undertaken a range of activities across its geographic footprint displaying the strength of our purpose, values, how they inform our decision-making and the strength of the culture of the organisation.

Directors' pay in the context of the Group's wider pay practices
The Committee's oversight of the implementation of our remuneration principles and the alignment of remuneration across the Company, provides important context as to the impact of reward on organisational culture and helps inform decision-making on Executive Director remuneration.

The following summarises the alignment of remuneration for the wider workforce during 2022. The detail of retirement and benefits are specific to each location and are shown for the UK.

	All employees	Executive Directors
Salary	• Pay increase recommended by site & division. • Reviewed and approved by head office (UK Average 3-4% in 2022)	• Pay rise % below or in line with employee pay (2.5% in 2022)
Short-term incentive	• All employees are eligible for a bonus. • Site incentive targets: customer delivery, productivity, quality, HSE	• Max 125%, on-target 62.5% • Targets: profit, cash flow, strategic delivery
Deferred share bonus plan	• Not applicable	• 20% of short-term incentive deferred for 2 years
Long-term incentive	• Divisional leadership team, three-year performance period, no holding period • Targets: typically per Executive Directors	• Max 150%, on target 37.5% • Three years, two year holding period • Performance conditions: EPS and TSR
Retirement	• Up to 7% contribution	• 15% contribution • Reducing to 7% for 2023
Other benefits	• Life cover 4x • Healthcare • ShareSave • Car allowance (Sales and senior leadership)	• Life cover 4x • Healthcare • ShareSave • Car allowance • Risk benefits

CEO PAY RATIO

The table below shows the ratio of the total remuneration of the Chief Executive Officer to that of the UK employees of the Group. The CEO's pay is based on the single figure of remuneration.

Year	Methodology used	Lower quartile	Median	Upper quartile
2022	Option B	51:1	43:1	28:1
2021	Option B	62:1	52:1	34:1
2020[1]	Option B	54:1	40:1	29:1
2019	Option B	63:1	55:1	38:1

1 The 2020 ratio was impacted by COVID-19. Salary and incentive remuneration levels for 2020 include salary reductions taken by the CEO, included in the single figure of remuneration, and the impact of the UK Government Coronavirus Job Retention Scheme and associated voluntary furlough salary reductions in the wider UK workforce. Under the chosen method for calculation, the employee ranking and quartile assessment was based on the April 2020 snapshot date during which time approximately 14% of employees were on furlough.

We have chosen to use Option B of the available methodologies as permitted under The Companies (Miscellaneous Reporting) Regulations 2018. Given the complexity of the Group, this approach enables us to use our existing Gender Pay reporting datasets as the foundation for our calculations. We determined the hourly rates at each quartile of our 5 April 2022 Gender Pay data then calculated the average annual salary and total remuneration for representative employees at each quartile. Representative employees must have been employed on 31 December 2022 and employee data is based on full-time equivalent pay and calculated in accordance with the single figure of remuneration. Adjustments may be made to ensure that quartiles are representative, no adjustments were required for 2022.

Across the UK, the majority (80 per cent) of the workforce undertake operational roles in our facilities. The employee lower quartile and median remuneration values are generally reflective of the roles held by our semi-skilled/skilled operators. The quartile data is considered to be broadly representative of total remuneration across the workforce in the UK.

The change in the median CEO pay ratio is attributable to changes in the remuneration of the CEO and of the Company's UK employees as a whole. In line with our remuneration principles, the majority of the CEO's remuneration opportunity is performance-related variable pay. The CEO's pay ratio is, therefore, heavily dependent on the outcomes of the short-term and long-term incentive plans and, in the case of long-term share-based awards, share price movements. As such it is expected that there will be considerable year-to-year changes in the ratio. The lower CEO pay ratio results from a number of factors: (i) higher UK employee remuneration from the actions to support employees manage the impacts of high inflation through targeted salary increases to lower paid employees and the one-off additional cost of living payment, (ii) lower CEO variable remuneration from a lower STIP award than in the prior year, reflecting the challenging external environment, and the low vesting of the LTIP which continues to reflect the pause in the growth momentum of the Company caused by the pandemic. The Committee believes that the pay ratio is appropriate and is reflective of the performance of the Group and the roles undertaken by employees in the UK. Further context to the CEO total remuneration is set out on in detail in this report.

The following table summarises the representative salary and single figure of total remuneration pay quartiles of UK employees.

	Lower quartile	Median	Upper quartile
Salary	£21,732	£25,800	£38,837
Single figure of total remuneration	£23,331	£27,491	£43,230

ANNUAL PERCENTAGE CHANGE IN REMUNERATION OF DIRECTORS AND EMPLOYEES

The following table shows the percentage change in each Executive and Non-executive Director's remuneration compared with the average change for all employees of the parent Company for the years ended 31 December 2020, 2021 and 2022. Going forward, this disclosure will build up over time to cover a rolling five-year period.

	Change in basic salary/fees (%)			Change in benefits (%)			Change in bonus (%)		
	2021 to 2022	2020 to 2021	2019 to 2020	2021 to 2022	2020 to 2021	2019 to 2020	2021 to 2022	2020 to 2021	2019 to 2020
Executive Directors									
Richard Tyson	2.5%	6.8%	(5.0)%	5.0%	48.0%	5.9%	(35.5)%	169.4%	(28.5)%
Mark Hoad	2.5%	6.7%	(5.0)%	5.2%	52.0%	8.0%	(35.5)%	169.4%	(28.5)%
Chairman									
Warren Tucker[3]	2.5%	1.5%	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Non-executive Directors									
Jack Boyer[4]	2.5%	14.9%	3.3%	n/a	n/a	n/a	n/a	n/a	n/a
Alison Wood	2.5%	8.0%	(5.0)%	n/a	n/a	n/a	n/a	n/a	n/a
Anne Thorburn[5]	2.5%	12.5%	6.0%	n/a	n/a	n/a	n/a	n/a	n/a
Average UK TT Electronics parent employee[6]	9.4%	2.9%	3.8%	10.4%	6.8%	6.1%	(25.7)%	108.4%	(39.4)%

1 Benefit data is calculated on the same basis as the benefits data in the single figure table and includes benefits in kind and benefits taken in cash but excludes any pension allowances.

2 Salary/fees paid to Directors in 2020 included a 20% reduction for a three-month period that was volunteered by the Directors in response to the COVID-19 pandemic and the actions taken by the Group to reduce costs and protect cash flows.

3 Warren Tucker was appointed to the Board as Chairman on 2 April 2020. For comparison purposes the figure shown is the change in the Chairman fee over the period excluding the three-month impact of the 20% fee reduction volunteered by Directors during 2020 in response to the COVID-19 pandemic.

4 Jack Boyer was appointed SID on 6 May 2020.

5 Anne Thorburn was appointed Chair of the Audit Committee on 6 May 2020.

6 Average parent Company employee based on employees who were employed throughout each two-year comparison period.

The Directors received salary/fee increases of 2.5 per cent in January 2022, a level below that generally received across the UK workforce. The majority of the changes in respect of salaries/fees between 2019 and 2021 were related to the 20 per cent voluntary reduction for a three-month period in 2020 as part of the cost reduction and cash flow protection actions in response to the COVID-19 pandemic. The change in average salaries across parent Company employees was in part due to increases received during the annual salary review and increases in relation to promotions, progression in role and market realignment in response to specific retention risks.

RELATIVE IMPORTANCE OF SPEND ON PAY

A year-on-year comparison of the relative importance of spend on pay with significant distributions to shareholders and others is shown below.

	2022	2021	Change
Staff costs for the Group (£m)	164.5	135.3	21.6%
Dividends relating to the period (£m)	11.1	9.8	13.3%
Share buyback (£m)	0	0	0%

ADVISERS TO THE REMUNERATION COMMITTEE

The Committee received advice during the year from FIT Remuneration Consultants LLP (FIT). FIT is a member of the Remuneration Consultants Group and has signed up to that group's code of conduct. FIT was appointed by the Committee following an adviser review in 2019. The Committee is satisfied that the advice it received during the year was appropriate, objective and independent. FIT did not provide any other services to the Group and does not have any other connection with the Company or individual Directors.

Work undertaken by FIT in its role as independent advisers to the Committee included advice in respect of the developments in good governance, the evolution of the 2023 Policy, the provision of market information and market practice, and other governance matters. The fees paid to FIT for providing advice in relation to Executive remuneration over the financial year, based on time and materials, totalled £28,990.

The Group's approach to the Chairman's and Executive Directors' remuneration is determined by the Board on the advice of the Remuneration Committee. The Committee considers the views of the Chairman on the performance of the CEO, and of the CEO on the performance and remuneration of the other members of the ELT. The Committee is also supported by the Group General Counsel and Company Secretary who acts as Secretary to the Committee, the CFO, the Chief People Officer, and the Group Reward Director who attend meetings at the invitation of the Committee. No Committee members or attendees take part in any discussions relating to their own remuneration.

SHAREHOLDER VOTING

At the AGM held on 13 May 2022, the proxy votes cast in respect of the resolutions on the Directors' remuneration report were as follows:

Number of votes	Date of AGM	For and Discretionary	For and Discretionary (%)	Against	Against (%)	Withheld	Total votes
Directors' Remuneration Policy	May 2020	109,271,441	91.89%	9,642,007	8.11%	13,273,878	132,187,326
Directors' remuneration report	May 2022	128,029,798	88.47%	16,682,114	11.53%	3,558,473	148,270,385

A full schedule in respect of shareholder voting on the above and all resolutions at the 2023 AGM is available at www.ttelectronics.com.

The Remuneration Committee considers shareholder feedback received in connection with the AGM each year at a meeting immediately following the AGM and at other times of the year. This feedback is considered as part of the Group's annual review of the Remuneration report and Remuneration Policy. In addition, the Remuneration Committee endeavours to consult directly with the largest shareholders and their representative bodies on proposals ahead of significant changes.

The Directors' remuneration report has been approved by the Board on 7 March 2023 and signed on its behalf by:

Alison Wood
Chair, Remuneration Committee
7 March 2023

OTHER STATUTORY DISCLOSURES

This Annual Report and Accounts includes the Directors' report and the audited financial statements for the year ended 31 December 2022. Certain information required to be disclosed in the Directors' report is provided in other sections of this Annual Report. This includes the overview, the operating and financial reviews, the Governance and Remuneration reports and specific elements of the financial statements noted below. The table below lists items that are relevant to this report, and which are incorporated by reference, including information required in accordance with the UK Companies Act 2006 and Listing Rule 9.8.4R:

AGM information	Page 227
Current and future dividend waiver	Page 137
Employee engagement	Page 42
Future developments in the business	Pages 6 to 21
Going concern	Page 73
Scope 1 & 2 emissions	Page 54
Section 172 statement	Page 63
Share capital	Page 227
Subsidiary undertakings	Page 216
Viability statement	Page 68

Results and dividend

The Group's loss on ordinary activities after taxation was £13.2 million (2021: £12.8 million, profit). The audited financial statements of the Group and the Company are set out on pages 149 to 226. Further details of the Group's activities are set out in the Strategic report on pages IFC to 75 which is incorporated into the Directors' report by reference.

Full details of the Company's dividend policy and proposed final dividend payment for the year ended 31 December 2022 are set out on page 32 and Note 9 to the consolidated financial statements.

Tax principles and strategy

The Group applies a conservative approach to tax and seeks to comply with the OECD Transfer Pricing guidelines, which should ensure that profits are taxed where value is created and business risks are managed. The Group's full Tax Principles and Strategy document is published on the Group's website.

Important events since the end of the financial year

There were no important events affecting the Group which occurred since 31 December 2022.

Auditor

In 2019, the Company undertook a competitive re-tender exercise for external audit services, following which Deloitte LLP (Deloitte) was appointed as external Auditor for the financial year 2020 onwards. Deloitte was appointed by the Company's shareholders at the AGM held on 6 May 2020 and have been reappointed at each subsequent AGM (including the 2022 AGM). See page 95 for further details on the Auditor transition process.

The Auditor's responsibilities are set out on page 146 and should be read in conjunction with those of the Directors as set out at the end of this report.

Significant agreements relating to change of control

The Group has a number of borrowing facilities provided by various banking groups. The most significant of these facility agreements (as described below) include change of control provisions which, in the event of a change in ownership of the Company, could result in renegotiation or withdrawal of these facilities:

PP: In August 2021, the Group agreed a debut issue of £75 million of private placement fixed rate loan notes with three institutional investors. The PP transaction completed in December 2021, whereupon funds were received by the Group, with the issue being evenly split between seven- and ten-year maturities with an average interest rate of 2.9%.

RCF: In June 2022, the Group entered into an agreement for a £147.4 million multicurrency revolving credit facility with a syndicate of five relationship banks, taking the maturity date out to four years, with a one-year extension option.

There are a number of other agreements that may be terminable upon a change of control of the Company and therefore subject to renegotiation. No such agreements are considered at present to be significant in terms of their potential impact on the business of the Group as a whole, with the exception of the contract described below:

Anthem Contract: In November 2022, the Group's GMS Division entered into a long-term contract with Honeywell, pursuant to which GMS will provide manufacturing services to enable Honeywell to bring to market its next generation avionics cockpit system. This system is designed to operate with the next generation of electric aircraft. The long-term contract has a duration of 12 years and contains market standard provisions requiring Honeywell's consent for the contract to continue in the event of a change of control of the Company.

Employment
The Group is committed to the fair and equal treatment of all its employees regardless of gender, race, age, religion, disability or sexual orientation. Where existing employees become disabled, the policy of the Group is to provide continuing employment and training wherever practicable.

The Group makes significant efforts to ensure it maintains high standards of employee welfare in all its operations, irrespective of where in the world, and of local market conditions. Together with many other global companies operating in this sector, the Group is a member of the Responsible Business Alliance (formerly the Electronic Industry Citizenship Coalition), a leading industry organisation promoting best practice in corporate responsibility, which is committed to raising standards of employee welfare, (addressing such issues as modern slavery) in all jurisdictions and at all levels of the supply chain for electronic products. Further details on the Group's policies relating to its employees are given on pages 40 to 49.

Political contributions
The Group made no political contributions during the year.

Authority to allot shares and disapply statutory pre-emption rights
The Directors will be seeking to renew their authorities to allot unissued shares and to disapply statutory pre-emption rights at the Annual General Meeting, to be held on 9 May 2023. During 2022, this authority was used in respect of customary allotments of shares resulting from the operation of the Group's share schemes. As set out in the Notice of Annual General Meeting which accompanies this report, the Company is seeking shareholder approval of revised authorities this year (in resolutions 17 and 18) in line with the updated Statement of Principles published by the Pre-Emption Group in November 2022.

Purchase of own shares
At the Annual General Meeting held on 13 May 2022, the Company was given authority to purchase up to 17,630,474 of its ordinary shares until the date of its next AGM. Other than market purchases made by the Employee Benefit Trust, no purchases were made during the year by the Company. The Directors will be seeking a new authority for the Company to purchase its ordinary shares at the forthcoming Annual General Meeting.

Further details regarding the authority to allot shares and disapply statutory pre-emption rights and the purchase of own shares are set out in the Notice of the Annual General Meeting, which accompanies this document and is available to view on the Company's website.

Shares held by the Employee Benefit Trust
The Company has established an employee benefit trust (EBT), the Trustee of which is Sanne Fiduciary Services Limited, part of Sanne Group. As at 31 December 2022, the Trustee held 479,727 shares with a nominal value of £119,931.75 and an aggregate purchase price of £0.89 per share, representing 0.271 per cent of the total issued share capital at that date. These shares will be used to satisfy awards made under the TT Electronics plc Restricted Share Plan, the TT Electronics plc Long-Term Incentive Plan or other employee share schemes. The maximum number of shares held by the EBT during the year was 1,064,565. The voting rights in relation to these shares are exercisable by the Trustee. However, in accordance with investor protection guidelines, the Trustee abstains from voting. A dividend waiver is in place under which the trustee waived its right to receive dividends on the shares it held during the year, and any future dividends. The Executive Directors, as employees of the Company, are potential beneficiaries of shares held by the EBT.

Disclosure of information to the Auditor
To the best of each Director's knowledge and belief, there is no audit information relevant to the preparation of the Auditor's report of which the Auditor is unaware and each Director has taken all steps which might be expected to be aware of such relevant information and to establish that the Auditor is also aware of that information.

Approved by the Board on 7 March 2023 and signed on its behalf by:

Lynton Boardman
Group General Counsel and Company Secretary

STATEMENT OF DIRECTORS' RESPONSIBILITIES

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

Company law requires the Directors to prepare Group and parent Company financial statements for each financial year. Under that law the Directors are required to prepare the Group financial statements in accordance with UK adopted international accounting standards in conformity with the requirements of the Companies Act 2006. The financial statements also comply with International Financial Reporting Standards (IFRSs) as issued by the IASB. The Directors have elected to prepare the parent Company financial statements in accordance with UK accounting standards, including FRS 101 Reduced Disclosure Framework.

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 period. In preparing each of the Group and parent Company financial statements, the Directors are required to:

- select suitable accounting policies and then apply them consistently;
- make judgements and estimates that are reasonable, relevant and reliable;
- for the Group financial statements, state whether they have been prepared in accordance with UK adopted international accounting standards;
- for the parent Company financial statements, state whether applicable UK accounting standards have been followed, subject to any material departures disclosed and explained in the parent Company financial statements;
- assess the Group and parent Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern; and
- use the going concern basis of accounting unless they either intend to liquidate the Group or the parent Company or to cease operations, or have no realistic alternative but to do so.

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 its financial statements comply with the Companies Act 2006. They are responsible for such internal control as they determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error, and have general responsibility for taking such steps as are reasonably open to them to safeguard the assets of the Group and to prevent and detect fraud and other irregularities.

Under applicable law and regulations, the Directors are also responsible for preparing a Strategic report, Directors' report, Directors' remuneration report and Corporate Governance statement that complies with that law and those regulations.

The Directors are responsible for the maintenance and integrity of the corporate and financial information included on the Company's website. Legislation in the UK governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

RESPONSIBILITY STATEMENT OF THE DIRECTORS IN RESPECT OF THE ANNUAL REPORT AND ACCOUNTS

We confirm that to the best of our knowledge:

- the financial statements, prepared in accordance with the applicable set of accounting standards, 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; and
- 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.

We consider the Annual Report and Accounts, taken as a whole, is fair, balanced and understandable and provides the information necessary for shareholders to assess the Group's position and performance, business model and strategy.

The coordination and review of Group-wide input into the Annual Report is a key element of the control process upon which the Directors rely and is an exercise which spans a period wider than the timetable for compiling the Annual Report itself. This control process incorporates the controls the Group operates throughout the year to identify key financial and operational issues and includes:

- strategy meetings held as part of most Board meetings, at which the entire Board is present, resulting in a clear agreement of the Group's strategy;
- the identification of the key milestones and the related KPIs to be monitored and measured throughout the period;
- monthly reviews of business performance conducted by Executive management (in consultation with divisional management), supplemented by reports highlighting key issues and analysis of the main variances from budget and prior year;
- preparation of a detailed budget, reviewed and agreed by management and then the Board, which is used to calibrate strategy implementation and against which actual performance is measured.
- a timetabled process coordinating input from each division, identifying significant market issues and key elements of performance for each business area, and appropriately incorporating them into the structure of the Annual Report;
- the identification of key risks from the risk management process, for inclusion within the Annual Report, ensuring a consistency of approach with regard to the risks and the ongoing review programme;
- a planned Audit Committee sign-off process which incorporates meetings of the Chair of the Audit Committee with the Executive Directors, the Risk and Assurance function and external Auditor to identify and timetable potential issues of significance to be addressed; and
- a process for internal distribution and comment on the Annual Report, including those of the members of the Board, the ELT, key advisers and external Auditor.

By order of the Board:

Lynton Boardman
Group General Counsel and Company Secretary
7 March 2023

INDEPENDENT AUDITOR'S REPORT TO THE MEMBERS OF TT ELECTRONICS PLC

Report on the audit of the financial statements

1. OPINION

In our opinion:

- the financial statements of TT Electronics plc (the 'parent company') and its subsidiaries (the 'Group') give a true and fair view of the state of the Group's and of the parent company's affairs as at 31 December 2022 and of the group's loss for the year then ended;

- the group financial statements have been properly prepared in accordance with United Kingdom adopted international accounting standards and International Financial Reporting Standards (IFRSs) as issued by the International Accounting Standards Board (IASB);

- the parent company financial statements have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice, including Financial Reporting Standard 101 "Reduced Disclosure Framework"; and

- the financial statements have been prepared in accordance with the requirements of the Companies Act 2006.

We have audited the financial statements which comprise:

- the consolidated income statement;
- the consolidated statement of comprehensive income;
- the consolidated and parent company statements of financial position;
- the consolidated and parent company statements of changes in equity;
- the consolidated statement of cash flows; and
- the related Notes 1 to 32 of the consolidated financial statements and the related Notes 1 to 15 of the parent company financial statements.

The financial reporting framework that has been applied in the preparation of the group financial statements is applicable law, United Kingdom adopted international accounting standards and IFRSs as issued by the IASB. 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 FRS 101 "Reduced Disclosure Framework" (United Kingdom Generally Accepted Accounting Practice).

2. 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 and the parent company in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, including the Financial Reporting Council's (the 'FRC's') Ethical Standard as applied to listed public interest entities, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We confirm that we have not provided any non-audit services prohibited by the FRC's Ethical Standard to the Group or the parent company.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

3. SUMMARY OF OUR AUDIT APPROACH

Key audit matters	The key audit matters that we identified in the current year were: – Impairment of technology products goodwill – Classification of adjusting items. Within this report, key audit matters are identified as follows: Newly identified Increased level of risk Similar level of risk Decreased level of risk
Materiality	The materiality that we used for the group financial statements was £2.1 million which was determined based on 5% of the adjusted income before tax after amortisation.
Scoping	Our approach to the audit scoping included performing the following: Components representing 49% of revenue and 24% of net assets were subject to full scope audit procedures; Components representing 32% of revenue and 56% of net assets were subject to audits of specific account balances; Overall, our components subject to full scope and specified account balance audits represented 87% of adjusted profit before tax after amortisation; and All remaining parts of the Group were subject to analytical review procedures.
Significant changes in our approach	In the prior year, we identified a key audit matter relating to the recoverability of assets related to the Virolens product. In the current year, these assets have been fully impaired and this is no longer a key audit matter.

4. 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:

– obtaining an understanding of the key processes relating to the Group's forecasting;
– inspecting loan documents to assess the principal terms and related financial covenants;
– assessing management's key assumptions underpinning the Group's forecasts, specifically the forecast adjusting items expense and cash flows, and the achievability of forecasts; these were assessed with reference to external data such as market growth rates and industry data;
– assessing the impact of reasonably possible downside scenarios on the Group's funding position including forecast financial covenants;
– comparing forecasts to historical financial information to assess management's historical forecasting accuracy;
– assessing the mitigating actions available to the Group in the event of any downside scenarios and the feasibility of these in the next 12 months; and
– assessing the appropriateness of the going concern disclosures in the financial statements.

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.

In relation to the reporting on how the Group has applied the UK Corporate Governance Code, we have nothing material to add or draw attention to in relation to the directors' statement in the financial statements about whether the directors considered it appropriate to adopt the going concern basis of accounting.

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

5. 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.

5.1. Impairment of Technology Products goodwill

Key audit matter description	Total goodwill on the balance sheet at 31 December 2022 is £155.1 million (2021: £156.5 million) arising from past acquisitions. As required by IAS 36 Impairment of Assets management performs an impairment review for all cash generating units ('CGUs') that have goodwill on an annual basis. An impairment charge of £17.7million (2021: £nil) was recognised in the IoT Solutions CGU's goodwill (after impairing Virolens related assets of £5.4million). Subsequent to the impairment, this CGU accounts for £9.9 million (2021: £27.6 million) of the Group's goodwill. The impairment assessment of goodwill for the IoT Solutions CGU has been identified as a key audit matter as a result of the subjective nature over the value of impairment recorded during the year, the quantitative significance of the balance, and the application of management judgement and estimation in its impairment assessment. The key assumptions driving the subjective nature of the impairment relates to Revenue Growth, Operating Profit, Discount Rate and Long-Term Growth Rate. Note 14 to the financial statements discloses the sensitivities reflecting the risks inherent in the value in use calculations that were used in performing the impairment review. Note 1g discloses this matter as a key source of estimation uncertainty and reasonably possible changes in the value for this CGU. Refer also to page 99 of the Audit Committee report.
How the scope of our audit responded to the key audit matter	We obtained an understanding of the relevant controls over the valuation of goodwill, in particular controls over the Group's forecasting of future cash flows and the determination of CGU specific discount and growth rates that underpin the impairment model, and controls around management's preparation of the model. We assessed management's impairment paper, underlying analysis, and supporting financial models, and challenged the reasonableness of the assumptions which underpinned the forecasts. Specifically, our work included, but was not limited to: – challenging the key assumptions relating to the 2023 forecast and later forecast periods with reference to the recent and historical performance of the IoT Solutions business, expected order book levels, our knowledge of the businesses, inflationary pressures, benefits from current and prior year restructuring activity from the Group's self-help programme, and the status of new product launches; – retrospective review of performance against budget, including consideration of post year end actual against budget; – benchmarking long term growth rates to applicable macro-economic and market data; – involving our valuation specialists to challenge the discount rate applied, by benchmarking against market data and comparable organisations, and by evaluating the underlying process used to determine the risk-adjusted cash flow projections; – testing the integrity and mathematical accuracy of the impairment models; – checking the application of the input assumptions, and testing their compliance with IAS 36; – assessing and reperforming management's sensitivity analysis to assess the key assumptions which have a significant effect on the model; – challenging management on the key drivers of the value in use model such as forecast revenues, operating margins, discount and long-term growth rates. We considered how movements in these drivers, either individually or collectively, could impact the level of impairment and the likelihood of such movements; and – assessing the appropriateness of the disclosures relating to the IoT Solutions goodwill as an area with key sources of estimation certainty, and whether a reasonably possible change disclosure has been included which appropriately reflects the sensitivity in the IoT's CGU impairment review.
Key observations	We determined that the assumptions applied in the impairment model and the resultant overall position adopted was reasonable including the impairment charge recorded of £17.7 million. We assessed that the disclosures including the impairment assessment of goodwill for the IoT Solutions CGU are appropriate.

5.2. Classification of adjusting items

Key audit matter description	In addition to the statutory results, the Group continues to present adjusted profit measures in the consolidated income statement. While the key measure used by management to monitor performance is adjusted operating profit, adjusted profit before tax is also a key measure used by management in communication with shareholders. The Group's policy on adjusting items is set out in note 1c to the financial statements. Judgements made regarding the classification of adjusting costs and income therefore have a significant impact on the presentation of the Group's results. In total, adjustments of £50.5 million (2021: £15.5 million) have been made to the statutory operating loss of £3.4 million (2021: £19.3 million profit) to derive adjusted operating profit of £47.1 million (2021: £34.8 million profit). Adjusting items in 2022 include: – Restructuring costs £6.4 million; – Impairment of IoT goodwill (£17.7million) and Virolens related assets (£5.4million); – Amortisation of intangible assets arising on business combinations (£6 million); – Pension Buy in / Enhanced Transfer Value (ETV) exercise (£13.8 million); and, – Other acquisition related costs (£1.2 million). The identification of adjusting items and the presentation of adjusted profit and earnings measures that show a consistent and balanced view of the performance of the Group involves significant judgement. Significant judgement is also involved in ensuring that undue prominence is not given to adjusted financial information, as this would be misleading to the readers of the financial statements. There is a risk that items may be classified as adjusting which do not meet the Company's definitions, and therefore distort the reported adjusted profit, whether due to manipulation or error; this could also impact financial covenants reported and management remuneration, hence this is considered a fraud risk. Consistency in the identification and presentation of these items is important for the comparability of year on year reporting. Explanations of each adjustment are set out in note 7 to the financial statements and also in note 1 to the group financial statements in relation to the critical judgements in determining adjusting items. Refer also to page 99 of the Audit Committee report.
How the scope of our audit responded to the key audit matter	We obtained understanding of the relevant controls over the classification of adjusting items in the financial statements. We evaluated the appropriateness of the inclusion of items, both individually and in aggregate, within adjusted results. Specifically, our procedures included: – assessing the consistency of the Group's policy and items included year on year, and the application of management's accounting policy, challenging the nature of these items in comparison to ESMA guidance and latest FRC guidance on alternative performance measures, and challenging in particular the inclusion of those items that recur annually; – challenging management regarding the nature of restructuring related adjusting items and evaluating whether they fall within management's accounting policy definition for restructuring related costs for restructuring costs related to severance, assessing whether these met the criteria of IAS37 Provisions, including a review of announcements and other communication to employees; – testing a sample of adjusting items by agreeing to source documentation and evaluating the classification of the individual costs against the Group's definition of adjusting items and assessing whether the disclosures within the financial statements provide sufficient detail for the reader to understand the nature of these items and how adjusted results are reconciled to statutory results.
Key observations	The value of adjusting items results in a material difference between the statutory and adjusted results. Whilst we note that the majority of adjusting items recur from period to period, we assessed that their classification and presentation is reasonable and consistent with the Group's policy.

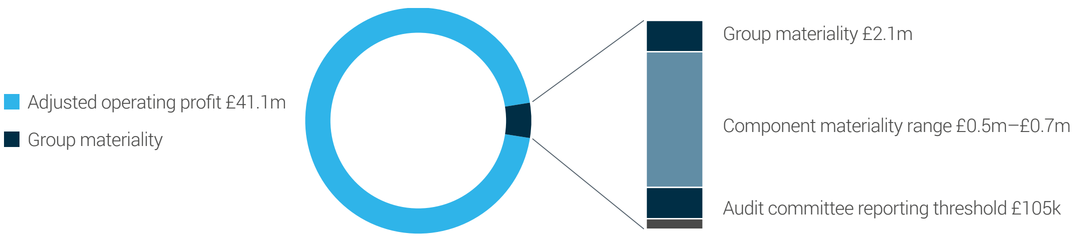
6. OUR APPLICATION OF MATERIALITY

6.1. Materiality

We define materiality as the magnitude of misstatement in the financial statements that makes it probable that the economic decisions of a reasonably knowledgeable person would be changed or influenced. We use materiality both in planning the scope of our audit work and in evaluating the results of our work.

Based on our professional judgement, we determined materiality for the financial statements as a whole as follows:

	Group financial statements	Parent company financial statements
Materiality	£2.1 million (2021: £1.6 million)	£0.7million (2021: £0.6 million)
Basis for determining materiality	5.1% of adjusted income before tax after amortisation as disclosed in note 7 of the financial statements. We considered other measures such as adjusted profit before tax and statutory profit before tax. Materiality for the current year represents: – 0.3% of revenue (2021: 0.3%); – 4.5% of adjusted profit before tax (2021: 4.6%); and – 0.7% of net assets (2021: 0.5%).	Parent company materiality equates to 0.2% of net assets which is capped at 60% of group performance materiality, consistent with the prior year, in order to address the risk of aggregation when combined with other businesses. This is consistent with the prior period.
Rationale for the benchmark applied	We considered the financial measures that were most relevant to users of the financial statements and concluded that the adjusted profit measure represented the most relevant metric for the purpose of evaluating financial performance.	We believe that use of a balance sheet measure was appropriate given that the parent acts as a holding company.



6.2. Performance materiality

We set performance materiality at a level lower than materiality to reduce the probability that, in aggregate, uncorrected and undetected misstatements exceed the materiality for the financial statements as a whole.

	Group financial statements	Parent company financial statements
Performance materiality	65% (2021: 65%) of group materiality	70% (2021: 65%) of parent company materiality
Basis and rationale for determining performance materiality	In determining performance materiality, we considered the following factors: – our assessment of the respective complexity of the group and the parent company, and nature of the group's business model; – the de-centralised nature of the group's control environment and its variation across the group; and – the number of uncorrected misstatements identified in the previous year.	

6.3. Error reporting threshold

We agreed with the Audit Committee that we would report to the Committee all audit differences in excess of £105k (2021: £80k), as well as differences below that threshold that, in our view, warranted reporting on qualitative grounds. We also report to the Audit Committee on disclosure matters that we identified when assessing the overall presentation of the financial statements.

7. AN OVERVIEW OF THE SCOPE OF OUR AUDIT

7.1. Identification and scoping of components

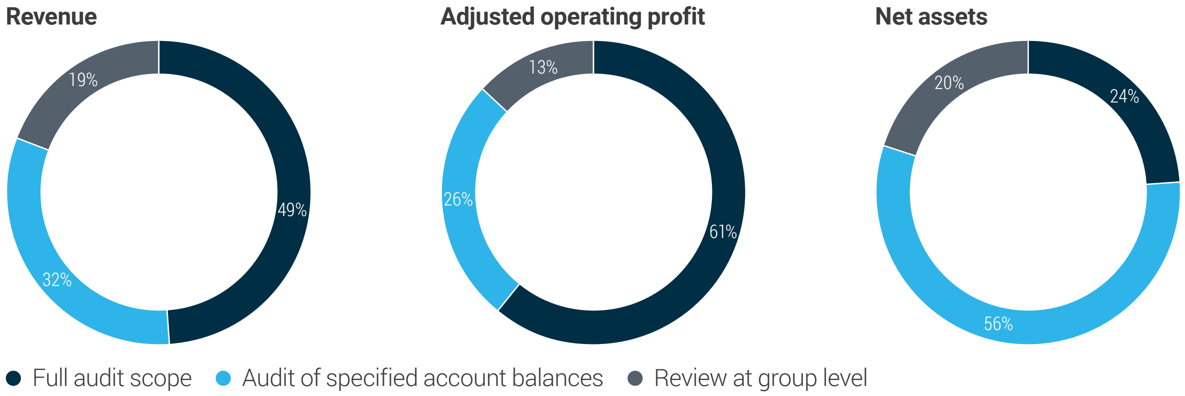
Our Group audit was scoped by obtaining an understanding of the Group and its environment, including Group-wide controls, and assessing the risks of material misstatement at the Group and component level.

There are 72 (2021: 72) reporting components in total, each of which is responsible for maintaining their own accounting records and controls and using an integrated consolidation system to report to UK head office.

Our Group audit scope focused on audit work at 20 components (2021: 22 components). We selected 10 reporting units where we requested component auditors to perform a full scope audit of the component's financial information. We also requested component auditors to audit specified account balances at a further 10 reporting units. Coverage from the in-scope components represents 81% (2021: 79%) of the Group's revenue, 87% (2021: 88%) of the Group's adjusted operating profit and 80% (2021: 88%) of the Group's net assets.

Each component was set a specific component materiality, considering its relative size and any component-specific risk factors such as the location of components. The component materialities applied were in the range £0.5 million to £0.7 million (2021: £0.4 million to £0.6 million).

We tested the consolidation process at the parent company level and conducted analytical procedures for entities not subject to detailed audit work to confirm our conclusion that there was no significant risk of material misstatement in the aggregated financial information.



7.2. Our consideration of climate-related risks

Climate change and the transition to a low carbon economy were considered in our audit where they have the potential to directly or indirectly impact key judgements and estimates within the group financial statements. The Group continues to develop its assessment of the potential impacts of climate change. Management have identified sustainability, climate change and the environment as a principal risk to the business.

We performed the following procedures to address the climate-related risks:

- We held discussions with management to obtain an understanding of the process for considering the impact of climate-related risks and controls that are relevant to the entity.
- We performed our own qualitative risk assessment of the potential impact of climate change on the Group's account balances and classes of transaction and did not identify any reasonably possible risks of material misstatement.
- With the involvement of our Environmental, Social & Governance ("ESG") specialist team, we assessed the climate change related disclosures including TCFD in the financial statements against regulatory requirements and market peers.
- We also considered whether information included in the climate related disclosures in the Annual Report were materially consistent with the financial statements and our knowledge obtained in the audit.

7.3. Working with other auditors

Given the Group's geographical presence across the world, we directed and supervised our many component audit teams in the execution of our audit referral instructions.

We performed site visits to a number of our material components to discuss significant matters of the audit, audit procedures performed, as well as results of work done. The Group engagement team continued to have online interaction with the Group's largest and most complex businesses during 2022 with a particular focus on locations where work was performed on significant or material components.

In addition to the above, the group engagement partner held group-wide, divisional and individual planning and close meetings which covered all businesses. Each division has a dedicated senior member of the group audit team responsible for the supervision and direction of components, including where appropriate sector-specific expertise. We included all component audit teams in our team briefing, discussed and reviewed their risk assessment, and reviewed documentation of the findings from their work. We also reviewed the audit work papers supporting each component team's reporting to us; this was done remotely using shared desktop technology.

8. OTHER INFORMATION

The other information comprises the information included in the annual report, other than the financial statements and our auditor's report thereon. The Directors are responsible for the other information contained within the annual report.

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.

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 course of 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 this gives rise to a material misstatement in the financial statements themselves. 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.

9. RESPONSIBILITIES OF DIRECTORS

As explained more fully in the Directors' responsibilities statement, 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 the 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.

10. 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 guarantee 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.

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

11. EXTENT TO WHICH 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.

11.1. Identifying and assessing potential risks related to irregularities

In identifying and assessing risks of material misstatement in respect of irregularities, including fraud and non-compliance with laws and regulations, we considered the following:

- the nature of the industry and sector, control environment and business performance including the design of the group's remuneration policies, key drivers for Directors' remuneration, bonus levels and performance targets;
- results of our enquiries of management, internal audit, the Directors and the audit committee about their own identification and assessment of the risks of irregularities, including those that are specific to the Group's sector;
- any matters we identified having obtained and reviewed the Group's documentation of their policies and procedures relating to:
  - identifying, evaluating, and complying with laws and regulations and whether they were aware of any instances of non-compliance
  - detecting and responding to the risks of fraud and whether they have knowledge of any actual, suspected, or alleged fraud;
  - the internal controls established to mitigate risks of fraud or non-compliance with laws and regulations; and
- the matters discussed among the audit engagement team including significant component audit teams and relevant internal specialists, including tax, valuations, pensions, ESG and IT, regarding how and where fraud might occur in the financial statements and any potential indicators of fraud.

As a result of these procedures, we considered the opportunities and incentives that may exist within the organisation for fraud and identified the greatest potential for fraud in the classification of adjusting items. In common with all audits under ISAs (UK), we are also required to perform specific procedures to respond to the risk of management override.

We also obtained an understanding of the legal and regulatory frameworks that the Group operates in, focusing on provisions of those laws and regulations that had a direct effect on the determination of material amounts and disclosures in the financial statements The key laws and regulations we considered in this context included the UK Companies Act, Listing Rules, pensions legislation and tax legislation.

In addition, we considered provisions of other laws and regulations that do not have a direct effect on the financial statements but compliance with which may be fundamental to the group's ability to operate or to avoid a material penalty.

11.2 Audit response to risks identified

As a result of performing the above, we identified the classification of adjusting items as a key audit matter related to the potential risk of fraud. The key audit matters section of our report explains the matter in more detail and also describes the specific procedures we performed in response to that key audit matter.

In addition to the above, our procedures to respond to risks identified included the following:

- reviewing the financial statement disclosures and testing to supporting documentation to assess compliance with provisions of relevant laws and regulations described as having a direct effect on the financial statements;
- enquiring of management, the audit committee and external legal counsel concerning actual and potential litigation and claims;
- performing analytical procedures to identify any unusual or unexpected relationships that may indicate risks of material misstatement due to fraud;
- reading minutes of meetings of those charged with governance, reviewing internal audit reports, and reviewing correspondence with tax authorities; and
- in addressing the risk of fraud through management override of controls, testing the appropriateness of journal entries and other adjustments; assessing whether the judgements made in making accounting estimates are indicative of a potential bias; and evaluating the business rationale of any significant transactions that are unusual or outside the normal course of business.

We also communicated relevant identified laws and regulations and potential fraud risks to all engagement team members including internal specialists and significant component audit teams and remained alert to any indications of fraud or non-compliance with laws and regulations throughout the audit.

Report on other legal and regulatory requirements

12. OPINIONS ON OTHER MATTERS PRESCRIBED BY THE COMPANIES ACT 2006

In our opinion the part of the Directors' remuneration report to be audited has been properly prepared in accordance with the Companies Act 2006.

In our opinion, based on the work undertaken in the course of the 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 the Directors' report have been prepared in accordance with applicable legal requirements.

In the 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 any material misstatements in the strategic report or the Directors' report.

13. CORPORATE GOVERNANCE STATEMENT

The Listing Rules require us to review the Directors' statement in relation to going concern, longer-term viability and that part of the Corporate Governance Statement relating to the group's compliance with the provisions of the UK Corporate Governance Code specified for our review.

Based on the work undertaken as part of our audit, we have concluded that each of the following elements of the Corporate Governance Statement is materially consistent with the financial statements and our knowledge obtained during the audit:

- the Directors' statement with regards to the appropriateness of adopting the going concern basis of accounting and any material uncertainties identified set out on page 89;
- the Directors' explanation as to its assessment of the group's prospects, the period this assessment covers and why the period is appropriate set out on page 68;
- the Directors' statement on fair, balanced and understandable set out on page 98;
- the Board's confirmation that it has carried out a robust assessment of the emerging and principal risks set out on page 66;
- the section of the Annual report that describes the review of effectiveness of risk management and internal control systems set out on page 67; and
- the section describing the work of the Audit Committee set out on pages 95 to 100.

14. MATTERS ON WHICH WE ARE REQUIRED TO REPORT BY EXCEPTION

14.1. Adequacy of explanations received and accounting records

Under the Companies Act 2006 we are required to report to you if, in our opinion:

- we have not received all the information and explanations we require for our audit; or
- 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.

We have nothing to report in respect of these matters.

14.2. Directors' remuneration

Under the Companies Act 2006 we are also required to report if in our opinion certain disclosures of directors' remuneration have not been made or the part of the directors' remuneration report to be audited is not in agreement with the accounting records and returns.

We have nothing to report in respect of these matters.

15. OTHER MATTERS WHICH WE ARE REQUIRED TO ADDRESS

15.1. Auditor tenure

Following the recommendation of the Audit Committee, we were appointed by the board of directors of the parent company on 6 May 2020 at the 2020 Annual General Meeting to audit the financial statements for the year ended 31 December 2020 and subsequent financial periods. The period of total uninterrupted engagement including previous renewals and reappointments of the firm is 3 years, covering the years ending 31 December 2020 to 31 December 2022.

15.2. Consistency of the audit report with the additional report to the audit committee

Our audit opinion is consistent with the additional report to the audit committee we are required to provide in accordance with ISAs (UK).

16. 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.

As required by the Financial Conduct Authority (FCA) Disclosure Guidance and Transparency Rule (DTR) 4.1.14R, these financial statements form part of the European Single Electronic Format (ESEF) prepared Annual Financial Report filed on the National Storage Mechanism of the UK FCA in accordance with the ESEF Regulatory Technical Standard ('ESEF RTS'). This auditor's report provides no assurance over whether the annual financial report has been prepared using the single electronic format specified in the ESEF RTS.

Robert Knight (Senior statutory auditor)
For and on behalf of Deloitte LLP
Statutory Auditor
London/United Kingdom
07 March 2023

Consolidated income statement

for the year ended 31 December 2022

£million (unless otherwise stated)	Note	**2022**	2021
Revenue	3	**617.0**	476.2
Cost of sales		**(481.5)**	(360.6)
Gross profit		**135.5**	115.6
Distribution costs		**(29.6)**	(29.6)
Administrative expenses		**(109.3)**	(69.4)
Operating (loss)/profit		**(3.4)**	19.3
Analysed as:			
Adjusted operating profit	3	**47.1**	34.8
Restructuring and other	7	**(20.2)**	(7.8)
Asset impairments	7	**(23.1)**	–
Acquisition and disposal related costs	7	**(7.2)**	(7.7)
Finance income	5	**2.3**	1.1
Finance costs	5	**(9.0)**	(4.4)
(Loss)/profit before taxation		**(10.1)**	16.0
Taxation	8	**(3.1)**	(3.2)
(Loss)/profit for the period attributable to the owners of the Company		**(13.2)**	12.8
EPS attributable to owners of the Company (pence)			
Basic	10	**(7.5)**	7.3
Diluted	10	**(7.5)**	7.2

Consolidated statement of comprehensive income

for the year ended 31 December 2022

£million	Note	2022	2021
(Loss)/profit for the year		**(13.2)**	12.8
Other comprehensive income for the year after tax			
Items that are or may be reclassified subsequently to the income statement:			
Exchange differences on translation of foreign operations		**26.9**	3.4
Tax on exchange differences		**(1.6)**	–
Loss on hedge of net investment in foreign operations		**(3.4)**	(0.2)
Loss on cash flow hedges taken to equity less amounts recycled to the income statement		**(2.9)**	(3.2)
Deferred tax (loss)/gain on movement in cash flow hedges		**(0.4)**	0.5
Items that will never be reclassified to the income statement:			
Remeasurement of defined benefit pension schemes	22	**(35.9)**	35.8
Tax on remeasurement of defined benefit pension schemes		**6.5**	(11.4)
Total comprehensive (loss)/income for the period attributable to the owners of the Company		**(24.0)**	37.7

Consolidated statement of financial position

at 31 December 2022

£million	Note	**2022**	2021
ASSETS			
Non-current assets			
Right-of-use assets	12	**19.6**	19.6
Property, plant and equipment	13	**54.8**	50.4
Goodwill	14	**155.1**	156.5
Other intangible assets	15	**53.7**	51.7
Deferred tax assets	8	**13.2**	11.3
Derivative financial instruments	21	**0.8**	0.6
Pensions	22	**31.3**	78.4
Total non-current assets		**328.5**	368.5
Current assets			
Inventories	16	**189.2**	141.8
Trade and other receivables	17	**120.3**	86.2
Income taxes receivable		**1.1**	2.6
Derivative financial instruments	21	**3.1**	4.0
Cash and cash equivalents		**65.0**	68.3
Total current assets		**378.7**	302.9
Total assets		**707.2**	671.4
LIABILITIES			
Current liabilities			
Borrowings	20	**3.7**	1.1
Lease liabilities	20, 28	**4.4**	4.1
Derivative financial instruments	21	**3.6**	1.3
Trade and other payables	18	**173.2**	133.9
Income taxes payable		**9.6**	7.1
Provisions	19	**3.5**	2.5
Total current liabilities		**198.0**	150.0
Non-current liabilities			
Borrowings	20	**176.6**	147.1
Lease liabilities	20, 28	**18.7**	18.5
Derivative financial instruments	21	**0.8**	0.7
Deferred tax liability	8	**12.4**	20.2
Pensions	22	**2.9**	3.9
Provisions and other non-current liabilities	18, 19	**0.8**	1.0
Total non-current liabilities		**212.2**	191.4
Total liabilities		**410.2**	341.4
Net assets		**297.0**	330.0
EQUITY			
Share capital	23	**44.1**	44.1
Share premium		**22.9**	22.6
Translation reserve		**55.1**	33.2
Other reserves	24	**7.3**	7.1
Retained earnings		**167.6**	221.0
Equity attributable to owners of the Company		**297.0**	328.0
Non-controlling interests	25	**–**	2.0
Total equity		**297.0**	330.0

Approved by the Board of Directors on 7 March 2023 and signed on their behalf by:

Richard Tyson
Director

Mark Hoad
Director

Consolidated statement of changes in equity

for the year ended 31 December 2022

£million	Share capital	Share premium	Translation Reserve	Other reserves	Retained earnings	Sub-total	Non-controlling interest	Total
At 31 December 2020	43.6	21.7	30.0	5.5	195.2	296.0	2.0	298.0
Profit for the year	–	–	–	–	12.8	12.8	–	12.8
Other comprehensive income								
Exchange differences on translation of foreign operations	–	–	3.4	–	–	3.4	–	3.4
Loss on hedge of net investment in foreign operations	–	–	(0.2)	–	–	(0.2)	–	(0.2)
Loss on cash flow hedges taken to equity less amounts recycled to the income statement	–	–	–	(3.2)	–	(3.2)	–	(3.2)
Deferred tax gain on movement in cash flow hedges	–	–	–	0.5	–	0.5	–	0.5
Remeasurement of defined benefit pension schemes	–	–	–	–	35.8	35.8	–	35.8
Tax on remeasurement of defined benefit pension schemes	–	–	–	–	(11.4)	(11.4)	–	(11.4)
Total comprehensive income	–	–	3.2	(2.7)	37.2	37.7	–	37.7
Transactions with owners recorded directly in equity								
Equity dividends paid by the Company	–	–	–	–	(11.4)	(11.4)	–	(11.4)
Share-based payments	–	–	–	3.8	–	3.8	–	3.8
Deferred tax on share-based payments	–	–	–	0.5	–	0.5	–	0.5
New shares issued	0.5	0.9	–	–	(0.3)	1.1	–	1.1
Other movements	–	–	–	–	0.3	0.3	–	0.3
At 31 December 2021	44.1	22.6	33.2	7.1	221.0	328.0	2.0	330.0
At 31 December 2021	**44.1**	**22.6**	**33.2**	**7.1**	**221.0**	**328.0**	**2.0**	**330.0**
Loss for the year					**(13.2)**	**(13.2)**	**–**	**(13.2)**
Other comprehensive income								
Exchange differences on translation of foreign operations	**–**	**–**	**26.9**	**–**	**–**	**26.9**	**–**	**26.9**
Tax on exchange differences	**–**	**–**	**(1.6)**	**–**	**–**	**(1.6)**	**–**	**(1.6)**
Loss on hedge of net investment in foreign operations	**–**	**–**	**(3.4)**	**–**	**–**	**(3.4)**	**–**	**(3.4)**
Loss on cash flow hedges taken to equity less amounts recycled to income statement	**–**	**–**	**–**	**(2.9)**	**–**	**(2.9)**	**–**	**(2.9)**
Deferred tax on movement in cash flow hedges [1]	**–**	**–**	**–**	**0.2**	**(0.6)**	**(0.4)**	**–**	**(0.4)**
Remeasurement of defined benefit pension schemes	**–**	**–**	**–**	**–**	**(35.9)**	**(35.9)**	**–**	**(35.9)**
Tax on remeasurement of defined benefit pension schemes	**–**	**–**	**–**	**–**	**6.5**	**6.5**	**–**	**6.5**
Total comprehensive income/(loss)	**–**	**–**	**21.9**	**(2.7)**	**(43.2)**	**(24.0)**	**–**	**(24.0)**
Transactions with owners recorded directly in equity								
Equity dividends paid by the Company	**–**	**–**	**–**	**–**	**(10.2)**	**(10.2)**	**–**	**(10.2)**
Share-based payments	**–**	**–**	**–**	**4.8**	**–**	**4.8**	**–**	**4.8**
Deferred tax on share-based payments	**–**	**–**	**–**	**(1.0)**	**–**	**(1.0)**	**–**	**(1.0)**
New shares issued	**–**	**0.3**	**–**	**–**	**–**	**0.3**	**–**	**0.3**
Other movements	**–**	**–**	**–**	**(0.9)**	**–**	**(0.9)**	**–**	**(0.9)**
Dividend to non-controlling interest	**–**	**–**	**–**	**–**	**–**	**–**	**(2.0)**	**(2.0)**
At 31 December 2022	**44.1**	**22.9**	**55.1**	**7.3**	**167.6**	**297.0**	**–**	**297.0**

1 During the year £0.6 million was transferred out of retained earnings and into the hedging reserve.

Consolidated statement of cash flows

for the year ended 31 December 2022

£million	Note	2022	2021
Cash flows from operating activities			
(Loss)/Profit for the year		**(13.2)**	12.8
Taxation	8	**3.1**	3.2
Net finance costs		**6.7**	3.3
Restructuring costs and non underlying asset impairments	7	**43.3**	7.8
Acquisition related costs	7	**7.2**	7.7
Adjusted operating profit		**47.1**	34.8
Adjustments for:			
Depreciation	12, 13	**13.9**	13.6
Amortisation of intangible assets	15	**2.2**	2.5
Share based payment expense		**4.8**	3.8
Other items		**0.5**	1.1
Increase in inventories		**(40.4)**	(42.6)
Increase in receivables		**(26.3)**	(15.7)
Increase in payables and provisions		**27.9**	42.0
Adjusted operating cash flow		**29.7**	39.5
Special payments to pension funds		**–**	(5.5)
Restructuring and acquisition related costs		**(11.1)**	(15.0)
Net cash generated from operations		**18.6**	19.0
Net income taxes paid		**(5.9)**	(4.7)
Net cash flow from operating activities		**12.7**	14.3
Cash flows from investing activities			
Purchase of property, plant and equipment	13	**(11.4)**	(14.6)
Proceeds from sale of property, plant and equipment and government grants received		**0.3**	9.3
Capitalised development expenditure	15	**(2.3)**	(1.9)
Purchase of other intangibles	15	**(0.6)**	(0.5)
Acquisitions of businesses	4	**(8.3)**	(0.5)
Net cash flow used in investing activities		**(22.3)**	(8.2)
Cash flows from financing activities			
Issue of share capital	23	**0.4**	1.4
Interest paid		**(7.5)**	(4.0)
Repayment of borrowings		**(149.3)**	(86.9)
Proceeds from borrowings		**174.3**	96.4
Capital payment of lease liabilities		**(4.3)**	(3.9)
Other items		**(1.0)**	(0.5)
Dividends paid to minority shareholders	25	**(2.0)**	–
Dividends paid by the Company	9	**(10.2)**	(11.4)
Net cash flow from/(used in) financing activities		**0.4**	(8.9)
Net (decrease)/increase in cash and cash equivalents		**(9.2)**	(2.8)
Cash and cash equivalents at beginning of year	27	**67.2**	69.0
Exchange differences	27	**3.3**	1.0
Cash and cash equivalents at end of year	27	**61.3**	67.2
Cash and cash equivalents comprise:			
Cash at bank and in hand		**65.0**	68.3
Bank overdrafts		**(3.7)**	(1.1)
		61.3	67.2

Notes to the Consolidated financial statements

at 31 December 2022

1 Basis of preparation

a) Basis of accounting

TT Electronics Plc ("the Group") is a public company limited by shares (company number 00087249). The Group is incorporated in the United Kingdom under the Companies Act 2006 and registered in England and Wales. The address of the registered office is 'TT Electronics Plc, Fourth Floor, St Andrews House, West Street, Woking, Surrey, GU21 6EB'. The nature of the Group's operations and its principal activities by operating segment are set out in note 3 and in the divisional reviews on pages 26 to 31. The Consolidated Financial Statements of the Group for the year ended 31 December 2022 were authorised in accordance with a resolution of the Directors of TT Electronics Plc on 7 March 2023.

These consolidated financial statements are presented in pounds sterling, which is also the functional currency of the Company. Foreign operations are included in accordance with the policies set out in note 2.

The consolidated financial statements have been prepared on a historical cost basis modified by derivatives held at fair value. 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. The financial statements have also been prepared in accordance with International Financial Reporting Standards as issued by the IASB.

The financial statements set out on pages 149 to 226 have been prepared using consistent accounting policies except for the adoption of new accounting standards and interpretations noted below.

b) Basis of consolidation

The consolidated financial statements set out the Group's financial position as at 31 December 2022 and the Group's financial performance for the year ended 31 December 2022.

Subsidiaries are those enterprises controlled by the Group. Control exists when the Group is exposed, or has rights, to variable returns from its involvement with the subsidiary and has the ability to affect those returns through its power over the subsidiary. Subsidiaries are consolidated from the date on which control is transferred to the Group and cease to be consolidated from the date on which control is transferred out of the Group.

All intercompany balances and transactions, including unrealised profits arising from intra-group transactions, have been eliminated in full. Unrealised losses are eliminated in the same way as unrealised gains except that they are only eliminated to the extent that there is no evidence of impairment.

c) Alternative performance measures

The Group presents Alternative Performance Measures ("APMs") in addition to the statutory results of the Group. These are presented in accordance with the guidelines on APMs issued by the European Securities and Markets Authority ("ESMA").

Adjusted operating profit has been defined as operating profit from continuing operations excluding the impacts of significant restructuring programmes, significant one-off items including property disposals, impairment charges significant in nature and/or value, business acquisition, integration, and divestment related activity, and the amortisation of intangible assets recognised on acquisition. Acquisition and disposal related items include the writing off of the pre-acquisition profit element of inventory written up on acquisition, other direct costs associated with business combinations and adjustments to contingent consideration related to acquired businesses. Restructuring includes significant changes in footprint (including movement of production facilities) and significant costs of management changes.

In addition to the items above, adjusting items impacting profit after tax include:

- The net effect on tax of significant restructuring from strategy changes that are not considered by the Group to be part of the normal operating costs of the business; and
- The tax effects of adjustments to profit before tax.

These financial statements include alternative performance measures that are not prepared in accordance with IFRS. These alternative performance measures have been selected by the Directors to assist them in making operating decisions because they represent the underlying operating performance of the Group and facilitate internal comparisons of performance over time.

The Directors consider the adjusted results to be an important measure used to monitor how the businesses are performing as this provides a meaningful reflection of how the businesses are managed and measured on a day-to-day basis and achieves consistency and comparability between reporting periods.

1 Basis of preparation continued

These alternative performance measures exclude certain significant non-recurring, infrequent or non-cash items that the Directors do not believe are indicative of the underlying operating performance of the Group (that are otherwise included when preparing financial measures under IFRS).

Adjusted profit is not a defined term under IFRS and may not be comparable with similarly titled profit measures reported by other companies. It is not intended to be a substitute for, or superior to, GAAP measures. All APMs relate to the current year results and comparable periods where provided.

The Directors consider there to be four main alternative performance measures: adjusted operating profit, free cash flow, adjusted EPS and adjusted effective tax rate.

All alternative performance measures are presented on pages 224 to 226 and are reconciled to their equivalent statutory measures where this is appropriate.

d) Going concern

The Group's business activities, together with the factors likely to affect its future development, performance and position are set out within the Strategic Report on pages 1 to 75. The Strategic Report analyses the financial position of the Group, its cash flows, liquidity position and borrowing facilities. In addition, note 21 to the financial statements includes the Group's objectives, policies and processes for managing its capital; its financial risk management objectives; details of its financial instruments and hedging activities; and its exposures to credit risk and liquidity risk.

The Group has experienced continued improvement in trading momentum and strong growth on our 2021 results. The structural growth markets we have selected to focus on have moved back towards their long-term growth trajectory, the benefits of our strategic repositioning and focus on building close relationships with our clients can be seen in both the order book and financial performance of the Group.

The Group's financial position remains strong, at 31 December 2022 it had:

- £267.2 million of total borrowing facilities available (comprising committed facilities of £226.0 million and uncommitted facilities of £41.2 million representing overdraft lines and an accordion facility of £32.6 million). The Group's primary source of finance is the £147.4 million committed revolving credit facility (RCF) which was signed in June 2022 to replace the already existing RCF; at 31 December 2022 £103.6 million of this facility had been drawn down. The Group's RCF is payable on a floating rate basis above GBP SONIA, USD SOFR or EURIBOR depending on the currency of the loan and will mature in June 2026 with a one-year extension option which expires in May 2023. In February 2023 £15.0 million of uncommitted accordion facility was converted into committed RCF extending the total committed facilities to £241.0 million. In December 2021, the Group issued £75 million of fixed rate loan notes with three institutional investors; the issue is evenly split between 7- and 10- year maturities with an average interest rate of 2.9% and covenants in line with our bank facility.
- A leverage ratio (banking covenant defined measure) of 2.0 times at 31 December 2022 compared to the RCF (and PP loan notes) covenant maximum of 3.0 times. Interest cover (banking covenant defined measure) of 7.4 times compared to the RCF (and PP loan notes) covenant minimum of 4.0 times

The Group has prepared and reviewed cash flow forecasts across the business over the twelve-month period from the date of the approval of these financial statements, considering the Group's current financial position and the potential impact of our principal risks on divisions.

The Group's financial projections contain key assumptions surrounding revenue and operating profit growth in 2023. Under the Group's base case financial projections, the Group retains significant liquidity and covenant headroom throughout the forecast period, with both metrics improving from the position as at 31 December 2022.

The Group's financial projections have been stress tested for "business as usual" risks (such as profit growth, supply chain pressure and working capital variances), and the impact of the following principal risks: general revenue reduction, contractual risks, research and development, people and capability, supplier resilience and health and safety (occurring both individually and in unison). Principal risks which were not specifically modelled were either considered not likely to have an impact within the going concern period or their financial effect was covered within the overall downside economic risks implicit within the stress testing. Under the stress tested modelling, the liquidity headroom within the group remains adequate throughout during the forecast period. Financial covenants continue to be in compliance under the stress tested model and management have a number of mitigating actions which could be undertaken if required.

Notes to the Consolidated financial statements
continued

1 Basis of preparation continued
The Group's downside stress test scenario has been sensitised for supply chain challenges and capacity constraints which shows a reduction in revenue and operating profit compared to the latest forecast. Despite this further reduction these projections show that the Group should remain well within its facilities headroom and within bank covenants for the 12 months following the approval of these financial statements. A "reverse" stress-test was also modelled to understand the conditions which could jeopardise the ability of the Group to continue as a going concern including assessing against covenant testing and facility headroom. The stress testing also considered mitigating actions which could be put in place. Mitigating actions included limiting capital expenditure and reducing controllable costs including items such as discretionary bonuses and pay rises. The reverse stress test is deemed to have a remote likelihood and help inform the Directors' assessment that there are no material uncertainties in relation to going concern.

The Group's wide geographical and sector diversification helps minimise the risk of serious business interruption or catastrophic reputational damage. Furthermore, the business model is structured so that the Group is not overly reliant on any single customer, market or geography.

The Directors have assessed the future funding requirements of the Group with due regard to the risks and uncertainties to which the Group is exposed and compared them with the level of available borrowing facilities and are satisfied that the Group has adequate resources for at least twelve months from the date of signing. Accordingly, the financial statements have been prepared on a going concern basis.

e) New and revised standards and interpretations adopted, not yet adopted and those in issue but not yet effective
New and revised standards and interpretations adopted during the year
At the date of authorisation of these financial statements the Group has considered the following revised standards or interpretations, however they were deemed not to have a material effect on the financial statements:

- Covid-19-Related Rent Concessions beyond 30 June 2021 (Amendment to IFRS 16)

New and revised standards and interpretations not yet adopted
The Group does not consider that any standard, amendment or interpretation issued by the IASB, but not yet applicable, will have a significant impact on the financial statements.

New and revised IFRS Standards in issue but not yet effective
At the date of authorisation of these financial statements, the Group has not applied the following new and revised IFRS Standards that have been issued but are not yet effective:

- Applying IFRS 9 'Financial Instruments' with IFRS 4 'Insurance Contracts' (Amendments to IFRS 4)
- Classification of liabilities as current or non-current (Amendments to IAS 1)
- Property, Plant and Equipment — Proceeds before Intended Use (Amendments to IAS 16)
- Disclosure of Accounting Policies (Amendments to IAS 1 and IFRS Practice Statement 2)
- Annual Improvements 2018-2020 Cycle
- Reference to the Conceptual Framework (Amendments to IFRS 3)
- Onerous Contracts — Cost of Fulfilling a Contract (Amendments to IAS 37)
- Amendments to IFRS 17
- Extension of the Temporary Exemption from Applying IFRS 9 (Amendments to IFRS 4)
- Initial Application of IFRS 17 and IFRS 9 — Comparative Information (Amendment to IFRS 17)
- Amendments to IAS 12 – Deferred tax related to assets and liabilities arising from a single transaction.
- Amendments to IAS 8 – Definition of accounting estimates.

f) Change in accounting policies
Adoption of new and amendments to published standards and interpretations effective for the Group for the year ended 31 December 2022 did not have any material impact on the financial position or performance of the Group.

Interest rate benchmark reform
Throughout 2021 the Group was exposed to the following interest rate benchmarks within its hedge accounting relationships and borrowings, which have been subject to interest rate benchmark reform in 2022: GBP LIBOR and USD LIBOR ("IBORs"). The hedging instruments are interest rate swaps and the hedged items are Sterling and US Dollar floating rate debt. On 4 January 2022 the Group transitioned away from GBP LIBOR and replaced this with GBP SONIA. USD LIBOR remained available throughout 2022. There was no impact of this transition. As described in note 20 the Group underwent a refinancing exercise in June 2022 and is now exposed to GBP SONIA, USD SOFR and EURIBOR.

1 Basis of preparation continued

g) Critical accounting judgements and key sources of estimation uncertainty

In the application of the Group's accounting policies, which are described in note 2, the Directors are required to make judgements, estimates and assumptions about the carrying amounts of assets and liabilities that are not readily apparent from other sources.

The estimates and associated assumptions are based on historical experiences and other factors that are considered to be relevant. 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 revision and future periods if the revision affects both current and future periods.

Critical judgements

In the course of preparing the Financial Statements, a critical judgement within the scope of paragraph 122 of IAS 1: "Presentation of Financial Statements" is made during the process of applying the Group's accounting policies.

Adjusting items

Judgements are required as to whether items are disclosed as adjusting, with consideration given to both quantitative and qualitative factors. Further information about the determination of adjusting items in the year ended 31 December 2022 is included in note 1c.

There are no other critical judgements other than those involving estimates, that have had a significant effect on the amounts recognised in the financial statements. Those involving estimates are set out below.

Key sources of estimation uncertainty

Assumptions concerning the future and other key sources of estimation uncertainty at the balance sheet date, that may have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year, are discussed below.

- Notes 7 and 14 – Assumptions used to determine the carrying value of goodwill in relation to the IoT Solutions cash generating unit ("CGU"). The carrying amount of goodwill at 31 December 2022 was £155.1 million (2021: £156.5 million). Determining whether goodwill is impaired requires an estimation of the value in use of the CGUs to which the goodwill has been allocated. The value in use calculation requires management to estimate the future cash flows expected to arise from CGUs and a suitable discount rate in order to calculate present value. During the year a full impairment review was performed and an impairment charge of £17.7 million was recorded in respect of goodwill held in the IoT Solutions CGU which was recognised within the Power and Connectivity segment. Should the business experience further unforeseen deterioration of results a future impairment may be required. Further information is provided in note 7 and sensitivity analysis is provided in note 14. Following the impairment, the carrying amount of the IoT Solutions CGU's goodwill was £9.9 million (2021: £27.6 million).
- Note 8 – Taxation. Accruals for tax contingencies require management to make judgements and estimates in relation to tax authority audits and exposures. Amounts accrued are based on management's interpretation of country-specific tax law and the likelihood of settlement. Tax benefits are not recognised unless the tax positions are probable of being sustained. Once considered to be probable, management reviews each material tax benefit to assess whether a provision should be taken against full recognition of the benefit on the basis of potential settlement through negotiation and/or litigation. These amounts are expected to be utilised or to reverse as tax audits occur or as the statute of limitations is reached in the respective countries concerned. The Group's current tax liability at 31 December 2022 includes tax provisions of £8.4 million (2021: £6.9 million). The Group believes the range of reasonable possible outcomes in respect of these exposures is tax liabilities of up to £11.1 million (2021: £9.0 million).

Notes to the Consolidated financial statements

continued

2 Summary of significant accounting policies

The following significant accounting policies have been applied in the preparation of the consolidated financial statements. These accounting policies have been consistently applied across the Group.

a) Revenue

Revenue is measured at the fair value of the right to consideration, usually the invoiced value, for the provision of goods to external customers excluding value added tax and other sales related taxes and is recognised when the customer obtains control of goods for revenues which are not recognised over time. In most cases this is at the point in time of transfer of legal title of the goods; terms vary by customer, but the two most common arrangements are at the time of dispatch and at the time of delivery. Where revenue is recognised over time this is recognised with regards to completion of performance obligation milestones. For sales to customers where a right to return an item is granted, revenue is recognised to the extent of the consideration to which the Group ultimately expects to be entitled (i.e. revenue is not recognised for goods expected to be returned). Where a service warranty is provided to customers, the associated revenue, based upon an allocation of the overall cost of performance, is recognised over the warranty period. Payment terms typically range from 30 to 120 days.

b) Finance income

Finance income comprises interest income on funds invested, the calculated interest income on pensions assets for schemes which are in surplus and net foreign exchange gains or losses on cash balances and loans receivables. Interest income is recognised using the effective interest rate. Net foreign exchange gains or losses on other monetary assets or liabilities are recognised either within other income or cost of sales, depending on what the underlying monetary asset or liability relates to.

c) Finance costs

Finance costs comprise interest expense on borrowings which are not capitalised under the borrowing costs policy, the calculated interest expense on pension liabilities for schemes which are in deficit, the interest costs on lease liabilities and net foreign exchange gains or losses on external loans. Net foreign exchange gains or losses on other monetary assets or liabilities are recognised either within other income or cost of sales, depending on what the underlying monetary asset or liability relates to.

d) Discontinued operations and assets held for sale

The Group reports a business as a discontinued operation when it has been disposed of in a period, or its future sale is considered to be highly probable at the balance sheet date, and results in the cessation of a major line of business or geographical area of operation. An asset is classified as held for sale if it is available for immediate sale in its present condition subject only to terms that are usual and customary for sales of such assets and that it is highly probable the asset will be sold within one year from the date of classification.

e) Dividends

Dividends are recognised as a liability in the period in which they are approved by shareholders. Dividends receivable are recognised when the Group's right to receive payment is established.

f) Business combinations

Business combinations are accounted for using the acquisition method. Goodwill on business combinations is recognised as the fair value of the consideration, including the full cost of any derivative financial instruments used to hedge this item, less the fair value of the identifiable assets and liabilities acquired and is recognised as an asset in the consolidated balance sheet. Costs directly attributable to business combinations are recognised as an expense within the income statement as incurred.

Acquisitions and disposals of non-controlling interests that do not result in a change of control are accounted for as transactions with owners in their capacity as owners and therefore no goodwill is recognised as a result of such transactions. The adjustments to non-controlling interests are based on a proportionate amount of the net assets of the subsidiary. Any difference between the price paid or received and the amount by which non-controlling interests are adjusted is recognised directly in equity and attributed to the owners of the parent.

If the initial accounting for a business combination is incomplete by the end of the reporting period in which the combination occurs, the Group reports provisional amounts for the items for which the accounting is incomplete. Those provisional amounts are adjusted during the measurement period (which is no longer than 12 months from the acquisition date), or additional assets or liabilities are recognised, to reflect new information obtained about facts and circumstances that existed as of the acquisition date that, if known, would have affected the amounts recognised as of that date.

g) Property, plant and equipment

Initial measurement

Property, plant and equipment is stated at cost less accumulated depreciation and impairment losses. The cost of a tangible fixed asset comprises its purchase price and any costs directly attributable to bringing it into working condition for its intended use. The cost of self-constructed assets includes the cost of materials, direct labour and an appropriate proportion of production overheads.

2 Summary of significant accounting policies continued

Depreciation

The cost of each item of property, plant and equipment is depreciated over its useful life. Depreciation is charged to the income statement so as to write-off the cost less estimated residual value on a straight-line basis over the estimated useful life of the asset. Depreciation commences on the date the assets are ready for use within the business and the asset carrying values are reviewed for impairment when there is an indication that they may be impaired. Freehold land is not depreciated.

The depreciation rates of assets are as follows:

Freehold buildings	50 years
Leasehold building improvements	50 years (or over the period of the lease, if shorter)
Plant and equipment	3 to 10 years

Borrowing costs directly attributable to the acquisition, construction or production of qualifying assets that take a substantial period of time to get ready for their intended use are capitalised as part of the cost of the respective asset.

h) Investment property

Property held to earn rental income rather than for the purpose of the Group's principal activities is classified as investment property. Investment property is recorded at cost less accumulated depreciation and any recognised impairment loss. The depreciation policy is consistent with that described for other Group properties. The assets' residual values and useful lives are reviewed, and adjusted, if appropriate, at each balance sheet date.

Investment properties are derecognised when either they have been disposed of or when the investment property is permanently withdrawn from use and no future economic benefit is expected from its disposal. The difference between the net disposal proceeds and the carrying amount of the asset is recognised in the income statement in the period of derecognition.

i) Leases

The Group applies IFRS 16 'Leases' and recognises right-of-use assets and lease liabilities for most leases (unless the lease term is 12 months or less or the underlying asset has a low value).

The Group recognises a lease liability at the lease commencement date, measured as the present value of the future lease payments, discounted at the incremental borrowing rate. A corresponding right-of-use asset is recognised separately on the face of the consolidated balance sheet, net of accumulated depreciation and impairment losses.

The Group has applied judgement to determine the lease term for contracts that include renewal options. The assessment of whether the exercise of such options is reasonably certain impacts the lease term, which affects the amount of lease liability and right-of-use asset recognised.

j) Government grants

Government grants relating to non-current assets are treated as deferred income and credited to the income statement by equal instalments over the anticipated useful lives of the assets to which the grants relate. Other grants are credited to the income statement over the period of the project to which they relate.

k) Goodwill

Goodwill arising on the acquisition of a business, representing the difference between the cost of acquisition and the fair value of the identifiable net assets acquired, is capitalised and is tested annually for impairment. Goodwill is not amortised, and any impairment losses are not subsequently reversed. On the subsequent disposal or discontinuance of a previously acquired business, the relevant goodwill is included in the gain or loss on disposal within the consolidated income statement except to the extent it has been previously impaired.

Negative goodwill arising on the acquisition of a business is credited to the consolidated income statement on acquisition as part of acquisition costs reported outside adjusted profit.

Cash-generating units 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 cash-generating unit is less than the carrying amount of the unit, the impairment loss is allocated first to reduce the carrying amount of any goodwill allocated to the unit and then to the other assets of the unit pro-rata on the basis of the carrying amount of each asset in the unit. An impairment loss recognised for goodwill is not reversed in a subsequent period.

Notes to the Consolidated financial statements
continued

2 Summary of significant accounting policies continued

l) Other intangible assets

Intangible assets acquired as part of a business combination are stated in the balance sheet at their fair value at the date of acquisition less accumulated amortisation.

Expenditure on research activities undertaken with the prospect of gaining new scientific or technical knowledge and understanding is recognised in the income statement as incurred. Expenditure on development activities, whereby research findings are applied to a plan or design for the production of new or substantially improved products and processes, is capitalised if the product or process is technically and commercially feasible and the Group has sufficient resources to complete development. The expenditure capitalised includes the cost of materials, direct labour and an appropriate proportion of overheads. Other development expenditure is recognised in the income statement as incurred. Capitalised development expenditure is stated at cost less accumulated amortisation and impairment losses. The carrying values of intangible assets are tested for impairment whenever there is an indication that they may be impaired.

Customer relationships and contracts are valued on the basis of the net present value of the future additional cash flows arising from customer relationships with appropriate allowance for attrition of customers.

Acquired computer software licences for use within the Group are capitalised as an intangible asset on the basis of the costs incurred to acquire and bring to use the specific software. Costs that are directly associated with the implementation of identifiable and unique software products controlled by the Group, and that will probably generate economic benefits exceeding costs beyond one year, are recognised as intangible assets. Capitalised software development expenditure is stated at cost less accumulated amortisation.

The amortisation rates for intangible assets are:

Acquired patents and licences	up to 10 years
Product development costs	5 years
Customer relationships	3 to 22 years
Order backlog	up to 2 years
Software	3 to 5 years

Amortisation is charged on a straight-line basis.

m) Deferred taxation

Deferred taxation is provided on taxable temporary differences between the carrying amounts of assets and liabilities in the financial statements and their corresponding tax bases. No provision is made for deferred tax which would become payable on the distribution of retained profits by overseas subsidiaries where the timing of the reversal of the temporary difference can be controlled and it is probable that the temporary difference will not reverse in the foreseeable future. Deferred tax is measured using the tax rates expected to apply when the asset is realised, or the liability settled based on tax rates enacted or substantively enacted by the balance sheet date. However, deferred tax is not provided on the initial recognition of goodwill, nor on the initial recognition of an asset or liability unless the related transaction is a business combination or affects tax or accounting profit.

A deferred tax asset is recognised only to the extent that it is probable that future taxable profits will be available against which the asset can be utilised or that they will reverse. Deferred tax assets are reduced to the extent that it is no longer probable that the related tax benefit will be realised.

Deferred tax assets and liabilities are offset if a legally enforceable right exists to set off current tax assets against current tax liabilities and the deferred taxes relate to the same taxable entity and the same taxation authority.

n) Inventories

Inventories are valued at the lower of cost, including related overheads, and net realisable value. Cost comprises direct materials and, where applicable, direct labour costs and the overheads incurred in bringing inventories to their present location and condition. Cost is calculated on a weighted average cost basis. Net realisable value is based on estimated selling price less costs expected to be incurred to completion and disposal. Provisions are made for obsolescence or other expected losses where necessary.

o) Financial instruments

Recognition

The Group recognises financial assets and liabilities on its balance sheet when it becomes a party to the contractual provisions of the instrument.

2 Summary of significant accounting policies continued

Financial assets and liabilities are offset and the net amount is reported in the balance sheet when there is a legally enforceable right to set off the recognised amounts and there is an intention to settle on a net basis, or realise the asset and settle the liability simultaneously.

Measurement

When financial assets and liabilities are initially recognised, they are measured at fair value being the consideration given or received plus (or minus) directly attributable transaction costs.

Trade receivables are recognised at transaction price (i.e. original invoice price) and subsequently measured at amortised cost less provision made for loss allowance of these receivables based upon the expected credit loss model (simplified model). All trade receivables are held to collect contractual cash flows within a business model and meet the 'Solely Payments of Principal and Interest' (SPPI) test.

Trade payables are carried at the amounts expected to be paid to counterparties and are held at amortised cost.

Borrowings are initially recognised at the fair value of the consideration received less directly attributable transaction costs. After initial recognition, borrowings are subsequently measured at amortised cost using the effective interest method.

Cash and cash equivalents comprise cash at bank and in hand, short-term deposits held on call or with maturities of less than three months at inception, and highly liquid investments that are readily convertible into known amounts of cash and are subject to insignificant risk of changes in value. Within the cashflow statement this definition also includes bank overdrafts that are repayable on demand and form an integral part of the Group's cash management. Cash and cash equivalents are initially recognised at fair value and subsequently are measured at amortised cost because they meet the 'Solely Payments of Principal and Interest' (SPPI) test.

In determining estimated fair value, investments are valued at quoted bid prices on the trade date.

Derivatives and hedge accounting

The Group uses derivative financial instruments such as forward foreign exchange contracts and interest rate derivatives to hedge risks associated with foreign exchange fluctuations and interest rate risk. These are designated as cash flow hedges (CFH). At the inception of the hedge relationship, the Group documents the relationship between the hedging instrument and the hedged item, along with its risk management objectives and its strategy for undertaking various hedge transactions. Furthermore, at the inception of the hedge and on an ongoing basis, the Group documents whether the hedging instrument that is used in a hedging relationship is highly effective in offsetting changes in cash flows of the hedged item.

The effective portion of changes in the fair value of derivatives that are designated and qualify as cash flow hedges are deferred in equity. The gain or loss relating to the ineffective portion is recognised immediately in the income statement.

Amounts deferred in equity are reclassified to the income statement in the periods when the hedged item is recognised in the income statement, in the same line of the income statement as the recognised hedged item.

Hedge accounting is discontinued when the hedging instrument expires or is sold, terminated, or exercised, or no longer qualifies for hedge accounting. Any cumulative gain or loss deferred in equity at that time remains in equity and is recognised when the forecast transaction is ultimately recognised in the income statement. When a forecast transaction is no longer expected to occur, the cumulative gain or loss that was deferred in equity is recognised immediately in the income statement.

When hedging the FX risk on a forecast business combination, the Group includes the accumulated gains or losses on hedging instruments within goodwill as a 'basis adjustment'.

Derecognition

A financial asset is derecognised when the Group loses control over the contractual rights that comprise that asset. This occurs when the rights are realised, expire or are surrendered. A financial liability is derecognised when it is extinguished. Originated loans and receivables are derecognised on the date they are transferred by the Group.

Impairment of financial assets – other financial assets

At each reporting date the Group assesses credit risk by considering reasonable and supportable information that may indicate increases in credit risk. Indicators that an asset carries a higher credit risk compared to at inception or that an asset is credit-impaired would include observable data in relation to the financial health of the debtor: significant financial difficulty of the issuer or the debtor; the debtor breaching contract; it being probable that the debtor will enter bankruptcy or financial reorganisation.

Notes to the Consolidated financial statements
continued

2 Summary of significant accounting policies continued
The amount of credit risk provision is the difference between the original carrying amount and the recoverable amount, being the present value of expected cash flows receivable (discounted using the original effective interest rate). The amount of the provision is recognised in the income statement within administrative expenses.

Financial assets are written off when there is evidence indicating that the debtor is in severe financial difficulty and the Group has no realistic prospect of recovery. Receivables written off are still subject to enforcement activity and pursued by the Group.

p) Income tax
Income tax for the year comprises current and deferred tax. Income tax is recognised in the income statement except to the extent that it relates to items charged or credited directly to equity, in which case it is recognised in equity. Current tax expense is the expected tax payable on the taxable income for the year and any adjustment to tax payable in respect of previous years.

q) Provisions
Provisions are recognised when the Group has a present obligation (legal or constructive) as a result of a past event, and it is probable that an outflow of resources will be required to settle the obligation and a reliable estimate can be made of the amount. If the effect of the time value of money is material, provisions are determined by discounting the expected future cash flows at a pre-tax rate that reflects current market assessments of the time value of money and, where appropriate, the risks specific to the liability. Where discounting is used, the increase in the provision due to the passage of time is recognised as a finance cost.

r) Employee benefits
The Group operates defined benefit post-retirement benefit schemes and defined contribution pension schemes.

Defined contribution plans
A defined contribution plan is a post-employment benefit plan under which an entity pays fixed contributions into a separate entity and will have no legal or constructive obligation to pay further amounts. Obligations for contributions to defined contribution pension plans are recognised in the income statement in the periods during which services are rendered by employees.

Defined benefit plans
The liability recognised in the balance sheet for defined benefit schemes is the present value of the schemes' liabilities less the fair value of the schemes' assets. The operating and financing costs of defined benefit schemes are recognised separately in the income statement. Operating costs comprise the current service cost, any gains or losses on settlement or curtailments, and past service costs. Net interest income and expense on net defined benefit assets and liabilities is determined by applying discount rates used to measure defined benefit obligations at the beginning of the year to net defined benefit assets and liabilities at the beginning of the year and is included in finance income and costs. Remeasurements arising from defined benefit plans comprise actuarial gains and losses, the return on plan assets (excluding interest) and the effect of the asset ceiling (if any, excluding interest).

The Group recognises remeasurements immediately in other comprehensive income and all other expenses related to defined benefit plans in employee benefit expenses in profit or loss. Surpluses are recognised where, on wind-up, the Group has unconditional right to any surplus and Trustees do not have unilateral power to alter members' benefits.

Termination benefits
Termination benefits are recognised as an expense when the Group is committed demonstrably, without realistic possibility of withdrawal, to a formal detailed plan to either terminate employment before the normal retirement date, or to provide termination benefits as a result of an offer made to encourage voluntary redundancy. Termination benefits for voluntary redundancies are recognised as an expense if the Group has made an offer of voluntary redundancy, it is probable that the offer will be accepted, and the number of acceptances can be estimated reliably.

Short-term employee benefits
Short-term employee benefit obligations are measured on an undiscounted basis and are expensed as the related service is provided. A liability is recognised for the amount expected to be paid under short-term cash bonus or profit-sharing plans if the Group has a present legal or constructive obligation to pay this amount as a result of past service provided by the employee, and the obligation can be estimated reliably.

2 Summary of significant accounting policies continued

Share-based payments

Certain employees of the Group receive part of their remuneration in the form of share-based payment transactions, whereby employees render services in exchange for shares or rights over shares (equity-settled transactions). The cost of equity-settled transactions with employees is measured at fair value at the date at which they are granted. The fair value of share awards with market-related vesting conditions is determined by an external consultant and the fair value at the grant date is expensed on a straight-line basis over the vesting period based on the Group's estimate of shares that will eventually vest. The estimate of the number of awards likely to vest is reviewed at each balance sheet date up to the vesting date at which point the estimate is adjusted to reflect the actual outcome of awards which have vested. No adjustment is made to the fair value after the vesting date even if the awards are forfeited or not exercised.

s) Own shares

Own equity instruments which are re-acquired (own shares) are recognised at cost and deducted from equity. No gain or loss is recognised in the income statement on the purchase, sale, issue or cancellation of the Group's own equity instruments. Any difference between the carrying amount and the consideration paid to acquire such equity instruments is recognised within retained earnings.

t) Foreign currency translation

The functional currency for each entity in the Group is determined with reference to the currency of the primary economic environment in which it operates. Transactions in currencies other than the functional currency are initially recorded at the functional currency rate ruling at the date of the transaction. Monetary assets and liabilities denominated in foreign currencies are retranslated at the rate of exchange ruling at the balance sheet date. Exchange gains and losses on settlement of foreign currency transactions translated at the rate prevailing at the date of the transactions, or the translation of monetary assets and liabilities at period end exchange rates, are taken to the income statement. Non-monetary assets and liabilities denominated in foreign currencies that are stated at historical cost are translated to the functional currency at the foreign exchange rate ruling at the date of the transaction.

On consolidation, income statements of subsidiaries are translated into sterling at average rates of exchange. Balance sheet items are translated into sterling at period end exchange rates. Exchange differences on the retranslation are taken to equity. Exchange differences on foreign currency borrowings financing those net investments (which are designated as net investment hedges) and exchange differences on intercompany loans which will not be repaid in the foreseeable future (which are treated as quasi equity) are also recorded within equity and are reported in the statement of comprehensive income. All other exchange differences are charged or credited to the income statement in the year in which they arise. On disposal of an overseas subsidiary any cumulative exchange movements relating to that subsidiary held in the translation reserve are transferred to the consolidated income statement.

u) Impairment of non-financial assets

Property, plant and equipment and intangible assets (excluding goodwill) carrying amounts are reviewed at each reporting date to determine whether there is any indication of impairment. If any such indication exists, the recoverable amount of the asset is estimated. Recoverable amount is the higher of fair value less costs of disposal and value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate. Assets that do not generate largely independent cash flows are assessed based on the CGU to which the asset belongs. If the recoverable amount of an asset (or CGU) is estimated to be less than its carrying amount, an impairment loss is recognised in the income statement.

Notes to the Consolidated financial statements

continued

3 Segmental reporting

The Group is organised into three divisions, as shown below, according to the nature of the products and services provided. Each of these divisions represents an operating segment or an aggregation of operating segments in accordance with IFRS 8 'Operating Segments'. The chief operating decision maker is the Chief Executive Officer. The operating segments are:

- Power and Connectivity – The Power and Connectivity division designs and manufactures power application products and connectivity devices which enable the capture and wireless transfer of data. We collaborate with our customers to develop innovative solutions to optimise their electronic systems; Power and Connectivity is an aggregation of two operating segments due to similarities in products and markets served;
- Global Manufacturing Solutions – The Global Manufacturing Solutions division provides manufacturing services and engineering solutions for our product divisions and to customers that often require a lower volume and higher mix of different products. We manufacture complex integrated product assemblies for our customers and provide engineering services including designing testing solutions and value-engineering; and
- Sensors and Specialist Components – The Sensors and Specialist Components division works with customers to develop standard and customised solutions including sensors and power management devices. Our solutions improve the precision, speed and reliability of critical aspects of our customers' applications.

The key performance measure of the operating segments is adjusted operating profit. Refer to the section titled 'Reconciliation of KPIs and non IFRS measure' for a definition of adjusted profit.

Corporate costs – Resources and costs of the head office managed centrally but deployed in support of the operating units are allocated to segments based on a combination of revenue and operating profit. Resources and costs of the head office which are not related to the operating activities of the trading units are not allocated to divisions and are separately disclosed, equivalent to the segment disclosure information, so that reporting is consistent with the format that is used for review by the chief operating decision maker. This gives greater transparency of the adjusted operating profits for each segment.

Inter-segment pricing is determined on an arms length basis in a manner similar to transactions with third parties.

The Group's geographical segments are determined by the location of the Group's non-current assets and, for revenue, the location of external customers. Group financing (including finance costs and finance income) and income taxes are managed on a Group basis and are not allocated to operating segments. Goodwill is allocated to the individual cash generating units which may be smaller than the segment of which they are part.

a) Income statement information – continuing operations

						2022
£million	**Power and Connectivity**	**Global Manufacturing Solutions**	**Sensors and Specialist Components**	**Total Operating Segments**	**Corporate**	**Total**
Sales to external customers	**154.2**	**323.0**	**139.8**	**617.0**	**–**	**617.0**
Adjusted operating profit	**7.9**	**25.2**	**21.8**	**54.9**	**(7.8)**	**47.1**
Add back: adjustments made to operating profit (note 7)						**(50.5)**
Operating loss						**(3.4)**
Net finance costs						**(6.7)**
Loss before taxation						**(10.1)**

						2021
£million	Power and Connectivity	Global Manufacturing Solutions	Sensors and Specialist Components	Total Operating Segments	Corporate	Total
Sales to external customers	140.2	220.1	115.9	476.2	–	476.2
Adjusted operating profit	7.8	18.3	16.4	42.5	(7.7)	34.8
Add back: adjustments made to operating profit (note 7)						(15.5)
Operating profit						19.3
Net finance costs						(3.3)
Profit before taxation						16.0

3 Segmental reporting continued

b) Segment assets and liabilities

	Assets		Liabilities	
£million	**2022**	2021	**2022**	2021
Power and Connectivity	**231.0**	219.6	**48.1**	39.0
Global Manufacturing Solutions	**210.0**	162.8	**118.9**	84.3
Sensors and Specialist Components	**148.6**	121.4	**31.0**	30.4
Segment assets and liabilities	**589.6**	503.8	**198.0**	153.7
Pensions	**31.3**	78.4	**2.9**	3.9
Unallocated	**86.3**	89.2	**209.3**	183.8
Total assets/liabilities	**707.2**	671.4	**410.2**	341.4

Unallocated assets of £86.3 million (2021: £89.2 million) comprise deferred tax of £13.2 million (2021: £11.3 million), cash and cash equivalents of £65.0 million (2021: £68.3 million), income tax of £1.1 million (2021: £2.6 million) and assets associated with the central corporate function of £7.0 million (2021: £7.0 million).

Unallocated liabilities of £209.3 million (2021: £183.8 million) comprise borrowings (excluding leases and overdrafts) of £176.6 million (2021: £147.1 million), overdrafts of £3.7 million (2021: £1.1 million), deferred tax of £12.4 million (2021: £20.2 million), income tax of £9.6 million (2021: £7.1 million) and liabilities associated with the central corporate function of £7.0 million (2021: £8.3 million).

	Capital expenditure		Depreciation and amortisation	
£million	**2022**	2021	**2022**	2021
Power and Connectivity	**5.4**	6.1	**5.5**	5.6
Global Manufacturing Solutions	**2.4**	1.7	**4.6**	4.8
Sensors and Specialist Components	**6.5**	9.2	**6.0**	5.7
Total	**14.3**	17.0	**16.1**	16.1

c) Geographic information

Revenue by destination

The Group operates on a global basis. Revenue from external customers by geographical destination is shown below. Management monitors and reviews revenue by region rather than by individual country given the significant number of countries where customers are based.

£million	**2022**	2021
United Kingdom	**130.0**	100.2
Rest of Europe	**104.3**	78.6
North America	**236.6**	182.7
Asia	**144.7**	113.3
Rest of the World	**1.4**	1.4
	617.0	476.2

Revenue from services is less than 1% of Group revenues. All other revenue is from the sale of goods.

Notes to the Consolidated financial statements
continued

3 Segmental reporting continued

Non-current assets

The carrying amount of non-current assets, excluding deferred tax assets, derivatives and pensions, analysed by the geographical area is shown below:

£million	2022	2021
United Kingdom	**103.6**	116.3
Rest of Europe	**0.2**	0.3
North America	**162.6**	144.8
Central and South America	**5.0**	4.4
Asia	**11.8**	12.4
	283.2	278.2

d) Market information key customers

The Group operates in the following markets:

£million	2022	2021[1]
Healthcare	**172.0**	118.8
Aerospace and defence	**91.7**	85.5
Automation and electrification	**229.6**	172.2
Distribution	**123.7**	99.7
	617.0	476.2

1 Revenue by market in 2021 has been represented following a reclassification of end markets for several key customers.

The Group had one customer who contributed greater than 10% of revenues (12%) in 2022 (2021: less than 10%). Revenues from this customer are recognised within the Global Manufacturing Solutions segment.

4 Acquisitions

On 7 January 2022 the Group acquired the Power and Control business of Ferranti Technologies Ltd, from Elbit Systems UK Ltd. Total cash consideration was £8.3 million comprising £10.0 million paid in January 2022 and a final £1.7 million working capital adjustment received in April 2022.

Had the acquisition been completed on 1 January, the full year revenue, operating loss and adjusted operating profit would have been unchanged at £617.0 million, £3.4 million and £47.1 million respectively as reported. Ferranti Power and Control's contribution to the Group's 2022 revenue, operating loss and adjusted operating profit was £7.9 million, £0.8 million and £1.9 million respectively.

Ferranti Power and Control, based in Oldham, Greater Manchester, designs and manufactures mission-critical complex power and control sub-assemblies for blue chip customers in high-reliability and high-performance end markets, primarily aerospace and defence. The acquisition brings highly skilled employees who provide full-service capabilities from design, assembly, manufacturing, and testing including environmental stress screening and inspection through to service. Ferranti Power and Control adds further technology capability, and scale to our Power business with valuable long-term customer relationships and programmes with leading global aerospace, defence and industrial OEMs operating in highly regulated markets with significant barriers to entry through necessary industry accreditations and customer approvals. The goodwill recognised on acquisition represents the Group's view on the future earnings growth potential and technical capabilities of the acquired business. None of the goodwill recognised is expected to be deductible for income tax purposes. Costs in relation to this acquisition recognised in the statement of profit or loss amounted to £0.3 million.

The fair values of the identifiable assets (including goodwill) and liabilities are presented below.

The fair value of receivables of £2.1 million is not materially different to the contractual cashflows. The amount expected to not be collected is £nil.

£million	Power and Control business of Ferranti Technologies Ltd
Non-current assets	
Right-of-use asset	**0.2**
Property, plant and equipment	**0.4**
Identifiable intangible assets	**5.3**
Current assets/(liabilities)	
Inventory	**2.2**
Trade and other receivables	**2.1**
Trade and other payables	**(2.5)**
Provisions	**(3.0)**
Lease liabilities	**(0.2)**
Deferred tax liabilities	**(1.2)**
Net assets of acquiree	**3.3**
Consideration paid	
Cash consideration	**8.3**
Goodwill	**5.0**

The acquisition balance sheet above represents the final acquisition balance after substantially completing the initial measurement period of 12 months since acquisition. During the final six months of the year there were opening balance sheet adjustments as compared to the preliminary acquisition balance sheet disclosed with the half year results. These adjustments were to increase provisions by £0.4 million reduce trade and other receivables by £0.1 million, reduce deferred tax liabilities by £0.1 million and to increase goodwill by £0.4 million.

Notes to the Consolidated financial statements

continued

5 Finance costs and finance income

£million	2022	2021
Interest income	**0.1**	0.2
Net interest income on pension schemes in surplus	**2.2**	0.9
Finance income	**2.3**	1.1
Interest expense	**7.1**	3.1
Interest on lease liabilities	**0.8**	0.8
Net interest expense on pension schemes in deficit	**0.1**	0.1
Amortisation of arrangement fees	**1.0**	0.4
Finance costs	**9.0**	4.4
Net finance costs	**6.7**	3.3

Within 'Amortisation of arrangement fees' is an expense of £0.5m relating to the acceleration of capitalised loan arrangement fees following a refinancing activity described in note 20.

6 Profit for the year

Profit from continuing operations for the year is stated after charging/(crediting):

£million	2022	2021
Depreciation of property, plant and equipment	**9.6**	9.9
Depreciation of right-of-use assets	**4.3**	3.7
Amortisation of intangible assets [1]	**8.2**	7.6
Impairment of goodwill (excluded from adjusted operating profit, note 14)	**17.7**	–
Impairment of other assets (excluded from adjusted operating profit) [2]	**5.4**	–
Net foreign exchange losses/(gains) recognised within operating profit	**1.1**	(4.1)
Cost of inventories recognised as an expense	**481.5**	360.6
Research and development	**10.1**	10.2
Staff costs (see note 11)	**164.5**	135.3
Restructuring (excluded from adjusted operating profit)	**20.2**	7.8
Acquisition and disposal related costs (excluded from adjusted operating profit)	**7.2**	7.7
Remuneration of Group Auditor:		
– audit of these financial statements	**0.8**	0.6
– audit of financial statements of subsidiaries of the Company	**0.8**	0.7
– assurance and other services [3]	**0.1**	0.1
Government grants	**(0.1)**	(0.2)
Share-based payments	**4.8**	3.8
Profit on disposal of property, plant and equipment (excluded from adjusted operating profit)	**–**	(1.7)

1 Included within amortisation of intangible assets is £6.0 million (2021: £5.1 million) reported within items excluded from adjusted operating profit. The remaining charge is within administrative expenses.
2 Included within impairment of other assets of £5.4 million is £2.8 million in respect of inventories, £1.5 million in respect of plant property and equipment, £0.8 million in respect of receivables and £0.3 million in respect of capitalised product development costs.
3 Assurance and other services of £0.1 million relate to the half year review (2021: £0.1 million relating to the half year review).

7 Adjusting items

As described in note 1c, adjusted profit measures are an alternative performance measure used by the Board to monitor the operating performance of the Group.

	2022		2021	
£million	Operating profit	Tax	Operating profit	Tax
As reported	**(3.4)**	**(3.1)**	19.3	(3.2)
Restructuring and other				
Restructuring	**(6.4)**	**1.2**	(9.7)	1.2
Property disposals	**–**	**–**	1.7	(0.2)
Pension restructuring costs	**(2.0)**	**0.4**	(1.5)	0.2
Pension enhanced transfer value exercise	**(11.8)**	**2.2**	–	–
Pension increase exchange exercise	**–**	**–**	1.8	(0.2)
Other items	**–**	**–**	(0.1)	–
	(20.2)	**3.8**	(7.8)	1.0
Asset impairments				
Goodwill impairment	**(17.7)**	**–**	–	–
Other impairments	**(5.4)**	**1.0**	–	–
	(23.1)	**1.0**	–	–
Acquisition and disposal related costs				
Amortisation of intangible assets arising on business combinations	**(6.0)**	**0.3**	(5.1)	(0.3)
Torotel acquisition and integration costs	**(0.1)**	**–**	(1.5)	0.6
Covina acquisition and integration costs	**–**	**–**	(0.2)	0.1
Ferranti Power and Control acquisition and integration costs	**(1.1)**	**0.2**	(0.5)	0.2
Tax losses relating to the disposal of the transportation division	**–**	**–**	–	1.3
Other acquisition and disposal related costs	**–**	**–**	(0.4)	0.1
	(7.2)	**0.5**	(7.7)	2.0
Total items excluded from adjusted measure	**(50.5)**	**5.3**	(15.5)	3.0
Adjusted measure	**47.1**	**(8.4)**	34.8	(6.2)

Restructuring and other £20.2 million (2021: £7.8 million)

Restructuring costs charged in the period primarily relate to cost of the Group's self-help programme which began in 2020 and it is now substantially complete.

Restructuring costs of £6.4 million comprise £2.7 million relating to the restructure of the North America Resistors business, which includes pre-production costs at our new Plano facility; £2.0 million relating to closure of our site in Lutterworth, UK, £1.5 million relating to the relocation of production facilities from Covina, USA to Kansas, USA and £0.2 million relating to the relocation of production facilities from Medina, USA to Minneapolis, USA.

Pension enhanced transfer value exercise of £11.8 million represents the settlement cost of a liability management exercise undertaken during the year ahead of the buy-in completed in 2022. Pension restructuring costs of £2.0 million relate to costs associated with the enhanced transfer value exercise and scheme buy-in (see note 22).

Prior period restructuring costs of £7.8 million primarily comprised £8.0 million, net of a £1.7 million gain on property disposals, relating to restructuring the Group's footprint, £1.5 million relating to preparing the Group's pension scheme for buy-in, £0.1 million relating to other costs, and a £1.8 million gain relating to a 'Pensions Increase Exchange' exercise whereby eligible current pension members were offered the option to exchange their non statutory pension increases for an additional amount of level pension.

Notes to the Consolidated financial statements
continued

7 Adjusting items continued

Asset impairments £23.1 million (2021: £nil)

During the year an impairment of £5.4 million associated with Virolens related assets (£2.8 million of inventory, £1.5 million of plant and equipment, £0.8 million of other debtors and £0.3 million of product development costs) was recognised, reducing the carrying value to £nil.

Following a detailed impairment review of goodwill completed during the year an impairment charge of £17.7 million (2021: £nil) was recognised to reduce the carrying value of the IoT Solutions CGU to the recoverable amount.

The impairments of both Virolens related assets and goodwill were as a result of revised forecasts in the context of a weaker macro-economic environment and the impact of the evolution of the COVID pandemic on the potential demand for COVID testing. The impairment charges were recognised within the Power and Connectivity segment.

Acquisition and disposal related costs £7.2 million (2021: £7.7 million)

Acquisition and disposal related costs charged in the year comprise £6.0 million (2021: £5.1 million) of amortisation of acquired intangible assets; £0.3 million (2021: £0.5 million) of acquisition costs and £0.8 million of integration costs relating to the acquisition of the Power and Control business of Ferranti Technologies Ltd based in Oldham, UK and £0.1 million of integration costs of Torotel, Inc. (2021: £1.5 million). The prior period also included £0.4 million of costs of terminated acquisitions and £0.2 million of integration costs of the aerospace and defence power supply business of Excelitas Technologies Corp based in Covina, California.

8 Taxation

a) Analysis of the tax charge for the year

£million	2022	2021
Current tax		
Current income tax charge	**9.1**	5.1
Adjustments in respect of current income tax of previous year	**(0.5)**	(0.9)
Total current tax charge	**8.6**	4.2
Deferred tax		
Relating to origination and reversal of temporary differences	**(3.4)**	(0.4)
Change in tax rate	**(1.2)**	0.8
Adjustments in respect of deferred tax of previous years	**(0.9)**	(1.4)
Total deferred tax credit	**(5.5)**	(1.0)
Total tax charge in the income statement	**3.1**	3.2

The applicable tax rate for the period is based on the UK standard rate of corporation tax of 19% (2021: 19%). Overseas taxation is calculated at the rates prevailing in the respective jurisdictions. The Group's effective tax rate for the year was -30.7% (the adjusted tax rate was 20.8%, see section 'Reconciliation of KPIs and non IFRS measures').

The enacted UK tax rate applicable since 1 April 2017 to current year profits is 19%. An increase in UK rate has been enacted to occur from 1 April 2023 to 25%. In 2022 the impact on deferred tax as a result of this change was £1.2 million recognised in the income statement.

Included within the total tax charge above is a £5.3 million credit relating to items reported outside adjusted profit (2021: £3.0 million credit).

b) Reconciliation of the total tax charge for the year

£million	2022	2021
(Loss)/profit before tax from continuing operations	**(10.1)**	16.0
(Loss)/profit before tax multiplied by the standard rate of corporation tax in the UK of 19% (2021: 19%)	**(1.9)**	3.0
Effects of:		
Impact on deferred tax arising from changes in tax rates	**(1.2)**	0.8
Overseas tax rate differences	**0.8**	0.7
Items not deductible for tax purposes or income not taxable	**8.8**	2.2
Adjustment to current tax in respect of prior periods	**(0.5)**	(0.9)
Current year tax losses and other items not recognised	**(2.0)**	(1.2)
Adjustments in respect of deferred tax of previous years	**(0.9)**	(1.4)
Total tax charge reported in the income statement	**3.1**	3.2

Items not deductible for tax purposes or income not taxable includes an impairment of IoT Solutions CGU not deductible for tax purposes of £9.6 million.

The adjustment to current tax in respect of prior periods largely relates to the release of tax provisions in respect of concluded disputes and uncertainties.

Notes to the Consolidated financial statements

continued

8 Taxation continued

The overall aim of the Group's tax strategy is to support business operations by ensuring a sustainable tax rate, mitigating tax risks in a timely and cost-efficient way and complying with tax legislation in the jurisdictions in which the Group operates. It is however inevitable that the Group will be subject to routine tax audits or is in ongoing disputes with tax authorities in the multiple jurisdictions it operates within. This is much more likely to arise in situations involving more than one tax jurisdiction. Differences in interpretation of legislation, of global standards (e.g. OECD guidance) and of commercial transactions undertaken by the group between different tax authorities are one of the main causes of tax exposures and tax risks for the group.

In order to manage the risk to the Group an assessment is made of such tax exposures and provisions are created using the best estimate of the most likely amount to be incurred within a range of possible outcomes. The resolution of the Group's tax exposures can take a considerable period of time to conclude and, in some circumstances, it can be difficult to predict the final outcome.

The current tax liability at 31 December 2022 includes tax provisions of £8.4 million (2021: £6.9 million). The Group believes the range of reasonable possible outcomes in respect of these exposures is tax liabilities of up to £11.1 million (2021: £9.0 million).

c) Deferred tax

The Group completed a five year forward looking strategic plan covering the periods from 2023 to 2027 in which it was forecast that all divisions would show increasing profitability. Therefore, a deferred tax asset is recognised on the basis that it is considered probable that net taxable profits will be recognised in the future.

The amounts of deferred taxation assets/(liabilities) provided in the financial statements are as follows:

£million	As at 1 January 2022	Continuing operations	Recognised on acquisition	Recognised in equity/OCI	Net exchange translation	As at 31 December 2022
Intangible assets	(11.4)	0.9	(1.2)	–	(0.7)	(12.4)
Property, plant and equipment	1.5	(0.6)	–	–	(0.1)	0.8
Deferred development costs	(0.5)	0.2	–	–	(0.2)	(0.5)
Retirement benefit obligations	(18.9)	1.8	–	6.5	0.2	(10.4)
Inventories	1.1	(0.5)	–	–	0.3	0.9
Tax losses	9.3	0.9	–	–	0.5	10.7
Unremitted overseas earnings	(2.3)	0.5	–	–	–	(1.8)
Share-based payments	1.9	(0.2)	–	(1.0)	–	0.7
Cash flow hedges	0.5	–	–	(0.4)	–	0.1
Short-term temporary differences	9.9	2.5	–	(1.6)	1.9	12.7
Net deferred tax asset/(liability)	(8.9)	5.5	(1.2)	3.5	1.9	0.8
Deferred tax assets	11.3					13.2
Deferred tax liabilities	(20.2)					(12.4)
Net deferred tax asset/(liability)	(8.9)					0.8

8 Taxation continued

£million	At 31 December 2020	Continuing operations	Recognised on acquisition	Recognised in equity/OCI	Net exchange translation	As at 31 December 2021
Intangible assets	(10.6)	(0.8)	–	–	–	(11.4)
Property, plant and equipment	1.7	(0.2)	–	–	–	1.5
Deferred development costs	(0.5)	–	–	–	–	(0.5)
Retirement benefit obligations	(5.7)	(1.8)	–	(11.4)	–	(18.9)
Inventories	1.0	0.1	–	–	–	1.1
Tax losses	7.5	1.9	(0.2)	–	0.1	9.3
Unremitted overseas earnings	(2.0)	(0.3)	–	–	–	(2.3)
Share-based payments	0.7	0.7	–	0.5	–	1.9
Cash flow hedges	–	–	–	0.5	–	0.5
Short-term temporary differences	8.4	1.3	(0.1)	–	0.3	9.9
Net deferred tax asset	0.5	0.9	(0.3)	(10.4)	0.4	(8.9)
Deferred tax assets	8.9					11.3
Deferred tax liabilities	(8.6)					(20.2)
Net deferred tax asset	0.5					(8.9)

Deferred tax	Description
Intangible assets	Deferred tax relating to intangible assets created on acquisitions by the Group. This excludes any internally generated intangibles relating to product development costs.
Property, plant and equipment	Deferred tax relating to temporary differences in the value of property, plant and equipment between Group accounting and local accounting and/or tax returns
Deferred development costs	Deferred tax relating to deferred development costs
Retirement benefit obligations	Deferred tax relating to retirement benefit obligations
Inventories	Deferred tax relating to temporary differences between the local book value and Group consolidated value of inventory
Tax losses	Deferred tax relating to recognised tax losses carried forwards for offset against future profits of the Group
Unremitted overseas earnings	Deferred tax relating to the repatriation of subsidiary profits to the Group's ultimate holding company
Share based payments	Deferred tax relating to share based payment
Cash flow hedges	Deferred tax relating to derivatives designated as cash flow hedges
Short term temporary differences	Deferred tax relating to temporary differences between Group accounts and local accounts or tax return arising where a tax deduction is received on payment of an amount either between Group companies or to external unconnected third parties rather than on an accounting basis. This includes product development costs.

Notes to the Consolidated financial statements
continued

8 Taxation continued
At 31 December 2022, the gross amount and expiry date of losses not recognised for deferred tax purposes but available for carry forward are as follows:

£million	Expiring within 5 years	Expiring within 6 to 10 years	Unlimited	Total
Losses for which no deferred tax asset has been recognised	**0.6**	**–**	**71.6**	**72.2**

Deferred tax is not recognised on these losses because profit projections do not support the utilisation of these losses.

Tax losses of £58.2 million are subject to substantial limitations in the type of profits they can be offset against and no such capital disposals are currently anticipated.

At 31 December 2021, the gross amount and expiry date of losses available for carry forward were as follows:

£million	Expiring within 5 years	Expiring within 6 to 10 years	Unlimited	Total
Losses for which no deferred tax asset has been recognised	0.4	–	71.1	71.5

At 31 December 2022, the Group had no other items for which no deferred tax assets have been recognised (2021: £nil).

9 Dividends

	2022 pence per share	2022 £million	2021 pence per share	2021 £million
Final dividend paid for prior year	**3.80**	**6.7**	4.70	8.2
Interim dividend declared for current year	**2.00**	**3.5**	1.80	3.2

The Directors recommend a final dividend of 4.3 pence per share. The Group has a progressive dividend policy. The final dividend will be paid on 26 May 2023 to shareholders on the register on 28 April 2023.

10 Earnings per share

Basic earnings/(loss) per share is calculated by dividing the profit/(loss) attributable to owners of the Company by the weighted average number of shares in issue during the year.

Pence	2022	2021
(Loss)/Earnings per share		
Basic	**(7.5)**	7.3
Diluted	**(7.5)**	7.2

As the Group made a statutory loss, diluted statutory EPS has been calculated using the basic weighted average number of shares.

The numbers used in calculating adjusted, basic and diluted (loss)/earnings per share are shown below. Adjusted earnings per share is based on the adjusted profit after interest and tax.

Adjusted earnings per share:

£million (unless otherwise stated)	2022	2021
Group		
(Loss)/profit for the year attributable to owners of the Company	**(13.2)**	12.8
Restructuring and other	**20.2**	7.8
Asset impairments	**23.1**	–
Acquisition and disposal related costs	**7.2**	7.7
Tax effect of above items (see note 7)	**(5.3)**	(3.0)
Adjusted earnings	**32.0**	25.3
Adjusted earnings per share (pence)	**18.2**	14.5
Adjusted diluted earnings per share (pence)	**18.0**	14.2

The weighted average number of shares in issue is as follows (new shares issued in the year described in note 23):

million	2022	2021
Basic	**175.8**	174.8
Adjustment for share awards	**2.0**	3.3
Diluted	**177.8**	178.1

Notes to the Consolidated financial statements
continued

11 Employee information
The average number of full time equivalent employees (including Directors) during the year from continuing operations was:

Number	2022	2021
By function		
Production	**4,352**	4,075
Sales and distribution	**296**	270
Administration	**324**	287
	4,972	4,632
By division		
Power and Connectivity	**1,650**	1,597
Global Manufacturing Solutions	**1,567**	1,456
Sensors and Specialist Components	**1,755**	1,579
Total	**4,972**	4,632

Aggregate emoluments, including those of Directors, for the year were:

£million	2022	2021
Wages and salaries	**124.8**	103.1
Social security charges	**30.5**	24.0
Employers' pension costs	**3.2**	3.0
Defined benefit pension costs	**1.2**	1.4
Share based payments expense	**4.8**	3.8
	164.5	135.3

Remuneration in respect of the Directors was as follows:

£million	2022	2021
Emoluments	**2.1**	2.3

The remuneration of key management during the year was as follows:

£million	2022	2021
Short-term benefits	**3.5**	4.0
Pension and other post-employment benefit expense	**0.2**	0.1
Share based payments	**2.2**	1.8
	5.9	5.9

The Schedule 5 requirements of the Accounting Regulations for directors' remuneration are included within the Directors' remuneration report on pages 122-135.

12 Right-of-use assets

£million	Land and buildings	Other	Right-of-use assets
Cost			
At 1 January 2021	34.9	1.8	36.7
Additions	10.5	0.3	10.8
Disposals	(4.4)	(0.1)	(4.5)
Net exchange adjustment	0.5	–	0.5
At 1 January 2022	**41.5**	**2.0**	**43.5**
Additions	**2.3**	**–**	**2.3**
Disposals	**(0.5)**	**(0.1)**	**(0.6)**
Business acquired	**0.2**	**–**	**0.2**
Net exchange adjustment	**2.7**	**(0.4)**	**2.3**
At 31 December 2022	**46.2**	**1.5**	**47.7**
Depreciation			
At 1 January 2021	23.3	1.0	24.3
Depreciation charge	3.4	0.3	3.7
Impairment	0.1	–	0.1
Disposals	(4.4)	(0.1)	(4.5)
Net exchange adjustment	0.2	0.1	0.3
At 1 January 2022	**22.6**	**1.3**	**23.9**
Depreciation charge	**4.0**	**0.3**	**4.3**
Impairment	**(0.2)**	**–**	**(0.2)**
Disposals	**(0.5)**	**(0.1)**	**(0.6)**
Net exchange adjustment	**0.9**	**(0.2)**	**0.7**
At 31 December 2022	**26.8**	**1.3**	**28.1**
Net book value			
At 31 December 2022	**19.4**	**0.2**	**19.6**
At 31 December 2021	18.9	0.7	19.6

The reversal of impairment during the year of £0.2m relates to the reversal of a previously impaired lease as part of a previous restructuring programme; the credit has been recognised in the income statement under adjusting items as a restructuring cost.

Additions during the year relate to a new site in Manchester, UK (£1.8 million) and other locations throughout the Group (£0.5 million).

The Group only leases land and buildings for use in trading activities. Lease liabilities are disclosed in note 20. Contractual cashflows for these leases are disclosed in note 21e.

Notes to the Consolidated financial statements

continued

13 Property, plant and equipment

£million	Land and buildings	Plant and equipment	Total
Cost			
At 1 January 2021	29.7	177.0	206.7
Additions	7.9	6.7	14.6
Disposals	(13.5)	(13.2)	(26.7)
Net exchange adjustment	0.1	1.3	1.4
At 1 January 2022	**24.2**	**171.8**	**196.0**
Additions	**1.8**	**9.6**	**11.4**
Disposals	**(0.3)**	**(21.5)**	**(21.8)**
Business acquired	**–**	**0.4**	**0.4**
Net exchange adjustment	**1.9**	**11.5**	**13.4**
At 31 December 2022	**27.6**	**171.8**	**199.4**
Depreciation and impairment			
At 1 January 2021	10.8	142.9	153.7
Depreciation charge	1.1	8.8	9.9
Impairment	–	(0.1)	(0.1)
Disposals	(5.7)	(13.2)	(18.9)
Net exchange adjustment	0.1	0.9	1.0
At 1 January 2022	**6.3**	**139.3**	**145.6**
Depreciation charge	**1.2**	**8.4**	**9.6**
Impairment	**–**	**1.5**	**1.5**
Disposals	**(0.5)**	**(21.5)**	**(22.0)**
Net exchange adjustment	**0.3**	**9.6**	**9.9**
At 31 December 2022	**7.3**	**137.3**	**144.6**
Net book value			
At 31 December 2022	**20.3**	**34.5**	**54.8**
At 31 December 2021	17.9	32.5	50.4

Included within land and buildings is one investment property with a carrying value of £nil (2021: £nil) and a fair value of £0.7 million (2021: £0.7 million). Rental income of £0.2 million (2021: £0.2 million) was recognised within other income in relation to this property.

The impairment charge for the year of £1.5 million (2021: £nil) relates to assets in the IoT Solutions CGU and is reported within items excluded from adjusted operating profit as described in note 7. All impaired assets have been impaired down to a recoverable amount of £nil.

14 Goodwill

£million	
Cost	
At 1 January 2021	155.7
Net exchange adjustment	0.8
At 31 December 2021	156.5
Additions	5.0
Net exchange adjustment	11.3
At 31 December 2022	**172.8**
Impairment	
At 1 January 2021 and at 31 December 2021	–
Impairment	17.7
At 31 December 2022	**17.7**
Net book value	
At 31 December 2022	**155.1**
At 31 December 2021	156.5

The £5.0 million addition in goodwill in 2022 arose upon the acquisition of Power and Control business of Ferranti Technologies Ltd and is considered part of the Power Solutions CGU.

The goodwill generated as a result of acquisitions represents the premium paid in excess of the fair value of all net assets, including intangible assets, identified at the point of acquisition. The future improvements applied to the acquired businesses, achieved through a combination of revised strategic direction, operational improvements and investment are expected to result in improved profitability of the acquired businesses during the period of ownership. The combined value achieved from these improvements is expected to be in excess of the value of goodwill acquired.

Goodwill net of impairment is attributed to the following CGUs in the divisions shown below:

£million	**2022**	2021
Power and Connectivity:		
Power Solutions	**65.6**	57.0
IoT Solutions	**9.9**	27.6
Global Manufacturing Solutions:		
Global Manufacturing Solutions	**19.5**	18.4
Sensors and Specialist Components:		
Resistors	**34.2**	30.5
Sensors	**25.9**	23.0
	155.1	156.5

Notes to the Consolidated financial statements

continued

14 Goodwill continued

Impairment Testing

The Group tests goodwill impairment annually or 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 are those regarding the discount rates, growth rates and operating cash flow projections over a forecast period. The growth rate assumed after this forecast period is based on long-term GDP projections capped at long term growth rates (which are approximated as long-term inflation rates) of the primary market for the CGU, in perpetuity. Long-term growth rates are based on long-term forecasts for growth in the geography in which the group of CGUs operates. Long-term growth rates are determined using long-term growth rate forecasts that take into account the international presence and the markets in which each business operates.

Management estimate discount rates using pre-tax rates that reflect current market assessments of the Group's time value of money and the risks specific to the CGU being measured.

In determining the cost of equity, the Capital Asset Pricing Model ("CAPM") has been used. Under CAPM, the cost of equity is determined by adding a risk premium, based on an industry adjustment, to the expected return of the equity market above the risk-free return. The relative risk adjustment reflects the risk inherent in each group of CGUs relative to all other sectors and geographies on average.

The cost of debt is determined using a risk-free rate based on the cost of government bonds, and an interest rate premium equivalent to a corporate bond with a similar credit rating to TT Electronics Plc.

The growth rates assume that demand for our products remains broadly in line with the underlying economic environment in the long-term future. Taking into account our expectation of future market conditions, we believe that the evolution of selling prices and cost measures put into place will lead to a sustained improvement in profitability.

Management has detailed plans in place reflecting the latest budget and strategic growth plan. The pre-tax discount rates and periods of management approved forecasts are shown below. The discount rates used in the annual impairment test for the year ended 31 December 2022 are shown below:

	2022			2021		
	Pre-tax discount rate	**Long term growth rate**	**Period of forecast (years)**	Pre-tax discount rate	Long term growth rate	Period of forecast (years)
Power Solutions	**13.4%**	**1.7%**	**5**	12.2%	1.7%	5
IoT Solutions	**14.3%**	**1.6%**	**5**	12.2%	1.6%	5
Global Manufacturing Solutions	**13.8%**	**1.9%**	**5**	13.2%	1.8%	5
Resistors	**13.5%**	**1.6%**	**5**	13.3%	1.6%	5
Sensors	**13.2%**	**1.7%**	**5**	13.8%	1.7%	5

The date of the annual impairment test was 30 September 2022 to align with internal forecasting and review processes.

Based on the impairment testing performed, an impairment charge of £17.7 million was recorded in 2022 (2021: £nil) in respect of the IoT Solutions CGU as a result of revised forecasts for the business in the context of a weaker macro-economic environment and the impact of the evolution of the COVID pandemic on the potential demand for COVID testing, coupled with an increase in discount rates. The impairment charge is shown as an adjusting item (see note 7) in conjunction with related assets in the IoT Solutions CGU. No impairment losses have been recognised in the current or prior year in respect of the other CGUs as recoverable amounts exceed carrying value of assets in respect of those businesses.

Sensitivity analysis has been provided in respect of reasonably possible changes to key assumptions where applicable.

Key assumptions in the value in use test are the projected performance of the CGUs based on sales growth rates, cash flow forecasts and discount rate. Forecast sales growth rates are based on past experience adjusted for the strategic direction and near-term investment priorities within each CGU. The key assumptions include externally obtained growth rates in the key markets disclosed in note 3 and customer demand for product lines. Cash flow forecasts are determined based on historic experience of operating margins, adjusted for the impact of changes in product mix and cost-saving initiatives, including the impact of our restructuring projects and cash conversion based on historical experience.

14 Goodwill continued

The recoverable amounts associated with the goodwill balances which are based on these performance projections and current forecast information do not indicate that any goodwill balance, other than that for IoT Solutions, is impaired. If a company's actual performance does not meet these projections this could lead to an impairment of the goodwill in future periods.

Sensitivity Analysis

Sensitivity analysis has been performed on the key assumptions; operating cash flow projections, revenue growth rates and discount rate. Cash flows can be impacted by changes to sales prices, direct costs and replacement capital expenditure; individually they are not significant assumptions. Forecast sales growth rates are based on past experience adjusted for the strategic direction and near-term investment priorities. Cash flow forecasts are determined based on historic experience of operating margins, adjusted for the impact of changes in product mix and cost-saving initiatives, including the impact of our committed restructuring projects and cash conversion based on historical experience.

Other than in the case of the IoT Solutions CGU where an impairment has been recognised, the Directors have not identified reasonably possible changes in significant assumptions that would cause the carrying value of recognised goodwill to exceed its recoverable amount.

As discussed in note 1, determination of the recoverable amount involves management judgement on highly uncertain matters, particularly with regard to future growth prospects in the markets in which the CGUs operate, the level of competition and discount factors. Revenue forecasts for the IoT Solutions CGU have reduced and a higher discount factor has been applied in 2022. As a result the recoverable amount of the IoT Solutions CGU was £43.8 million resulting in an impairment to goodwill of £17.7 million.

In accordance with IAS 36 'Impairment of Assets' sensitivity analysis has been carried out as illustrated below:

- a further 1 per cent increase in the discount rate would result in a reduction in value in use (and additional impairment) of £3.3 million.
- a further 1 per cent decrease in the long-term growth rate (driven by delayed product launches) would result in a reduction in value in use (and additional impairment) of £2.2 million.
- a further 5 per cent reduction in the terminal value of operating profit (driven by lower than anticipated margin) would result in a reduction in value in use (and additional impairment) of £1.4 million.

Notes to the Consolidated financial statements

continued

15 Other intangible assets

£million	Product development costs	Patents, licences and other	Customer relationships	Total
Cost				
At 1 January 2021	16.7	35.4	63.9	116.0
Additions	1.9	0.5	–	2.4
Disposals	(0.1)	(0.1)	(0.5)	(0.7)
Net exchange adjustment	0.1	0.1	0.2	0.4
At 1 January 2022	**18.6**	**35.9**	**63.6**	**118.1**
Additions	**2.3**	**0.6**	**–**	**2.9**
Disposals	**(0.1)**	**(0.3)**	**–**	**(0.4)**
Businesses acquired	**–**	**2.3**	**3.0**	**5.3**
Net exchange adjustment	**1.4**	**0.9**	**2.6**	**4.9**
At 31 December 2022	**22.2**	**39.4**	**69.2**	**130.8**
Amortisation				
At 1 January 2021	9.7	31.0	18.2	58.9
Charge for the year	0.9	2.5	4.2	7.6
Impairment	–	–	0.2	0.2
Disposals	(0.1)	(0.1)	(0.5)	(0.7)
Net exchange adjustment	0.1	0.2	0.1	0.4
At 1 January 2022	**10.6**	**33.6**	**22.2**	**66.4**
Charge for the year	**1.2**	**2.8**	**4.2**	**8.2**
Impairment	**0.3**	**–**	**–**	**0.3**
Disposals	**(0.1)**	**(0.3)**	**–**	**(0.4)**
Net exchange adjustment	**1.1**	**0.9**	**0.6**	**2.6**
At 31 December 2022	**13.1**	**37.0**	**27.0**	**77.1**
Net book value				
At 31 December 2022	**9.1**	**2.4**	**42.2**	**53.7**
At 31 December 2021	8.0	2.3	41.4	51.7

Included within the impairment charge for the year is £0.3 million (2021: £nil) reported within the Power and Connectivity segment and within items excluded from adjusted operating profit as described in note 7. All impaired assets have been impaired down to a recoverable amount of £nil.

Included within the amortisation charge for the year is £6.0 million (2021: £5.1 million) included within items excluded from adjusted profit as the charge relates to intangibles acquired upon acquisition of businesses.

Customer relationships are intangible assets recognised upon acquisition which are amortised over long periods of time and are summarised below. The amortisation charge is excluded from adjusted operating profit as described in note 7. The composition of customer relationships and the years remaining until they are fully amortised is shown below.

15 Other intangible assets continued

Customer relationships held on the balance sheet are summarised below.

£million	Net book value	Years remaining
Stadium Group	13.4	10.3
Aero Stanrew	8.9	8.0
Torotel	7.9	19.9
Precision Inc.	5.8	9.7
Covina	3.5	11.2
Ferranti Power and Control	2.7	12.0
At 31 December 2022	**42.2**	

£million	Net book value	Years remaining
Stadium Group	14.5	11.3
Aero Stanrew	10.0	9.0
Torotel	7.3	20.9
Precision Inc.	5.6	10.7
Covina	3.3	12.2
Roxspur	0.3	0.6
Others	0.4	–
At 31 December 2021	41.4	

16 Inventories

£million	2022	2021
Raw materials	**130.9**	92.6
Work in progress	**34.8**	26.3
Finished goods	**23.5**	22.9
	189.2	141.8

Inventories are stated after a provision for obsolescence of £25.8 million (2021: £18.3 million). The directors do not consider there to be a material difference between net book value and replacement cost for inventories. An impairment of £2.8 million was recognised in items excluded from adjusted operating profit as described in note 7.

17 Trade and other receivables

£million	2022	2021
Trade receivables	**101.3**	72.9
Prepayments	**8.1**	6.3
VAT and other taxes receivable	**3.4**	2.9
Amounts owed by non-controlling interests	**–**	2.0
Accrued income	**1.4**	–
Contract assets	**1.7**	–
Other receivables	**4.4**	2.1
	120.3	86.2

Loss allowance for expected credit losses in respect of trade receivables and amounts owed by non-controlling interests are shown in note 21d(ii) and note 21d(iii) respectively.

Notes to the Consolidated financial statements
continued

18 Trade and other payables

£million	2022	2021
Current liabilities		
Trade payables	**97.0**	77.7
Taxation and social security	**4.1**	4.0
Accruals	**27.9**	26.4
Deferred income	**31.3**	16.1
Goods received not invoiced	**10.1**	7.6
Other payables	**2.8**	2.1
	173.2	133.9

£million	2022	2021
Non-current liabilities		
Accruals	**0.1**	0.2

Deferred income primarily represents pre-funded inventory which is expected to be converted into finished goods and sold within 12 months. All the brought forward balance carried over from 2021 was converted into finished goods and sold to the end customer within the year.

19 Provisions

£million	Property	Reorganisation	Legal, warranty and other	Total
At 1 January 2021	0.9	4.1	2.5	7.5
Utilised	–	(3.2)	(0.3)	(3.5)
Released	(0.1)	(0.2)	(1.4)	(1.7)
Transfer	–	–	(0.2)	(0.2)
Arising during the year	–	0.8	0.6	1.4
Exchange differences	–	(0.1)	(0.1)	(0.2)
At 1 January 2022	**0.8**	**1.4**	**1.1**	**3.3**
Utilised	**–**	**(0.3)**	**(1.7)**	**(2.0)**
Released	**(0.1)**	**–**	**(0.2)**	**(0.3)**
Transfer	**–**	**(0.7)**	**0.5**	**(0.2)**
Arising during the year	**–**	**–**	**0.3**	**0.3**
Businesses acquired	**–**	**–**	**3.0**	**3.0**
Exchange differences	**–**	**–**	**0.1**	**0.1**
At 31 December 2022	**0.7**	**0.4**	**3.1**	**4.2**

£million	2022	2021
Non-current	**0.7**	0.8
Current	**3.5**	2.5
	4.2	3.3

19 Provisions continued

Property

Property provisions of £0.7 million (2021: £0.8 million) relate to dilapidation provisions.

Reorganisation

Reorganisation provisions relate to committed costs in respect of restructuring programmes, as described in note 7, usually resulting in cash spend within one year.

The reorganisation provision of £0.4 million (2021: £1.4 million) includes £0.3 million in respect of self-help programmes which commenced in 2020 to consolidate our footprint. £0.1 million of the utilisation in year relates to severance provisions following the closure of our facilities in Lutterworth, UK and Covina, US.

A further £0.1 million (2021: £0.3 million) relates to the restructuring programme undertaken in association with the closure of the Boone, North Carolina operations. Work has been performed to rectify soil contamination that occurred as a result of past production practices, with £0.2 million utilised during the period. The provision is based upon the Group's estimate of the scope of further work which contains inherent uncertainty.

Legal, warranty and other

Legal, warranty and other claims represent the best estimate for the cost of settling outstanding product and other claims, and warranty provisions created on the disposal of businesses.

The provisions with acquired business of £3.0 million relate to provision on the opening balance sheet of the newly acquired Ferranti Power and Control business to complete onerous contracts. Of the £1.7 million utilisation in year £1.1 million relates to costs incurred for the completion of acquired onerous contracts in the Ferranti Power and Control business and £0.6 million relates to other provisions. The £0.2 million provision release during the year primarily relates to lower than anticipated costs for integration of our 2021 acquisition of Torotel. The £0.3 million costs charged to the income statement in year relate to £0.2 million local warranty provisions (recognised within admin expenses in the income statement) and £0.1 million for provisions in relation to the integration of the acquired Ferranti Power and Control business (recognised in acquisition and disposal costs which are excluded from adjusted operating profit).

The Group has, on occasion, been required to enforce commercial contracts and to defend itself against proceedings brought by other parties. Provisions are made for the expected costs associated with such matters, based on past experience of similar items and other known factors, taking into account professional advice received, and represent management's best estimate of the likely outcome. The timing of utilisation of these provisions is frequently uncertain, reflecting the complexity of issues and the outcome of various court proceedings and negotiations. Contractual and other provisions represent the Directors' best estimate of the cost of settling future obligations although there is a higher degree of judgement involved. Unless specific evidence exists to the contrary, these provisions are shown as current.

No provision is made for proceedings which have been or might be brought by other parties against Group companies unless management, taking into account professional advice received, assesses that it is more likely than not that such proceedings may be successful. Contingent liabilities associated with such proceedings have been identified, but the Directors are of the opinion that any associated claims that might be brought can be resisted successfully, and therefore the possibility of any material outflow in settlement in excess of amounts provided is assessed as remote.

The timing of the utilisation of these amounts is uncertain as they are subject to commercial negotiation and legal process in different jurisdictions. Where possible the Group has purchased insurance cover to protect itself from these exposures.

Notes to the Consolidated financial statements
continued

20 Borrowings and lease obligations

£million	Maturity	Currency of denomination	Current	Non-current	Total
At 31 December 2022					
£147.4 million multi-currency revolving credit facility	**2026**	**GBP**		**72.0**	**72.0**
	2026	**USD**		**31.6**	**31.6**
Unsecured loan note	**2028**	**GBP**		**37.5**	**37.5**
Unsecured loan note	**2031**	**GBP**		**37.5**	**37.5**
Overdrafts			**3.7**	**–**	**3.7**
Lease liabilities			**4.4**	**18.7**	**23.1**
Loan arrangement fee			**–**	**(2.0)**	**(2.0)**
Total			**8.1**	**195.3**	**203.4**
At 31 December 2021					
£180 million multi-currency revolving credit facility	2023	GBP		52.0	52.0
	2023	USD		21.4	21.4
Unsecured loan note	2028	GBP		37.5	37.5
Unsecured loan note	2031	GBP		37.5	37.5
Overdrafts			1.1	–	1.1
Lease liabilities			4.1	18.5	22.6
Loan arrangement fee			–	(1.3)	(1.3)
Total			5.2	165.6	170.8

The Group's primary source of finance is the £147.4 million committed revolving credit facility (RCF), and an uncommitted accordion facility of £32.6 million, which was signed in June 2022 to replace the previously existing RCF. The Group's RCF is payable on a floating rate basis above GBP SONIA, USD SOFR or EURIBOR depending on the currency of the loan and will mature in June 2026 with a one year extension option which expires in May 2023. As at 31 December 2022, £103.6 million (31 December 2021: £73.4 million) of the facility was drawn down. Arrangement fees with amortised cost of £2.0 million (2021: £1.3 million) have been netted off against these borrowings.

The interest margin payable on the facility is based on the Group's compliance with financial covenants, net debt/adjusted EBITDA (bank covenant) and is payable on a floating basis above GBP SONIA, or USD SOFR depending on the currency of denomination of the loan. On 4 January 2022 the Group transitioned away from GBP LIBOR to be replaced by GBP SONIA. There was no impact of this transition.

In December 2021 the Group issued £75.0 million of unsecured loan notes with £37.5 million maturing in seven years and £37.5 million maturing in 10 years respectively to a collection of three counterparties. The average interest rate on the loan notes is 2.9 per cent.

Undrawn facilities
At 31 December 2022, the total lease liabilities and borrowing facilities available to the Group net of £2.0 million of loan arrangement fees (2021: £1.3 million) amounted to £288.3 million (2021: £318.9 million). At 31 December 2022, the Group had available £47.4 million (2021: £110.1 million) of undrawn committed borrowing facilities (comprising the main facility £43.8 million (2020: £106.6 million) and China £3.6 million (2021: £3.5 million) and £41.2 million (2021: £38.0 million) of undrawn uncommitted borrowing facilities, representing overdraft lines and the accordion facility.

In February 2023 £15.0 million of accordion was converted from uncommitted into committed facility extending the total committed facilities available (including lease liabilities) to £262.1 million.

21 Financial risk management

The main risks arising from the Group's financial instruments are foreign exchange risk, interest rate risk, credit risk and liquidity risk. These risks arise from exposures that occur in the normal course of business and are managed by the Group's Treasury department in close co-operation with the Group's business divisions and operating companies, under the oversight of a Treasury Committee which is chaired by the Chief Financial Officer. The responsibilities of the Group's Treasury department include the monitoring of financial risks, management of cash resources, debt and capital structure management, approval of counterparties and relevant transaction limits, and oversight of all significant treasury activities undertaken by the Group. The Group Treasury department operates as a service centre to the business divisions of the Group and not as a profit centre.

A Group Treasury policy has been approved by the Board of Directors and is periodically updated to reflect developments in the financial markets and the financial exposure facing the Group.

The Group's principal financial instruments comprise borrowings, cash and cash equivalents and derivatives used for risk management purposes. The Group's borrowings, surplus liquidity and derivative financial instruments are monitored and managed centrally by the Group's Treasury department.

The Group's accounting policies with regard to financial instruments are detailed in note 2o.

a) Derivatives, other financial instruments and risk management

The Group uses derivative financial instruments to manage certain exposures to fluctuations in exchange rates and interest rates. The Group does not hold any speculative financial instruments.

The Group is exposed to transactional and translation foreign exchange risk. Transactional foreign exchange risk arises from sales or purchases by a Group company in a currency other than that company's functional currency. Translational foreign exchange risk arises on the translation of profits earned in overseas currencies into GBP and the translation of net assets denominated in overseas currencies into GBP, the Group's functional currency.

To mitigate transactional foreign exchange risk, wherever possible, Group companies enter into transactions in their functional currencies with customers and suppliers. When this is not possible, hedging strategies are undertaken through the use of forward currency contracts for up to two years ahead. The forward currency contracts have been designated as cash flow hedges and the effective portion of the mark to market valuation of these derivatives at 31 December 2022 is taken to the hedging reserve within equity. Currency basis spread that is not designated is taken to the income statement.

The Group have designated £31.6 million ($38.0 million) (2021: £21.4 million ($29.0 million)) of loans in a net investment hedge of USD net assets. No ineffectiveness was recorded (2021: £nil) and a loss of £3.4 million (2021: £0.2 million loss) was taken to the translation reserve. The amount accumulated in this reserve in respect of gains/losses arising on hedging instruments designated in net investment hedges up to 31 December 2022 was an accumulated loss of £3.7 million (2021: accumulated loss of £0.3 million).

The Group's interest rate management policy is to maintain a balance between fixed and floating rates of interest on borrowings and deposits, and to use interest rate derivatives when appropriate and pre-approved by the Treasury Committee. The interest rate hedging instruments are floating to fixed rate interest rate swaps used to manage the Group's interest cost.

At 31 December 2022, the Group had a net derivative financial liability of £0.5 million (2021: £2.6 million net asset).

Notes to the Consolidated financial statements
continued

21 Financial risk management continued

Foreign exchange (FX) hedges	Notional Amount (£m)	Average Hedged Rate	Fair value (£m)	Type of hedge
31 December 2022				
USD:CNY	**74.2**	**6.65**	**(1.6)**	**CFH – Forward rate**
USD:MXN	**35.2**	**21.95**	**2.1**	**CFH – Forward rate**
USD:GBP	**31.5**	**1.07**	**(0.9)**	**CFH – Forward rate**
GBP:USD	**20.1**	**1.26**	**0.6**	**CFH – Forward rate**
EUR:GBP	**17.0**	**0.87**	**(0.5)**	**CFH – Forward rate**
HKD:CNY	**10.1**	**0.88**	**(0.1)**	**CFH – Forward rate**
USD:MYR	**9.7**	**4.32**	**(0.1)**	**CFH – Forward rate**
CNY:GBP	**6.8**	**8.57**	**(0.4)**	**CFH – Forward rate**
CNY:EUR	**4.2**	**7.50**	**(0.1)**	**CFH – Forward rate**
GBP:EUR	**1.9**	**1.15**	**–**	**CFH – Forward rate**
GBP:SEK	**1.3**	**12.02**	**(0.1)**	**CFH – Forward rate**
Total	**212.0**		**(1.1)**	
31 December 2021				
USD:CNY	65.6	6.70	3.0	CFH – Forward rate
USD:MXN	23.9	22.03	0.4	CFH – Forward rate
USD:GBP	23.3	1.35	(0.1)	CFH – Forward rate
EUR:GBP	10.8	1.13	0.3	CFH – Forward rate
USD:MYR	8.6	4.17	–	CFH – Forward rate
CNY:GBP	6.1	9.08	(0.3)	CFH – Forward rate
GBP:USD	5.5	1.03	(0.1)	CFH – Forward rate
CNY:EUR	3.4	7.89	(0.3)	CFH – Forward rate
HKD:CNY	3.2	0.85	0.1	CFH – Forward rate
GBP:EUR	2.7	0.87	(0.1)	CFH – Forward rate
GBP:SEK	2.6	11.63	(0.1)	CFH – Forward rate
Other	–	–	0.1	CFH – Forward rate
Total	155.7		2.9	

CFH is an abbreviation for cash flow hedge.

The most common exchange rate risk is the transaction risk the Group takes when it invoices a customer or purchases from suppliers in a different currency to the underlying functional currency of the business. The Group policy is to review transactional foreign exchange exposures and place contracts on a quarterly basis. To the extent the cash flows associated with a transactional foreign exchange risk are committed the Group will hedge 100%. The notional values of the hedged transactions are disclosed in the above table. The group's policy is to hedge these transactions on a 1:1 ratio. Foreign currency basis spread of the derivative item is not designated and is therefore recognised in the income statement. The potential sources of ineffectiveness are timing of forecast transaction and credit risk. There was no hedge ineffectiveness incurred during the period.

The closing value of the hedging reserve in relation to FX hedges on 31 December 2022 was an accumulated loss of £1.1 million (2021: accumulated gain of £2.6 million). The transactions that have been designated as the hedged item in a cash flow hedge relationship are still considered highly probable forecasted transactions, during the year and at the year end 31 December 2022.

Hedges with a notional amount of £148.6 million (2021: £27.8 million) are due within 12 months with the remainder maturing within 24 months.

21 Financial risk management continued

Interest rate swaps	Notional amount (£m)	Fair value (£m)	Type of hedge
31 December 2022			
GBP	**19.0**	**0.6**	**CFH – SONIA**
	19.0	**0.6**	
31 December 2021			
USD	5.1	(0.1)	CFH – IBOR
GBP	19.0	(0.2)	CFH – IBOR
	24.1	(0.3)	

At the start of the year the Group was exposed to the following interest rate benchmarks within its hedge accounting relationships, which are subject to interest rate benchmark reform: GBP LIBOR and USD LIBOR ("IBORs"). The hedged items are Sterling and US Dollar floating rate debt (see note 20). On 4 January 2022 the Group transitioned away from GBP LIBOR to be replaced by GBP SONIA. There was no impact of this transition. As part of the RCF refinance in June 2022 the Group transitioned away from USD LIBOR to USD SOFR. There was no impact of this transition.

The Group hedges approximately 39% of the interest rate exposure of the Group. At 31 December 2022 the Group held interest rate swap instruments to fix the cost of GBP SONIA on borrowings under the bank facility. Under the terms of the swaps on the bank borrowings and excluding the bank margin, the Group will pay a weighted average fixed cost of approximately 1.5% until the swaps terminate in November 2023.

The average cost of the debt for the Group is expected to be approximately 5.1% over the next 12 months. The interest rate swaps are designated as cash flow hedges and were highly effective throughout 2022. The fair value of the contracts as at 31 December 2022 is disclosed in the table above. For the year ending 31 December 2022 an accumulated loss of £0.1 million (2021: accumulated loss of £0.4 million) was reclassified from the cash flow hedge reserve and included in the income statement as part of finance costs. A loss on the movement in fair value of the hedging instruments of £3.0 million (2021: gain of £0.3 million) was recognised within other comprehensive income. The closing value of the hedging reserve in relation to interest rate swaps on 31 December 2022 was a credit of £0.6 million (2021: debit of £0.3 million). Swaps with a notional value of £19.0 million will mature in November 2023.

No ineffectiveness was recognised through the income statement in 2022 (2021: £nil) or is expected to be recognised in future periods.

Notes to the Consolidated financial statements
continued

21 Financial risk management continued
b) Foreign exchange risk
Trade receivables are denominated in the currencies in which the Group trades. The Group's policy is that receivables and payables not in the functional currency of the subsidiary concerned are, in the main, hedged through forward foreign currency exchange contracts.

The Group's exposure to foreign currency before the impact of hedging is shown below:

£million	GBP	USD	Euro	Other	Total
31 December 2022					
Trade and other receivables	**–**	**23.8**	**1.9**	**0.6**	**26.3**
Cash and cash equivalents	**–**	**18.6**	**3.3**	**1.8**	**23.7**
Borrowings	**–**	**(32.7)**	**–**	**–**	**(32.7)**
Lease liabilities	**–**	**–**	**–**	**(1.6)**	**(1.6)**
Trade and other payables	**(0.7)**	**(23.0)**	**(1.3)**	**(2.8)**	**(27.8)**
Net Derivative financial instruments	**(1.8)**	**1.2**	**(0.1)**	**(0.4)**	**(1.1)**
Total	**(2.5)**	**(12.1)**	**3.8**	**(2.4)**	**(13.2)**
31 December 2021					
Trade and other receivables	0.1	21.3	2.1	0.6	24.1
Cash and cash equivalents	–	4.0	1.2	1.6	6.8
Borrowings	–	(21.4)	–	–	(21.4)
Lease liabilities	–	–	(0.1)	(1.2)	(1.3)
Trade and other payables	(0.4)	(19.5)	(1.4)	(2.9)	(24.2)
Net Derivative financial instruments	(0.1)	(0.1)	(0.3)	3.1	2.6
Total	(0.4)	(15.7)	1.5	1.2	(13.4)

A 10% strengthening of GBP against the following currencies at 31 December 2022 would have reduced loss after tax by the amounts shown below. This analysis assumes that all other variables, in particular interest rates, remain constant. A 10% weakening of GBP against the above currencies at 31 December 2022 would have had an equal but opposite effect on the above currencies to the amount shown above, on the basis that all other variables remain constant.

£million	2022	2021
US dollar	**1.8**	0.6
Euro	**0.4**	0.2

A 10% strengthening of GBP against the following currencies at 31 December 2022 would have decreased equity by the amounts shown below. This analysis assumes that all other variables, in particular interest rates, remain constant. The Group finances operations by obtaining funding through external borrowings and, where they are in foreign currencies, these borrowings may be designated as net investment hedges. This enables gains and losses arising on retranslation of these foreign currency borrowings to be charged to other comprehensive income, providing a partial offset in equity against the gains and losses arising on translation of the net assets of foreign operations. This has been considered in the analysis below.

£million	2022	2021
US dollar	**(3.0)**	(2.1)
Euro	**–**	–

10% weakening of GBP against the above currencies at 31 December 2022 would have had an equal but opposite effect on the above currencies to the amount shown above, on the basis that all other variables remain constant.

21 Financial risk management continued

c) Interest rate risk

The Group has financial assets and liabilities which are exposed to changes in market interest rates. Changes in interest rates primarily impact borrowings by changing their future cash flows (floating rate debt) or their fair value (fixed rate debt) and deposits. The Group's objective is to manage this interest rate exposure through the use of interest rate derivatives.

The exposure of the Group's financial assets and liabilities to interest rate risk is as follows:

£million	**Floating rate**	**Fixed rate**	**Non-interest bearing**	**2022 total**
Financial assets				
Trade and other receivables	**–**	**–**	**101.3**	**101.3**
Cash and cash equivalents	**19.4**	**–**	**45.6**	**65.0**
Derivative financial instruments	**0.6**	**–**	**3.3**	**3.9**
Total financial assets	**20.0**	**–**	**150.2**	**170.2**
Financial liabilities				
Borrowings	**(88.3)**	**(94.0)**	**2.0**	**(180.3)**
Lease liabilities	**–**	**(23.1)**	**–**	**(23.1)**
Trade and other payables	**–**	**–**	**(135.1)**	**(135.1)**
Derivative financial instruments	**–**	**–**	**(4.4)**	**(4.4)**
Total financial liabilities	**(88.3)**	**(117.1)**	**(137.5)**	**(342.9)**

£million	Floating rate	Fixed rate	Non-interest bearing	2021 total
Financial assets				
Trade and other receivables	–	–	74.9	74.9
Cash and cash equivalents	16.0	–	52.3	68.3
Derivative financial instruments	–	–	4.6	4.6
Total financial assets	16.0	–	131.8	147.8
Financial liabilities				
Borrowings	(50.4)	(99.1)	1.3	(148.2)
Lease liabilities	–	(22.6)	–	(22.6)
Trade and other payables	–	–	(111.9)	(111.9)
Derivative financial instruments	(0.3)	–	(1.7)	(2.0)
Total financial liabilities	(50.7)	(121.7)	(112.3)	(284.7)

At 31 December 2022, 52% of borrowings was at a fixed rate when including the effect of derivatives (2021: 66%).

The interest charged on floating rate financial liabilities is based on the relevant benchmark rate (such as GBP SONIA). Interest on financial instruments classified as fixed rate is fixed until the maturity of the instrument.

Considering the net debt position of the Group at 31 December 2022, any increase in interest rates would result in a net loss in the consolidated income statement, and any decrease in interest rates would result in a net gain. The effect on loss after tax of a 1% movement in interest rate, based on the year end floating rate borrowings, with all other variables held constant, is estimated to be £0.6 million (2021: £0.3 million). The impact on equity would be materially the same.

Notes to the Consolidated financial statements

continued

21 Financial risk management continued

d) Credit risk

Exposure to credit risk arises as a result of transactions in the Group's ordinary course of business and is applicable to all financial assets. Investments in cash and cash equivalents and derivative financial instruments are with approved counterparty banks and other financial institutions. Counterparties are assessed prior to, during, and after the conclusion of transactions to ensure exposure to credit risk is limited to an acceptable level. The maximum exposure with respect to credit risk is represented by the carrying amount of each financial asset on the balance sheet.

The Group's major exposure to credit risk is in respect of trade receivables. Given the number and geographical spread of the Group's ultimate customers and the solvency of major trade debtors, credit risk is believed to be limited. The Group is not reliant on any particular customer in the markets in which it operates and there is no significant concentration of credit risk. The Group regularly monitors its exposure to bad debts in order to minimise this exposure.

The Group has strict procedures in place to manage the credit risk on trade receivables. Customer credit risk is managed by each operating company within a division but is subject to Group oversight to ensure that each division's customer credit risk management system operates in a prudent and responsible manner. Credit evaluations are performed for all customers and credit limits are established based on internal or external rating criteria. The credit quality of the Group's significant customers is monitored on an ongoing basis. Letters of credit or payments in advance are obtained where customer credit quality is not considered strong enough for open credit. The Group operates the expected credit losses model when applying credit risk to receivables.

During the year there was a £0.4 million impairment of trade receivables as at 31 December 2022 (2021: £1.9 million) recognised within admin expenses. The solvency of the debtor and their ability to repay the receivables were considered in assessing the impairment of such assets.

(i) Risk for trade receivables by geographical regions

The maximum exposure to credit risk for trade receivables at 31 December by geographic areas was:

£million	**2022**	2021
Europe (including UK)	**40.2**	32.7
North America	**35.3**	26.7
Asia	**25.4**	13.2
Rest of the World	**0.4**	0.3
	101.3	72.9

(ii) Impairment losses

The ageing of trade receivables at 31 December was:

		2022		2021
£million	**Gross**	**Impairment**	Gross	Impairment
Not past due	**90.1**	**–**	66.0	(0.2)
Past due 1 – 60 days	**9.9**	**–**	6.6	–
Past due 61 – 120 days	**1.1**	**–**	0.3	(0.2)
More than 120 days	**2.3**	**(2.1)**	2.1	(1.7)
	103.4	**(2.1)**	75.0	(2.1)

21 Financial risk management continued

The movement in the provision for impairment in respect of trade receivables during the year was as follows:

£million	2022	2021
At 1 January	**2.1**	0.5
Released to income statement	**–**	(0.2)
Charged to income statement	**0.4**	1.9
Utilised	**(0.4)**	(0.1)
At 31 December	**2.1**	2.1

(iii) Credit risk related to other financial assets and cash deposits

Credit risk relating to the Group's other financial assets, principally comprising cash and cash equivalents and derivative financial instruments arises from the potential default of counterparties. Credit risk arising from balances with banks and financial institutions is monitored by the Group's Treasury department. The Group's policy on investment of cash and deposits are to only hold cash deposits with banks with a credit rating of investment grade and are reviewed on a regular basis to take account of developments in financial markets. Currently the Group has 12 counterparties to which it has credit risk exposure. The credit risk of the counterparties is between AA- and A- on the S&P's long term credit risk scale. The same process is undergone for counterparts with which the Group enters into hedging agreements. As such credit risk on these financial assets (cash and cash equivalents and derivatives) is calculated as £nil.

The expected credit risk model was applied to other receivables as described in note 2o where the credit risk was deemed immaterial.

The carrying amount of financial assets represents the maximum credit exposure. The maximum exposure to credit risk at 31 December was:

£million	2022	2021
Amounts owed by non-controlling interests	**–**	2.0
Cash and cash equivalents	**65.0**	68.3
Derivative financial instruments	**3.9**	4.6

Notes to the Consolidated financial statements
continued

21 Financial risk management continued
e) Liquidity risk
The Group maintains a balance between availability of funding and maximising investment return on cash balances through the use of short-term cash deposits, credit facilities and longer-term debt instruments. Management regularly reviews the funding requirements of the Group.

The Group's policy is to centrally manage debt and surplus cash balances.

At 31 December 2022, the Group had £47.4 million of undrawn committed borrowing facilities (2021: £110.1 million) and £41.2 million (2021: £38.0 million) of undrawn uncommitted borrowing facilities.

Contractual cashflows of financial liabilities
The following are the contractual maturities of financial liabilities including contractual future interest payments and commitment fees:

£million	Carrying value	Contractual Cash Flows	On demand	Under 3 months	3 to 12 months	1 to 2 years	2 to 3 years	3 to 4 years	4 to 5 years	Over 5 years
31 December 2022										
Borrowings (excl overdrafts)	**(176.6)**	**(208.9)**	**–**	**(1.0)**	**(5.5)**	**(6.0)**	**(6.0)**	**(107.7)**	**(2.2)**	**(80.5)**
Overdrafts	**(3.7)**	**(3.7)**	**(3.7)**	**–**	**–**	**–**	**–**	**–**	**–**	**–**
Lease liabilities	**(23.1)**	**(26.8)**	**–**	**(1.2)**	**(3.8)**	**(4.8)**	**(3.7)**	**(3.2)**	**(2.1)**	**(8.0)**
Trade and other payables	**(135.1)**	**(135.1)**	**–**	**(131.8)**	**(3.3)**	**–**	**–**	**–**	**–**	**–**
Derivatives settled gross	**(4.4)**	**(148.3)**	**–**	**(28.4)**	**(75.8)**	**(44.1)**	**–**	**–**	**–**	**–**
Interest rate swaps	**0.6**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**
	(342.3)	**(522.8)**	**(3.7)**	**(162.4)**	**(88.4)**	**(54.9)**	**(9.7)**	**(110.9)**	**(4.3)**	**(88.5)**
31 December 2021										
Borrowings (excl overdrafts)	(147.1)	(172.0)	–	(0.7)	(4.1)	(77.9)	(2.2)	(2.2)	(2.2)	(82.7)
Overdrafts	(1.1)	(1.1)	(1.1)	–	–	–	–	–	–	–
Lease liabilities	(22.6)	(27.0)	–	(1.2)	(3.2)	(4.2)	(3.4)	(2.9)	(2.7)	(9.4)
Trade and other payables	(111.9)	(112.1)	–	(111.3)	(0.6)	(0.1)	(0.1)	–	–	–
Derivatives settled gross	(1.7)	(41.9)	–	(5.7)	(22.1)	(14.1)	–	–	–	–
Interest rate swaps	(0.3)	(1.1)	–	(0.2)	(0.5)	(0.5)	–	–	–	–
	(284.7)	(355.2)	(1.1)	(119.1)	(30.5)	(96.8)	(5.7)	(5.1)	(4.9)	(92.1)

f) Fair value of financial assets and liabilities
IFRS 13 "Fair Value Measurement" requires an analysis of those financial instruments that are measured at fair value at the end of the year in a fair value hierarchy. In addition, IFRS 13 requires financial instruments not measured at fair value but for which fair value is disclosed to be analysed in the same fair value hierarchy:

- Level 1 – quoted prices (unadjusted) in active markets for identical assets or liabilities;
- Level 2 – inputs other than quoted prices included within level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices); and
- Level 3 – inputs for the asset or liability that are not based on observable market data (i.e. unobservable inputs).

21 Financial risk management continued

Set out below is a comparison by class of the carrying amounts and fair value of the Group's financial instruments that are carried in the financial statements.

£million	Fair value hierarchy	At 31 December 2022 Carrying value	At 31 December 2022 Fair value	At 31 December 2021 Carrying value	At 31 December 2021 Fair value
Held at amortised cost					
Cash and cash equivalents	n/a	65.0	65.0	68.3	68.3
Trade and other receivables	n/a	101.3	101.3	74.9	74.9
Trade and other payables	n/a	(135.1)	(135.1)	(111.9)	(111.9)
Borrowings (excluding unsecured loan notes)	2	(105.3)	(105.3)	(73.2)	(73.2)
Unsecured loan notes	3	(75.0)	(55.1)	(75.0)	(71.5)
Held at fair value					
Derivative financial instruments (assets)	2	3.9	3.9	4.6	4.6
Derivative financial instruments (liabilities)	2	(4.4)	(4.4)	(2.0)	(2.0)
Held at depreciated cost					–
Investment properties	3	–	0.7	–	0.7

The fair value of the financial assets and liabilities are included at the amount at which the instrument could be exchanged in a current transaction between willing parties, other than in a forced or liquidation sale. The following methods and assumptions were used to estimate the fair values:

- cash and cash equivalents, trade and other receivables, trade and other payables approximate to their carrying amounts largely due to the short-term maturities of these instruments;
- the fair value of borrowings is estimated by discounting future cash flows using rates currently available for debt and remaining maturities.
- the fair value of derivative financial instrument assets (£3.9 million) and liabilities (£4.4 million) are estimated by discounting expected future cash flows using current market indices such as yield curves and forward exchange rates over the remaining term of the instrument (level 2); and
- the fair value of investment properties are based on market valuations obtained through third party valuations (level 3).
- The fair value of unsecured loan notes has been derived from available market data for borrowings of similar terms and maturity period.

g) Capital management

The overriding objectives of the Group's capital management policy are to safeguard and support the business as a going concern through the business cycle and to maintain an optimal capital structure by reducing the Group's overall cost of capital. The Board considers equity shareholders' funds as capital.

The Group maintains a balance between availability of funding and maximising investment return on cash balances through the use of short-term cash deposits, credit facilities and longer term debt instruments, and management regularly reviews the funding requirements of the Group.

Dividends are paid when the Board consider it appropriate to do so, taking into account the availability of funding. The Group has a progressive dividend policy.

The Group has net debt of £138.4 million (2021: £102.5 million). Included within the debt facilities are certain financial covenants related to IFRS (excluding IFRS 16 update, and after the application of other covenant defined adjustments) net debt divided by adjusted EBITDA. Adjusted EBITDA is EBITDA adjusted to exclude the items not included within adjusted operating profit/net finance charges for which compliance certificates are produced on a 12 month rolling basis every half year. All financial covenants were fully complied with during the year and up to the date of approval of the financial statements.

Notes to the Consolidated financial statements
continued

22 Retirement benefit schemes
Defined contribution schemes
The Group operates 401(k) plans in North America and defined contribution arrangements in the rest of the world. The assets of these schemes are held independently of the Group. The total contributions charged by the Group in respect of defined contribution schemes were £3.2 million (2021: £3.0 million).

Defined benefit schemes
During the year the Group operated two defined benefit schemes in the UK (the TT Group (1993) Pension Scheme and the Southern & Redfern Ltd Retirement Benefits Schemes) and overseas defined benefit schemes in the USA. These schemes are closed to new members and the UK schemes are closed to future accrual.

In October 2022 the Trustees of the Southern & Redfern Ltd Retirement Benefits Scheme completed a buy-out of the scheme with a leading insurer, securing the pensions of members for the future. As a result, the assets (£0.6 million) and liabilities (£0.6 million) of the scheme have been derecognised. There was no impact on the income statement or OCI as a result of the buy-out.

The TT Group scheme commenced in 1993 and increased in size in 2006, 2007 and 2019 through the mergers of former UK schemes following a number of acquisitions. The parent company is the sponsoring employer in the TT Group scheme. The TT Group scheme is governed by TTG Pension Trustees Limited (the "Trustee") that has control over the operation, funding and investment strategy in consultation with the Group.

In November 2022, the Trustees of the TT Group Scheme entered into a bulk annuity insurance contract with an insurer in respect of the liabilities of the defined benefit scheme. This type of deal is also known as a 'buy-in'. The insurer, Legal & General, will pay into the Scheme cash matching the benefits due to members. The Trustee is of the opinion that this investment decision is appropriate, reduces the risks in the Scheme and provides additional security for the benefits due to members of the Scheme. The Trustee continues to be responsible for running the Scheme and retains the legal obligation for the benefits provided under the Scheme.

As the buy-in policy is a qualifying insurance asset, the fair value of the insurance policy is deemed to be the present value of the obligations that have been insured. The policy secured matches the benefits due to Scheme members under the Scheme's Trust Deed and Rules.

Since the assets of the Scheme were greater than the premium required to secure the liabilities through the buy-in, the Scheme Is in a net asset position at 31 December 2022 of £31.3 million. The buy-in has resulted in a re-measurement of the Scheme's assets, with a total re-measurement loss of £37.5 million recognised in the Group Statement of Comprehensive Income. A "true-up premium/refund" may be payable to/from the insurer during 2023, subject to a data cleanse exercise to formally agree the final benefits that are covered by the buy-in contract.

Prior to the buy-in, the TT Group scheme exposed the Group to a number of actuarial risks such as longevity risk, currency risk, inflation risk, interest rate risk and market (investment) risk. The buy-in mitigates the majority of these risks and the principal risk remaining is the credit risk associated with Legal & General, which is assessed to be very low. The Group is not exposed to any unusual, entity specific or scheme specific risks, but given the material nature of the TT Group scheme, the Group has developed a comprehensive strategy covering the following areas to manage the financial risk associated with it:

- Maintaining a long term working partnership with the Trustee to ensure strong governance of risks within the TT Group scheme. The TT Group scheme is a long term undertaking and is managed accordingly, in order to provide security to members' benefits and value for money to the Group.
- Since 2023 the Group had in place financial hedging that aimed to remove the majority of interest rate and inflation related risks. As the scheme funding has improved the level of hedging has been increased. Following the buy-in the Scheme's financial and demographic risks are now fully hedged by the insurer. There will be no material impact on the reported accounting position in future of a change in interest rates, inflation, or a change in life expectancies, in relation to the Scheme's liabilities and matching insurance policy asset. However, a small amount of residual investment risk remains within the surplus assets held by the Trustee.

The Scheme's investment strategy has been assessed as being low risk as the insured asset matches changes in the assessed value of the Schemes liabilities due to changes in interest rates, inflationary expectations and longevity expectations. The buy-in policy therefore matches the term and nature of the liabilities.

The Trustee does not currently hedge the longevity risk, although prudent assumptions are made regarding anticipated longevity for the purposes of the statutory funding actuarial valuation.

22 Retirement benefit schemes continued

The Trustee, in conjunction with the Group, has a duty to ensure that the TT Group scheme has an appropriate funding strategy in place that meets any local statutory requirements. The objective, which has been negotiated and agreed between the Group and the Trustee, is that the TT Group scheme should target and then maintain 100% funding on a basis that should ensure benefits can be paid as they fall due. Any shortfall in the assets relative to the funding target will be financed over a period that ensures the contributions are reasonably affordable to the Group.

The weighted average duration of the TT Group scheme defined benefit obligation is around 11 years.

UK legislation requires the Trustee to carry out a statutory funding valuation at least every three years and to target full funding against a basis that prudently reflects the TT Group scheme's risk exposure.

The last triennial valuation of the TT Group scheme as at April 2019 showed a net surplus of £0.3 million against the Trustee's statutory funding objective. As the scheme was fully funded at the 2019 triennial valuation date, there was no requirement for the Company to pay pension contributions. In addition to the statutory funding objective, the Trustee and Company agreed to move towards a 'self-sufficiency' funding target, under which once full funding is achieved the likelihood of the Trustee requiring subsequent contributions from the Company is significantly reduced. To support the scheme's long-term funding target of self-sufficiency the Company agreed to pay additional fixed contributions of £5.7 million and £4.4 million in the years 2022 and 2023 respectively. Due to an improvement in the funding position and favourable insurer pricing during 2022 the Company and Trustee began investigating in more detail the possibility of securing the Scheme's liabilities under a buy-in policy. As a result of the plans to secure the Scheme's liabilities under the buy-in policy, the Trustees and Company agreed that there was no requirement for any contributions falling due after 30 September 2022 to be paid to the Scheme after that date. The next triennial valuation of the TT Group scheme, as at April 2022, is expected to be completed by July 2023 and will take account of the new buy-in policy held by the Trustee.

In the year ended 31 December 2022 the Group made no funding contributions to the TT Group (1993) scheme or the Southern & Redfern Ltd Retirement Benefits Schemes.

The Company has set aside £0.2 million to be utilised in agreement with the Trustee for reducing the long-term liabilities of the TT Group scheme.

The Trustee and Company agreed that the Trustee should undertake an exercise during 2022, whereby deferred members were offered an enhanced transfer value option. In the year ended 31 December 2022 a £11.8 million settlement cost was recognised within items excluded from adjusted operating profit as a result of this exercise.

An actuarial valuation of the USA defined benefit schemes was carried out by independent qualified actuaries in 2022 using the projected unit credit method. Pension scheme assets are stated at their market value at 31 December 2022.

An analysis of the pension surplus/(deficit) by scheme is shown below:

£million	**2022**	2021
TT Group (1993)	**31.3**	78.4
Southern & Redfern	**–**	–
USA schemes	**(2.9)**	(3.9)
Net surplus	**28.4**	74.5

Given the nature of the Group's control of the TT Group under the Scheme rules, the Group considers that it has an unconditional right to refund of surplus in the event of the Scheme's wind-up. Based on these rights, any pension surpluses have been recognised in full under IFRIC 14. The ongoing expenses of running the Scheme are now met from the remaining Scheme assets.

Notes to the Consolidated financial statements

continued

22 Retirement benefit schemes continued

The principal assumptions used for the purpose of the actuarial valuations for the Group's primary defined benefit schemes were as follows:

%	TT Group 2022	TT Group 2021
Discount rate	**5.00**	1.80
Inflation rate (RPI)	**3.30**	3.60
Increases to pensions in payment (LPI 5% pension increases)	**3.05**	3.40
Increases to deferred pensions (CPI)	**2.65**	3.00

The mortality tables applied by the actuaries at 31 December 2022 for the TT Group (1993) Scheme were S2 tables with 105% (male)/ 106% (female) weighting for pensioners and 108% (male)/105% (female) weighting for non-pensioners with a 1.5% long-term rate of improvement in conjunction with the CMI 2021 projection model. The assumptions are equivalent to life expectancies as follows: Current pensioner aged 65: 87 years (male), 89 years (female). Future retiree currently aged 45: 88 years (male), 91 years (female).

Risk and sensitivity

Following the buy-in, changes in actuarial assumptions will impact the liabilities and insured asset to the same extent, with no overall impact on the net reporting position. A decrease in the discount rate by 0.1% per annum increases the liabilities and assets by approximately £4 million. An increase by 0.1% per annum in the inflation rate increases the liabilities and assets by approximately £2 million. An increase in the life expectancy of 1 year increases the liabilities and assets by approximately £11 million.

The sensitivities above consider the impact of the single change shown, with the other assumptions unchanged. The inflation sensitivities allow for the consequential impact on the relevant pension increase assumptions. The sensitivity analyses have been determined based on a method that extrapolates the impact on the defined benefit obligation as a result of reasonable changes in key assumptions occurring at the end of the reporting period.

The amounts recognised in respect of the pension surplus in the consolidated balance sheet are:

£million		2022	2021
Equities			
UK	Unquoted	**–**	0.9
Overseas	Quoted	**4.8**	4.8
	Unquoted	**–**	35.7
Government bonds			
UK	Fixed	**15.4**	149.2
	Index-linked	**–**	208.1
Overseas		**–**	7.0
Corporate bonds		**1.0**	120.8
Cash and cash equivalents		**14.0**	37.1
Derivatives		**–**	20.2
Insured assets		**357.9**	14.9
Other		**3.7**	53.2
Fair value of assets		**396.8**	651.9
Present value of defined benefit obligation		**(368.4)**	(577.4)
Net surplus recognised in the consolidated balance sheet		**28.4**	74.5

22 Retirement benefit schemes continued

The schemes' assets are unquoted unless otherwise stated and do not include the Group's financial instruments, any property occupied by, or other assets used by the Group. All of the funds included in the asset split are pooled investment vehicles for which due diligence has been completed. We have classified all of the Scheme's investments other than the cash held at the custodian, government bonds and the exchange traded funds (ETFs) as unquoted assets.

Amounts recognised in the consolidated income statement are:

£million	2022	2021
Scheme administration costs	**(1.2)**	(1.7)
Net (loss)/gain on pension projects (excluded from adjusted operating profit)	**(13.8)**	0.3
Net interest credit	**2.1**	0.9

Amounts recognised in the consolidated statement of comprehensive income are a loss of £35.9 million (2021: gain of £35.8 million) which comprises of; the actual return on scheme assets excluding interest income, a loss of £215.5 million (2021: gain of £11.3 million) and the remeasurement of the schemes obligations, a gain of £179.5 million (2021: £24.5 million).

Changes in the present value of the defined benefit obligation are:

£million	2022	2021
Defined benefit obligation at 1 January	**577.4**	618.2
Past service charge and settlements	**(20.3)**	(1.8)
Interest on obligation	**11.9**	9.6
Remeasurements:		
Effect of changes in demographic assumptions	**(0.5)**	(1.2)
Effect of changes in financial assumptions	**(197.2)**	(13.2)
Effect of experience adjustments	**18.2**	(10.1)
Benefits paid	**(22.6)**	(24.2)
Exchange	**1.5**	0.1
Defined benefit obligation at 31 December	**368.4**	577.4
TT Group (1993)	**357.9**	564.7
Southern & Redfern	**–**	0.9
USA schemes	**10.5**	11.8
	368.4	577.4

Notes to the Consolidated financial statements
continued

22 Retirement benefit schemes continued
Changes in the fair value of the schemes' assets are:

£million	2022	2021
Fair value of schemes' assets at 1 January	**651.9**	648.7
Interest income on defined benefit scheme assets	**14.0**	10.5
Return on scheme assets, excluding interest income	**(215.4)**	11.3
Contributions by employer	**1.3**	7.3
Pension scheme expenses	**(1.2)**	(1.7)
Settlements	**(32.1)**	–
Benefits paid	**(22.6)**	(24.2)
Exchange	**0.9**	–
Fair value of schemes' assets at 31 December	**396.8**	651.9

23 Share capital
Share capital

£million	2022	2021
Issued and fully paid		
176,486,627 (2021: 176,244,624) ordinary shares of 25p each	**44.1**	44.1

During the period the Company issued 242,003 ordinary shares as a result of share options being exercised under the Sharesave scheme and Share Purchase plans.

The performance conditions of the Long-term Incentive Plan awards issued in 2019 and Restricted Share Plan awards issued in 2019, 2020 and 2021 were met and shares were allocated to award holders from existing shares held by an Employee Benefit Trust for £nil consideration.

The aggregate consideration received for all share issues during the year was £382,814 which was represented by a £60,501 increase in share capital and a £322,314 increase in share premium.

24 Other reserves

£million	Share Based Payment Reserve	Employee Benefit Trust	**Share options reserve**	Hedging Reserve	Merger reserve	**Total**
At 1 January 2021	(3.1)	(0.2)	**(3.3)**	5.4	3.4	**5.5**
Share based payment charge	3.8	–	**3.8**	–	–	**3.8**
Awards made to employees	(0.2)	0.2	**–**	–	–	**–**
Deferred tax on share based payments	0.5	–	**0.5**	–	–	**0.5**
Issue of new shares	–	(0.3)	**(0.3)**	–	–	**(0.3)**
Loss on cash flow hedges taken to equity less amounts taken to income statement	–	–	**–**	(3.2)	–	**(3.2)**
Deferred tax on gain on cash flow hedges	–	–	**–**	0.5	–	**0.5**
Other movement	0.3	–	**0.3**	–	–	**0.3**
At 1 January 2022	1.3	(0.3)	**1.0**	2.7	3.4	**7.1**
Share based payment charge	4.8	–	**4.8**	–	–	**4.8**
Awards made to employees	(0.8)	0.4	**(0.4)**	–	–	**(0.4)**
Deferred tax on share based payments	(1.0)	–	**(1.0)**	–	–	**(1.0)**
Funding of employee benefit trust	–	(0.5)	**(0.5)**	–	–	**(0.5)**
Loss on cash flow hedges taken to equity less amounts recycled to income statement	–	–	**–**	(2.9)	–	**(2.9)**
Deferred tax on movement in cash flow hedges	–	–	**–**	0.2	–	**0.2**
Other movement	–	–	**–**	–	–	**–**
At 31 December 2022	4.3	(0.4)	**3.9**	–	3.4	**7.3**

25 Non-controlling interests

During the year RODCO limited, a subsidiary of TT Electronics Plc which is owned 60% by TT Electronics Plc and 40% Prysmian Cables & Systems Limited ('Prysmian') received payment for a £5.0 million receivable due from TT Electronics Plc and Prysmian in proportion to their shareholdings.

These funds received were subsequently returned to the shareholders as a dividend, with TT Electronics Plc receiving £3.0 million and Prysmian receiving £2.0 million. The dividend paid to Prysmian eliminated the non-controlling interest in the opening balance sheet for the Group.

Below is RODCO's balance sheet for the year ended 31 December 2022.

£million	**2022**	2021
ASSETS		
Current assets		
Trade and other receivables	**–**	5.0
Total assets	**–**	5.0
EQUITY		
Share capital	**–**	5.0
Total equity	**–**	5.0
Equity attributable to TT Electronics Plc	**–**	3.0
Non-controlling Prysmian Cables & Systems Limited	**–**	2.0

Notes to the Consolidated financial statements

continued

26 Share-based payment plans

The Company has the following share-based payment plans in operation at 31 December 2022:

- Long-term Incentive Plan ("LTIP") for senior executives;
- Restricted Share Plan ("RSP") for certain senior executives; and
- Sharesave plans for UK employees and a Share Purchase plan for US employees.

The LTIP and RSP schemes have been classified as equity settled schemes. The terms of the LTIP and RSP schemes state that the Group has the right as to how to settle these awards and it is the Group's intention to settle these with equity. At the date of vesting the Group will settle the awards either with new issue shares or shares purchased on the market at an earlier point in time.

The Group offers the employees the option for the Group to settle the tax liability, which the employee would incur upon receipt of the award, on behalf of the employee with the relevant tax authority. In this circumstance the Group may choose to pay, in cash, the tax liability due on behalf of the employee to the tax authority and the employee would receive the remaining value of their award in equity. In 2022 the Group paid £0.9 million to settle the employees' tax liabilities (2021: £0.3 million). The Group estimates that the future cashflows associated with the above would remain consistent in future years with the 2021 outflows. The Group also offers the employee the option for the Group to sell the remaining shares on the employees' behalf and to forward that cash to the employee, although the Group is not compelled to do so no matter what the employee chooses. In 2022 £40.0 thousand was used for these purposes (2021: £36.6 thousand). The Group estimates that the future cashflows associated with the above would remain consistent in future years with the 2022 outflows. These arrangements do not change the assessment that the share-based payments are equity settled.

The Sharesave scheme has also been classified as an equity settled scheme. The rules of this scheme state that the participant must always be paid in equity and that neither party can request settlement in any other way.

a) Long-term Incentive Plans

Details of the LTIP awards outstanding during the year are as follows:

	2022 Number of share awards	2021 Number of share awards
At 1 January	**5,379,293**	5,031,921
Granted	**650,871**	1,806,500
Forfeited	**(1,614,554)**	(1,246,053)
Exercised/Vested	**(457,321)**	(213,075)
At 31 December	**3,958,289**	5,379,293
Exercisable at 31 December	**–**	–

During 2022 grants of awards were made under the LTIP for the issue of shares in 2025. An award is a contingent right to receive shares in the future, subject to continued employment and the achievement of predetermined performance criteria. The performance targets attached to awards require the achievement of earnings per share ('EPS') and total shareholder return ('TSR') targets as detailed in the Directors' Remuneration Report on page 128.

On 14 March 2022 grants of awards were made under the LTIP for the issue of up to 650,871 shares in 2025.

On 16 March 2021 grants of awards were made under the LTIP for the issue of up to 1,763,817 shares in 2024.

On 1 October 2021 grants of awards were made under the LTIP for the issue of up to 42,683 shares in 2024.

The fair value of the shares was estimated at the grant date using a Monte Carlo simulation model, considering the terms and conditions upon which the shares were granted. This model simulates the TSR and compares it against the group of comparator companies. It considers historic dividends and share price fluctuations to predict the distribution of relative share price performance.

26 Share-based payment plans continued

The following table lists the inputs to the model:

Grant date	Number of awards	Fair value at grant date	Share price at grant date	Exercise price	Expected volatility	Vesting period (years)
2022						
14 March 2022	650,871	164.9p	202.5p	£nil	37%	3.0
2021						
16 March 2021	1,763,817	218.4p	256.0p	£nil	39%	3.0
1 October 2021	42,683	215.8p	253.0p	£nil	39%	3.0

The award of shares is not affected by the risk free rate of interest since no investment is required by the recipient, and therefore no interest could be earned elsewhere. Expected volatility is based on historical share price movements.

During the year nil (16 March 2021: 48,070) notional 'LTIP' share awards were granted to senior executives which will ultimately be settled in cash.

The performance conditions of the LTIP grants made in 2019 that reached the end of their performance periods in 2022 were partially met and shares were allocated to award holders from existing shares held by an Employee Benefit Trust for £nil consideration.

b) Restricted Share Plan

During the year the Group granted 1,219,914 shares (2021: 1,018,880) under the restricted plan. Awards are typically subject to continuing employment with no other vesting criteria.

Details of the restricted share plan awards outstanding during the year are as follows:

	2022 Number of share awards	2021 Number of share awards
At 1 January	**2,193,182**	1,485,970
Granted	**1,219,914**	1,018,880
Forfeited/Lapsed	**(476,619)**	(61,862)
Exercised/Vested	**(646,604)**	(249,806)
At 31 December	**2,289,873**	2,193,182
Exercisable at 31 December	**–**	–

During the year 59,874 (2021: 90,989) notional RSP share awards were granted to senior executives which will ultimately be settled in cash.

The performance conditions of the RSP grants made in 2019 that reached the end of their performance periods in 2022 were partially met and shares were allocated to award holders from existing shares held by an Employee Benefit Trust for £nil consideration.

Notes to the Consolidated financial statements
continued

26 Share-based payment plans continued
The following table lists the inputs to the model:

Grant date	Number of awards	Fair value at grant date	Share price at grant date	Exercise price	Expected volatility	Vesting period (years)	Vesting criteria
2022							
10 January 2022	**14,053**	**264.0p**	**264.0p**	**£nil**	**37%**	**3.0**	**Note 1**
14 March 2022	**948,429**	**202.5p**	**202.5p**	**£nil**	**37%**	**3.0**	**Note 1**
14 March 2022	**107,413**	**202.5p**	**202.5p**	**£nil**	**37%**	**3.0**	**Note 1**
6 June 2022	**49,342**	**200.5p**	**200.5p**	**£nil**	**37%**	**3.0**	**Note 1**
20 June 2022	**60,677**	**187.0p**	**187.0p**	**£nil**	**37%**	**3.0**	**Note 1**
21 November 2022	**40,000**	**170.0p**	**170.0p**	**£nil**	**37%**	**3.0**	**Note 1**

Grant date	Number of awards	Fair value at grant date	Share price at grant date	Exercise price	Expected volatility	Vesting period (years)	Vesting criteria
2021							
21 January 2021	20,000	208.0p	208.0p	£nil	39%	2.7	Note 1
3 February 2021	54,290	201.0p	201.0p	£nil	39%	0.9	Note 2
5 February 2021	135,467	203.0p	203.0p	£nil	39%	1.1	Note 2
16 March 2021	185,153	206.0p	206.0p	£nil	39%	3.0	Note 1
16 March 2021	237,425	206.0p	206.0p	£nil	39%	3.0	Note 1
18 August 2021	14,613	277.0p	277.0p	£nil	39%	1.7	Note 1
24 September 2021	273,747	278.0p	278.0p	£nil	39%	3.0	Note 1
1 October 2021	92,341	253.0p	253.0p	£nil	39%	3.0	Note 1
1 November 2021	5,844	252.0p	252.0p	£nil	39%	3.0	Note 1

Note 1 – these awards are subject to continuing employment with the Group.

Note 2 – these awards are subject to continuing employment with the Group as well as achievement of certain personal objectives.

26 Share-based payment plans continued

c) Sharesave schemes

The Group operates a Sharesave scheme for participating employees in the UK under a three-year plan. Employees may purchase the Group's shares at a 20% discount to the market price on the day prior to the commencement of the offer up to a maximum contribution value of £6,000 in any one year. Monthly contributions are saved with Lloyds Bank plc, via Equiniti Ltd, the Registrars, in the employee's share savings plan and will only be released to employees who remain in the Group's employment for a period of three years from commencement of the savings contract. Options become exercisable on completion of the three-year term or within six months of leaving in certain circumstances. All Sharesave scheme awards are accounted for as equity settled.

Details of the save as you earn share plan awards outstanding during the year are as follows:

	2022 Number of share awards	2021 Number of share awards
At 1 January	**2,465,154**	2,760,427
Granted	**1,930,800**	459,495
Forfeited	**(690,808)**	(384,156)
Exercised	**44,730**	(370,612)
At 31 December	**3,749,876**	2,465,154
Exercisable at 31 December	**507,668**	73,563

The fair value of the shares at grant date was as follows:

Date price set	Market price	Option price	Fair value	Options outstanding
30 August 2019	237.0p	190.0p	83.5p	480,798
30 August 2020	187.0p	151.0p	84.0p	1,033,266
7 September 2021	271.0p	226.0p	110.9p	329,713
6 September 2022	149.3p	119.5p	67.5p	1,906,099

pence	**2022**	2021
Fair value at grant date	**67.5**	110.9

The Group operates a Stock Purchase Plan for participating US employees. Under the plan employees may purchase the Group's shares at a 15% discount to the market price at the date of acquisition, up to a maximum of $6,500 per annum. Employees save on a monthly basis and shares are purchased each quarter.

The total share-based payment charge for the year excluding a social security credit of £0.2 million (2021: £0.5 million charge) arising from the above share scheme plans was £4.8 million (2021: £3.8 million).

Notes to the Consolidated financial statements

continued

27 Reconciliation of net cash flow to movement in net debt

Net cash of £61.3 million (2021: £67.2 million) comprises cash at bank and in hand of £65.0 million (2021: £68.3 million) and overdrafts of £3.7 million (2021: £1.1 million).

£million	Net cash	Lease liabilities	Borrowings	Net debt
At 1 January 2021	69.0	(15.9)	(137.0)	(83.9)
Cash flow	(2.8)	–	–	(2.8)
Repayment of borrowings	–	–	86.9	86.9
Proceeds from borrowings	–	–	(96.4)	(96.4)
Payment of lease liabilities	–	3.9	–	3.9
New leases	–	(10.8)	–	(10.8)
Amortisation of loan arrangement fees	–	–	0.2	0.2
Exchange differences	1.0	0.2	(0.8)	0.4
At 31 December 2021	**67.2**	**(22.6)**	**(147.1)**	**(102.5)**
Cash flow	**(9.2)**	**–**	**–**	**(9.2)**
Businesses acquired	**–**	**(0.2)**	**–**	**(0.2)**
Repayment of borrowings	**–**	**–**	**149.3**	**149.3**
Proceeds from borrowings	**–**	**–**	**(174.3)**	**(174.3)**
Payment of lease liabilities	**–**	**4.3**	**–**	**4.3**
New leases	**–**	**(2.3)**	**–**	**(2.3)**
Net movement in loan arrangement fees	**–**	**–**	**0.7**	**0.7**
Exchange differences	**3.3**	**(2.3)**	**(5.2)**	**(4.2)**
At 31 December 2022	**61.3**	**(23.1)**	**(176.6)**	**(138.4)**

28 Changes in liabilities arising from financing activities

£million	Lease liabilities	Borrowings	Interest rate swaps	Liabilities arising from financing activities
At 1 January 2021	(15.9)	(137.0)	(1.0)	(153.9)
Cash movements				
Cash flows	4.7	(6.7)	0.4	(1.6)
Non cash movements				
Fair value movements	–	–	0.3	0.3
Interest accrued	(0.8)	(2.4)	–	(3.2)
Net movement in loan arrangement fees	–	(0.2)	–	(0.2)
New leases	(10.8)	–	–	(10.8)
Exchange differences	0.2	(0.8)	–	(0.6)
At 1 January 2022	**(22.6)**	**(147.1)**	**(0.3)**	**(170.0)**
Cash movements				
Cash flows	**5.1**	**(17.9)**	**0.1**	**(12.7)**
Non cash movements				
Fair value movements	**–**	**–**	**0.8**	**0.8**
Business acquired	**(0.2)**	**–**	**–**	**(0.2)**
Interest accrued	**(0.8)**	**(7.1)**	**–**	**(7.9)**
Net movement in loan arrangement fees	**–**	**0.7**	**–**	**0.7**
New leases	**(2.3)**	**–**	**–**	**(2.3)**
Reassessment of lease liabilities	**–**	**–**	**–**	**–**
Exchange differences	**(2.3)**	**(5.2)**	**–**	**(7.5)**
At 31 December 2022	**(23.1)**	**(176.6)**	**0.6**	**(199.1)**

Notes to the Consolidated financial statements
continued

29 Contingent liabilities
The Group is subject to claims which arise in the ordinary course of business. Other than those for which provisions have been made and included within note 19, the Directors consider the likelihood of any other claims giving rise to a significant liability to be remote.

30 Capital commitments

£million	**2022**	2021
Contractual commitments for the purchase of property, plant and equipment	**2.7**	3.1

31 Leases
The total cash outflow for leases is £5.1 million (2021: £4.7 million) comprising lease repayments of £4.3 million (2021: £3.9 million), interest on lease liabilities of £0.8 million (2021: £0.8 million).

Interest on lease liabilities is shown in note 5, the maturity of the lease liabilities is shown in note 21(e) and the corresponding assets to which the lease liabilities relate are shown in note 12.

32 Related party transactions
Transactions between the Company and its subsidiaries have been eliminated on consolidation and are not disclosed in this note.

No related party transactions have taken place in 2022 or 2021 that have affected the financial position or performance of the Group.

Key management personnel and Directors' emoluments are disclosed in note 11.

Company statement of financial position

at 31 December 2022

£million	Note	2022	2021
Non current assets			
Right-of-use assets	2	**0.5**	0.6
Property, plant and equipment	2	**0.5**	0.6
Intangible assets	2	**0.9**	1.6
Investments	3	**126.4**	174.2
Deferred tax asset	11	**2.8**	3.4
Pensions	10	**31.3**	78.4
Debtors	4	**121.2**	113.7
Total fixed assets		**283.6**	372.5
Current assets			
Debtors	4	**20.5**	14.4
Cash at bank and in hand	13	**0.5**	2.3
Total current assets		**21.0**	16.7
Current liabilities			
Lease liabilities	6	**0.2**	0.2
Creditors: amounts falling due within one year	5	**9.0**	9.0
Total current liabilities		**9.2**	9.2
Net current assets		**11.8**	7.5
Non current liabilities			
Lease liabilities	6	**0.5**	0.6
Deferred tax liability	11	**11.0**	19.6
Total non current liabilities		**11.5**	20.2
Net assets		**283.9**	359.8
Capital and reserves			
Called up share capital	7	**44.1**	44.1
Share premium account	7	**22.9**	22.6
Share options reserve	8	**3.9**	1.0
Merger reserve		**3.4**	3.4
Profit and loss account	9	**209.6**	288.7
Shareholders' funds		**283.9**	359.8

The Company reported a loss for the financial year ended 31 December 2022 of £38.2 million (2021: profit of £53.1 million).

Approved by the Board of Directors on 7 March 2023 and signed on their behalf by:

Richard Tyson
Director

Mark Hoad
Director

Company statement of changes in equity

at 31 December 2022

£million	Share capital	Share premium	Merger reserve	Share options reserve	Profit and loss account	Total
At 1 January 2021	43.6	21.7	3.4	(3.3)	223.5	288.9
Profit for the year	–	–	–	–	53.1	53.1
Other comprehensive income						
Remeasurement of defined benefit pension schemes	–	–	–	–	34.8	34.8
Tax on remeasurement of defined benefit pension schemes	–	–	–	–	(11.3)	(11.3)
Total comprehensive income	–	–	–	–	76.6	76.6
Transactions with owners recorded directly in equity						
Dividends paid by the Company	–	–	–	–	(11.4)	(11.4)
Share-based payments	–	–	–	3.8	–	3.8
Deferred tax on share-based payments	–	–	–	0.5	–	0.5
New shares issued	0.5	0.9	–	–	–	1.4
At 31 December 2021	**44.1**	**22.6**	**3.4**	**1.0**	**288.7**	**359.8**
Loss for the year	**–**	**–**	**–**	**–**	**(38.2)**	**(38.2)**
Other comprehensive income						
Remeasurement of defined benefit pension schemes	**–**	**–**	**–**	**–**	**(37.5)**	**(37.5)**
Tax on remeasurement of defined benefit pension schemes	**–**	**–**	**–**	**–**	**6.8**	**6.8**
Total comprehensive expense	**–**	**–**	**–**	**–**	**(68.9)**	**(68.9)**
Transactions with owners recorded directly in equity						
Dividends paid by the Company	**–**	**–**	**–**	**–**	**(10.2)**	**(10.2)**
Share-based payments	**–**	**–**	**–**	**4.8**	**–**	**4.8**
Deferred tax on share-based payments	**–**	**–**	**–**	**(1.0)**	**–**	**(1.0)**
Other movements	**–**	**–**	**–**	**(0.9)**	**–**	**(0.9)**
New shares issued	**–**	**0.3**	**–**	**–**	**–**	**0.3**
At 31 December 2022	**44.1**	**22.9**	**3.4**	**3.9**	**209.6**	**283.9**

Notes to the Company financial statements

1 Significant accounting policies

a) Basis of preparation

The financial statements of TT Electronics plc (the "Company") were prepared in accordance with Financial Reporting Standard 101 Reduced Disclosure Framework ("FRS 101").

In preparing these financial statements, the Company applies the recognition, measurement and disclosure requirements of International Financial Reporting Standards, but makes amendments where necessary in order to comply with Companies Act 2006 and has set out below where advantage of the FRS 101 disclosure exemptions has been taken.

In these financial statements, the Company has applied the exemptions available under FRS 101 in respect of the following disclosures:

- a cash flow statement and related notes;
- disclosures in respect of transactions with wholly owned subsidiaries;
- disclosures in respect of capital management;
- the effects of new but not yet effective IFRSs;
- disclosures in respect of the compensation of key management personnel;
- comparable movement tables for tangible and intangible fixed assets; and
- disclosures in respect of leases

The accounting policies set out in note 2 of the Consolidated financial statements have, unless otherwise stated, been applied in the preparation of the Company financial statements.

Change in accounting policy

There have been no changes to accounting policies during the year. Adoption of new and amendments to published standards and interpretations effective for the Group for the year ended 31 December 2022 did not have any impact on the financial position or performance of the Group.

b) Estimation uncertainty

During the year there were no judgements made by the Directors, in the application of the adopted accounting policies, deemed to have a significant effect on the financial statements nor were there any estimates deemed to carry a significant risk of material adjustment in the next year.

Details of the Directors' assessment of the Company's ability to continue in operational existence for at least twelve months from the date of signing these financial statements are shown in note 1 of the Consolidated financial statements and in the Governance and Directors' Report on page 89.

c) Investments

Fixed asset investments in subsidiaries are carried at cost less provision for impairment.

d) Own shares held by Employee Benefit Trust

Transactions of the Company-sponsored Employee Benefit Trust are treated as being those of the Company and are therefore reflected in the Company's financial statements. In particular, the Trust's purchases of shares in the Company are debited directly to equity.

Notes to the company financial statements

continued

2 Non Current Assets

£million	Intangible Assets	Plant, equipment and vehicles	Right-of-use assets
Cost			
At 1 January 2022	19.4	1.2	1.2
Disposals	(1.6)	–	–
Additions	0.2	–	–
At 31 December 2022	**18.0**	**1.2**	**1.2**
Depreciation			
At 1 January 2022	17.8	0.6	0.6
Disposals	(1.6)	–	–
Depreciation charge	0.9	0.1	0.1
At 31 December 2022	**17.1**	**0.7**	**0.7**
Net book value			
At 31 December 2022	**0.9**	**0.5**	**0.5**
At 31 December 2021	1.6	0.6	0.6

Intangible assets solely relate to software, within this balance is software which is under construction of £0.4 million.

Disposals in the year relate to redundant intangible assets which held a carrying value of £nil at the start of the year.

3 Investments

£million	Subsidiary undertakings
Cost	
At 1 January 2022	253.0
Disposals	(1.0)
At 31 December 2022	**252.0**
Provisions	
At 1 January 2022	78.8
Impairment	46.8
At 31 December 2022	**125.6**
Net book value	
At 31 December 2022	**126.4**
At 31 December 2021	174.2

During the year an impairment of £46.8 million was recognised to reduce the investment in IoT Solutions UK Limited to its carrying value of £nil (2021: £46.8 million). The significant assumptions in determining the impairment are the future cash flows and the discount rate. A 10% improvement in future cashflows would have reduced the impairment by £2.6 million and a 10% worsening of the cashflows would have increased the impairment by £nil. An increase in the discount rate by 1.0% would have increased the impairment by £nil and a 1.0% reduction in the discount rate would have decreased the impairment by £4.0 million.

During the year RODCO limited, a subsidiary of TT Electronics Plc which was owned 60% by TT Electronics Plc and 40% Prysmian Cables & Systems Limited ('Prysmian') received payment for a £5.0 million receivable due from TT Electronics Plc and Prysmian in proportion to their shareholdings.

These funds received were subsequently returned to the shareholders as a dividend with TT Electronics Plc receiving £3.0 million and Prysmian receiving £2.0 million. The investment in RODCO, with a carrying value of £1.0m as at 31 December 2021 was eliminated as part of this transaction. The value of the dividend received over and above the value of the investment disposed of was £2.0 million and recognised within the profit and loss statement.

The Company's subsidiary undertakings and their locations are shown in note 14. Shareholdings are held indirectly for all principal operating subsidiary undertakings.

4 Debtors

£million	2022	2021
Current debtors		
Amounts owed by subsidiary undertakings	**19.4**	13.3
Prepayments, accrued income and other receivables	**1.1**	1.1
Amounts due within one year	**20.5**	14.4
Non Current debtors		
Amounts owed by subsidiary undertakings	**121.2**	113.7
Amounts due later than one year	**121.2**	113.7
Total	**141.7**	128.1

'Amounts owed by subsidiary undertakings' have been considered for impairment using the 12 months expected credit loss model because there was no change in credit risk since initial recognition. The expected credit loss is considered immaterial because the probability of default is negligible.

As at 31 December 2022 £121.2 million (2021: £113.7 million) of debtors have been classified as non current due to management's expectation that these will not be settled within 12 months.

5 Creditors

£million	2022	2021
Amounts falling due within one year		
Trade creditors	**2.0**	2.1
Amounts owed to subsidiary undertakings	**1.4**	1.3
Taxation and social security	**1.4**	0.9
Accruals and deferred income	**4.2**	4.7
	9.0	9.0

Notes to the company financial statements

continued

6 Lease obligations

£million	Current lease liabilities	Non-current lease liabilities	Total
At 31 December 2021	0.2	0.6	0.8
Capital repayments	–	(0.1)	(0.1)
At 31 December 2022	**0.2**	**0.5**	**0.7**

7 Share capital

£million	**2022**	2021
Issued, called up and fully paid		
176,486,627 (2021: 176,244,624) ordinary shares of 25p each	**44.1**	44.1

During the period the Company issued 242,003 ordinary shares as a result of share options being exercised under the Sharesave scheme and Share Purchase plans.

The performance conditions of the Long-term Incentive Plan awards issued in 2019 and Restricted Share Plan awards issued in 2019, 2020 and 2021 were met and shares were allocated to award holders from existing shares held by an Employee Benefit Trust for £nil consideration.

The aggregate consideration received for all share issues during the year was £382,814 which was represented by a £60,501 increase in share capital and a £322,314 increase in share premium.

8 Share-based payments

Details of share-based payments are shown in note 26 of the Consolidated financial statements. Any charge associated with share-based payments made to employees of subsidiaries are recharged out to the relevant subsidiaries within the same financial year.

9 Profit for the year

As permitted by Section 408 of the Companies Act 2006, the Company has elected not to present its profit and loss account for the year. The loss after tax of the Company for the year was £38.2 million (2021: profit of £53.1 million). The auditor’s remuneration for audit services is disclosed in note 6 to the Consolidated financial statements.

10 Pension schemes

Defined benefit scheme

In November 2022, the Trustees of the TT Group Scheme entered into a bulk annuity insurance contract with an insurer in respect of the liabilities of the defined benefit scheme. This type of deal is also known as a 'buy-in'. The insurer, Legal & General, will pay into the Scheme cash matching the benefits due to members. The Trustee is of the opinion that this investment decision is appropriate, reduces the risks in the Scheme and provides additional security for the benefits due to members of the Scheme. The Trustee continues to be responsible for running the Scheme and retains the legal obligation for the benefits provided under the Scheme.

As the buy-in policy is a qualifying insurance asset, the fair value of the insurance policy is deemed to be the present value of the obligations that have been insured. The policy secured matches the benefits due to Scheme members under the Scheme's Trust Deed and Rules.

Since the assets of the Scheme were greater than the premium required to secure the liabilities through the buy-in, the Scheme is in a net asset position at 31 December 2022 of £31.3 million. The buy-in has resulted in a re-measurement of the Scheme's assets, with a total re-measurement loss of £37.5 million recognised in the Company Statement of Changes in Equity. A "true-up premium/refund" may be payable to/from the insurer during 2023, subject to a data cleanse exercise to formally agree the final benefits that are covered by the buy-in contract.

The last triennial valuation of the TT Group scheme as at April 2019 showed a net surplus of £0.3 million against the Trustee's statutory funding objective. As the scheme was fully funded at the 2019 triennial valuation date, there is no requirement for the Company to pay pension contributions. In addition to the statutory funding objective, the Trustee and Company agreed to move towards a 'self-sufficiency' funding target, under which once full funding is achieved the likelihood of the Trustee requiring subsequent contributions from the Company is significantly reduced. To support the scheme's long-term funding target of self-sufficiency the Company agreed to pay additional fixed contributions of £5.7 million and £4.4 million in the years 2022 and 2023 respectively. As a result of the completed buy-in policy, the Trustees and Company agreed that there was no requirement for any contributions falling due after 30 September 2022 to be paid to the Scheme. The next triennial valuation of the TT Group scheme, as at December 2022, is expected to be completed by July 2023 and will take account of the new buy-in policy held by the Trustee.

The Group has set aside £0.2 million (2021: £0.6 million) under a legal agreement to be utilised in agreement with the Trustee for reducing liabilities of the pension scheme.

The Trustee and Company agreed that the Trustee should undertake an exercise during 2022, whereby deferred members were offered an enhanced transfer value option. In the year ended 31 December 2022 a £11.8 million settlement cost was recognised as a result of this exercise.

Defined contribution scheme

The Company operates a Group personal pension plan for employees and pays contributions to administered pension insurance plans. The Company has no further payment obligation once the contributions have been paid. Payments to the defined contribution scheme are charged as an expense as they are incurred. The total contributions charged by the Company including employee salary exchange contributions in respect of the year ended 31 December 2022 were £0.5 million (2021: £0.6 million).

11 Deferred tax

The deferred tax asset of £2.8 million comprises £0.7 million asset in respect of share-based payments (2021: £1.8 million asset) the movement in which has been recognised in equity (£1.0 million) and profit (£0.1 million); £1.4 million in respect of non-current assets (2021: £1.1 million asset) the movement in which has been recognised in profit (£0.3 million); and £0.7 million in respect of tax losses (2021: £0.5 million) the movement in which has been recognised in profit (£0.2 million).

The deferred tax liability of £11.0 million is in respect of the pension asset (2021: £19.6 million liability), the movement in which has been recognised in equity (£6.8 million) and profit (£2.8 million).

12 Employee information

The average number of full time equivalent employees (including Directors) during the year was 78.

13 Related party transactions

During 2022 and 2021, the Company did not have any related party transactions other than with wholly owned subsidiaries.

Notes to the company financial statements

continued

14 Subsidiary undertakings

The following entities are 100% owned with only ordinary shares in issue, unless otherwise stated. The country of incorporation matches the country in which the registered office/principal place of business is located.

Name of subsidiary undertaking	Registered office/principal place of business
Dongguan Arlec Electrical Products Co. Limited (capital contribution)	(1)
Shanghai Hongbian Electronics Co. Limited (capital contribution)	(2)
TT Electronics Integrated Manufacturing Services (Suzhou) Co., Ltd	(3)
Ying Si Ke Electrical Products Co. Limited (capital contribution)	(1)
TT Electronics SAS	(4)
TT Electronics GmbH	(5)
Stadium Asia Limited	(6)
STMC Limited	(6)
TT Electronics Srl	(7)
BI Technologies Corporation SDN BHD (ordinary and preference shares)	(8)
BI Technologies S.A. de C.V.	(9)
Optron de Mexico S.A. de C.V.	(10)
TT Electronics Asia Pte Ltd	(11)
TT Electronics Sweden AB	(12)
AB Connectors Limited	(13)
AB Electronic Components Limited	(14)
Abtest Limited [2]	(15)
Aero Stanrew Group Limited (ordinary and preference shares) [1,2]	(16)
Aero Stanrew Limited	(16)
Automotive Electronic Systems Limited [1]	(14)
BI Technologies Limited [2]	(14)
Commendshaw Limited [1]	(14)
Controls Direct Limited [2]	(14)
Crystalate Electronics Limited	(14)
Dale Electric International Limited [1,2]	(14)
Deltight Washers Limited [2]	(14)
Ferrus Power Limited [2]	(14)
Fox Industries Limited [2]	(14)
Hale End Holdings Limited [2]	(14)
Kingslo Limited [2]	(14)
KRP Power Source (UK) Limited [2]	(14)
Linton and Hirst Group Limited [2]	(14)
Midland Electronics Limited	(14)
MMG Linton and Hirst Limited [2]	(14)
Nulectrohms Limited [2]	(14)
Rodco Limited (60% owned) [1,2]	(14)
Roxspur Measurement & Control Limited	(14)
Semelab Limited [2]	(14)
Sensit Limited [2]	(14)
Stadium Electrical Holdings Limited [2]	(14)
Stadium Electronics Limited [2]	(14)
Stadium IGT Limited	(14)
Stadium Power Limited [2]	(14)

14 Subsidiary undertakings continued

Name of subsidiary undertaking	Registered office/principal place of business
Stadium United Wireless Limited [2]	(14)
Stadium Wireless Devices Limited [2]	(14)
Stadium Zirkon UK Limited [2]	(14)
Stontronics Limited [2]	(14)
The Brearley Group Limited [2]	(14)
TT Asia Holdings Limited	(14)
TT Automotive Electronics Limited [2]	(14)
TT Electronics Europe Limited [1,2]	(14)
TT Electronics Fairford Limited	(17)
TT Electronics Group Holdings Limited [1]	(14)
TT Electronics Holdco Limited	(14)
TT Electronics Integrated Manufacturing Services Limited	(15)
TT Electronics IoT Solutions Limited [1]	(14)
TT Electronics Power Solutions (UK) Limited	(14)
TT Group Limited [2]	(14)
TT Power Solutions Limited [2]	(14)
TTE Trustees Limited [1,2]	(14)
TTG Investments Limited [1]	(14)
TTG Nominees Limited [1,2]	(14)
TTG Pension Trustees Limited [1,2]	(14)
TTG Properties Limited [1]	(14)
Valuegolden Limited [2]	(14)
Welwyn Components Limited	(18)
Welwyn Electronics Limited [2]	(14)
Wolsey Comcare Limited [2]	(14)
Zirkon Holdings Limited [2]	(14)
AB Interconnect, Inc.	(19)
Apsco Holdings, Inc	(19)
BI Technologies Corporation	(19)
Cletronics N.A. Inc,	(20)
International Resistive Company Inc	(19)
International Resistive Company of Texas, LLC	(21)
Optek Technology Inc	(19)
Power Partners, Inc	(22)
Precision, Inc	(23)
Torotel, Inc	(24)
Torotel Products, Inc	(24)
TT Electronics Integrated Manufacturing Services, Inc	(25)
TT Electronics Power Solutions (US), Inc	(20)
TT Group Industries, Inc.	(19)

Notes to the company financial statements

continued

14 Subsidiary undertakings continued

(1) 4th Building, F Zone, Zheng Wei Science Park, Dongkeng Town, Dongguan City, Guangdong, China
(2) Room 404-A69, East of Building 1, 29 Jia Tai Road, China (Shanghai) Pilot Free Trade Zone, China
(3) 158-24 Hua Shan Road, Snd Suzhou, 215129, China
(4) 4 place Louis Armand, 75012 Paris, France
(5) Max-Lehner-Strasse 31, 85354, Freising, Germany
(6) Unit A, 3/F, Bamboos Centre, 52 Hung To Road, Kwun Tong, Kowloon, Hong Kong
(7) Via Santa Redegonda N. 11, Milano, Italy
(8) Lot 6.05, Level 6, KPMG tower, 8 First Avenue, Bandar Utama 47800 Petaling Jaya, Selangor, Darul Ehsan, Malaysia
(9) Ave Circulo de la Amistad No.102, Parque Industrial Mexicali IV, Mexico
(10) Ave Rio Bravo 1551-a, Parque Industrial Rio Bravo, CD. Juarez Chihuahua, Mexico
(11) 2 Shenton Way, #18-01 SGX Centre 1, 068804, Singapore
(12) Gullfossgatan 3, 164 40 Kista, Sweden
(13) Abercynon, Mountain Ash, Rhondda Cynon Taff, CF45 4SF, Wales
(14) Fourth Floor, St Andrews House, West Street, Woking, Surrey, GU21 6EB, England
(15) Unit 1, Tregwilym Industrial Estate, Rogerstone, Newport, Gwent, NP10 9YA, Wales
(16) Unit 1 Gratton Way, Roundswell Business Park, Barnstaple, Devon, EX31 3AR, England
(17) London Road, Fairford, Gloucestershire, GL7 4DS, England
(18) Welwyn Electronics Park, Bedlington, Northumberland, NE22 7AA, England
(19) Corporation Service Company, 251 Little Falls Drive, Wilmington, DE 19808, United States
(20) CT Corporation System, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801, United States
(21) Corporation Service Company, 211 East 7th Street, Suite 620, Austin, TX 78701-3218, United States
(22) 155 Northboro Road, Suite #9, Southborough, MA 01772, USA
(23) 1700 Freeway Boulevard, Minneapolis, MN 55430, United States
(24) 520 N Rogers Road, Olathe, KS66062, United States
(25) CT Corporation System, 4400 Easton Commons Way, Suite 125, Columbus, OH43219, United States

1 Shares held directly by TT Electronics plc
2 Dormant UK subsidiary

UK Registered Subsidiaries exempt from audit

The following UK subsidiaries will take advantage of the audit exemption set out within section 479A of the Companies Act 2006 for the year ended 31 December 2022. The following entities are 100% owned and have a single class of ordinary share with a nominal value of £1, unless otherwise stated. All subsidiaries below are registered at Fourth floor, St Andrews House, West Street, Woking GU21 6EB, United Kingdom.

Name of subsidiary undertaking	Company number
AB Electronic Components Limited	00578077
Automotive Electronic Systems Limited [1]	01518303
Crystalate Electronics Limited	00691591
Midland Electronics Limited	00675333
TT Asia Holdings Limited	02464046
TT Electronics Group Holdings Limited [1,2]	00299275

1 Shares held directly by TT Electronics plc
2 Single class of ordinary share with a nominal value of £0.25.

Five year record

£million (unless otherwise stated)	**2022**	2021	2020	2019 [2,3]	2018 [2]
Revenue	**617.0**	476.2	431.8	478.2	429.5
Operating profit	**(3.4)**	19.3	6.6	16.9	16.5
Adjusted operating profit [1]	**47.1**	34.8	27.5	38.1	33.4
Profit before taxation [2]	**(10.1)**	16.0	2.9	13.2	14.6
Adjusted profit before taxation [1,2]	**40.4**	31.5	23.8	34.4	31.5
Earnings (continuing) [2]	**(13.2)**	12.8	1.3	12.4	13.0
Adjusted earnings [1,2]	**32.0**	25.3	19.5	29.0	26.2
Earnings per share – continuing (pence) [2]	**(7.5)**	7.3	0.8	76.0	8.0
Adjusted earnings per share (pence) [1,2]	**18.2**	14.5	11.7	17.8	16.2
Dividends – paid and proposed [5]	**11.1**	9.9	8.2	11.4	10.5
Dividend per share – paid and proposed (pence) [5]	**6.3**	5.6	4.7	7.0	6.5
Average number of shares in issue	**175.8**	174.8	166.5	163.1	161.8
Net (debt)/funds	**(138.4)**	(102.5)	(83.9)	(69.1)	(41.7)
Total equity [2,3]	**297.0**	330.0	298.0	268.0	280.1

1 Adjusted operating profit, profit before taxation, adjusted earnings and adjusted earnings per share exclude the impact of restructuring costs, asset impairments and acquisition and disposal related costs.
2 Results for 2017 have been re-presented for IFRS 15
3 Profit measures for 2019 and equity for 2019 and 2018 have been restated.
4 Equity for 2019 has been restated for an adjustment to the assessment of IFRS15.
5 2022 shows the cashflows/value of the proposed 2022 dividend. 2021 and before shows the cashflows/value of the actual dividends relating to that particular year.

Reconciliation of KPIs and non IFRS measures

continued

In accordance with the Guidelines on APMs issued by the European Securities and Markets Authority (ESMA), additional information is provided on the APMs used by the Group below.

To assist with the understanding of earnings trends, the Group has included within its financial statements APMs adjusted operating profit and other adjusted profit measures. The APMs used are not defined terms under IFRS and therefore may not be comparable to similar measures used by other companies. They are not intended to be a substitute for, or superior to, GAAP measures.

Management uses adjusted measures to assess the operating performance of the Group, having adjusted for specific items as detailed in note 7. They form the basis of internal management accounts and are used for decision making, including capital allocation, with a subset also forming the basis of internal incentive arrangements. By using adjusted measures in segmental reporting, this enables readers of the financial statements to recognise how incentive performance is targeted. Adjusted measures are also presented in this announcement because the Directors believe they provide additional useful information to shareholders on comparable trends over time. Finally, this presentation allows for separate disclosure and specific narrative to be included concerning the adjusting items; this helps to ensure performance in any one year can be more clearly understood by the user of the financial statements.

Income statement measures:

Alternative Performance Measure	Closest equivalent statutory measure	Note reference to reconciliation to statutory measure	Definition and purpose
Adjusted operating profit	Operating profit	Adjusting items as disclosed in note 7	Adjusted operating profit has been defined as operating profit from continuing operations excluding the impacts of significant restructuring programmes, significant one-off items including property disposals, impairment charges significant in nature and/or value, business acquisition, integration, and divestment related activity; and the amortisation of intangible assets recognised on acquisition. Acquisition and disposal related items include the writing off of the pre-acquisition profit element of inventory written up on acquisition, other direct costs associated with business combinations and adjustments to contingent consideration related to acquired businesses. Restructuring includes significant changes in footprint (including movement of production facilities) and significant costs of management changes. To provide a measure of the operating profits excluding the impacts of significant items such as restructuring or acquisition related activity and other items such as amortisation of intangibles which may not be present in peer companies which have grown organically.
Adjusted operating margin	Operating profit margin	Adjusting items as disclosed in note 7	Adjusted operating profit as a percentage of revenue. To provide a measure of the operating profits excluding the impacts of significant items such as restructuring or acquisition related activity and other items such as amortisation of intangibles which may not be present in peer companies which have grown organically.
Adjusted earnings per share	Earnings per share	See note 10 for the reconciliation and calculation of adjusted earnings per share	The profit for the year attributable to the owners of the Group adjusted to exclude the items not included within adjusted operating profit divided by the weighted average number of shares in issue during the year. To provide a measure of Earnings per Share excluding the impacts of significant items such as restructuring or acquisition related activity and other items such as amortisation of intangibles which may not be present in peer companies which have grown organically.

Income statement measures continued:

Alternative Performance Measure	Closest equivalent statutory measure	Note reference to reconciliation to statutory measure	Definition and purpose
Adjusted diluted earnings per share	Diluted earnings per share	See note 10 for the reconciliation and calculation of adjusted diluted earnings per share	The profit for the year attributable to the owners of the Group adjusted to exclude the items not included within adjusted operating profit divided by the weighted average number of shares in issue during the year, adjusted for the effects of any potentially dilutive options. To provide a measure of Earnings per Share excluding the impacts of significant items such as restructuring or acquisition related activity and other items such as amortisation of intangibles which may not be present in peer companies which have grown organically.
Organic revenue	Revenue	See note APM 1	This is the percentage change in revenue from continuing operations in the current year compared to the prior year, excluding the effects of currency movements, acquisitions and disposals. This measures the underlying growth or decline of the business. To provide a comparable view of the revenue growth of the business from period to period excluding acquisition and foreign exchange impacts.
Adjusted effective tax charge	Effective tax charge	See note APM 2	Tax charge adjusted to exclude tax on items not included within adjusted operating profit divided by adjusted profit before tax, which is also adjusted to exclude the items not included within adjusted operating profit. To provide a tax rate which excludes the impact of adjusting items such as restructuring or acquisition related activity and other items such as amortisation of intangibles which may not be present in peer companies which have grown organically.
Return on invested capital	None	See note APM 3	Adjusted operating profit for the year divided by average invested capital for the year. Average invested capital excludes pensions, provisions, tax balances, derivative financial assets and liabilities, cash and borrowings and is calculated at average rates taking twelve monthly balances. This measures how efficiently assets are utilised to generate returns with the target of exceeding the cost to hold the assets.

Reconciliation of KPIs and non IFRS measures

continued

Statement of financial position measures:

Alternative Performance Measure	Closest equivalent statutory measure	Note reference to reconciliation to statutory measure	Definition and purpose
Net debt	Cash and cash equivalents less borrowings and lease liabilities	Reconciliation of net cash flow to movement in net debt (note 27)	Net debt comprises cash and cash equivalents and borrowings including lease liabilities. This is additional information provided which may be helpful to the user in understanding the liquidity and financial structure of the business.
Leverage (bank covenant)	Cash and cash equivalents less borrowings	N/A	Leverage is the net debt defined as per the banking covenants (net debt (excluding lease liabilities) adjusted for certain terms as per the bank covenants) divided by EBITDA excluding items removed from adjusted profit and further adjusted for certain terms as per the bank covenants. Provides additional information over the Group's financial covenants to assist with assessing solvency and liquidity.
Net capital and development expenditure (net capex)	None	See note APM 4	Purchase of property, plant and equipment net of government grants (excluding property disposals), purchase of intangibles (excluding acquisition intangibles) and capitalised development. A measure of the Group's investments in capex and development to support longer term growth.
Dividend per share	Dividend per share	Not applicable	Amounts payable by dividend in terms of pence per share. Provides the dividend return per share to shareholders.

Statement of cash flows measures:

Alternative Performance Measure	Closest equivalent statutory measure	Note reference to reconciliation to statutory measure	Definition and purpose
Adjusted operating cash flow	Operating cash flow	See note APM 5	Adjusted operating profit, excluding depreciation of property, plant and equipment (depreciation of right-of-use assets is not excluded) and amortisation of intangible assets (amortisation of acquisition intangibles is not excluded) less working capital and other non-cash movements. An additional measure to help understand the Group's operating cash generation.
Adjusted operating cash flow post capex	Operating cash flow	See note APM 6	Adjusted operating cash flow less net capital and development expenditure. An additional measure to help understand the Group's operating cash generation after the deduction of capex.
Working capital cashflow	Cashflow – inventories payables, provisions and receivables	See note APM 7	Working capital comprises of three statutory cashflow figures: (increase)/decrease in inventories, increase/(decrease) in payables and provisions, and (increase)/decrease in receivables. To provide users a measure of how effectively the group is managing its working capital and the resultant impact on liquidity.
Free cash flow	Net increase/ decrease in cash and cash equivalents	See note APM 8	Free cash flow represents cash generated from trading after all costs including restructuring, pension contributions, tax and interest payments. Cashflows to settle share based payment schemes are excluded. Free cash flow provides a measure of how successful the company is in creating cash during the period which is then able to be used by the Group at its discretion.
Cash conversion	None	See note APM 9	Adjusted operating cash flow post capex (less any property disposals which were part of restructuring programmes) divided by adjusted operating profit. Cash conversion measures how effectively we convert profit into cash and tracks the management of our working capital and capital expenditure.
R&D cash spend as a percentage of revenue	None	See note APM 10	R&D cash spend and R&D investment as a percentage of revenue excludes Global Manufacturing Solutions which is a manufacturing services business and therefore has no R&D. To provide a measure of the company's expenditure on R&D relative to its overall size which may be helpful in considering the Group's longer term investment in future product pipeline.

Reconciliation of KPIs and non IFRS measures

continued

Non-financial measures:

Alternative Performance Measure	**Closest equivalent statutory measure**	**Note reference to reconciliation to statutory measure**	**Definition**
Employee engagement	Not applicable	Not applicable	We use our employee survey to measure how our employees feel about working in TT using a scale of 1 (low) to 7 (high) against eight factors (as surveyed by Best Companies Ltd). A company is awarded between zero and three stars based on the employee feedback. Provides a measure of employee sentiment and engagement.
Safety performance	Not applicable	Not applicable	Safety performance is defined as the number of occupational injuries resulting in three or more days' absence per 1,000 employees. This KPI allows us to compare our performance with that of our peers. We use a UK benchmark published by the Health and Safety Executive and apply this to all our facilities worldwide, reflecting our commitment to raising standards globally. Provides users additional information about the Group's commitment and achievements in the area of health and safety.

APM 1 – Organic revenue:

£million	**Power and Connectivity**	**Global Manufacturing Solutions**	**Sensors and Specialist Components**	**Total**
2022 revenue	154.2	323.0	139.8	**617.0**
Acquisitions	7.9	–	–	**7.9**
2022 revenue (excluding acquisitions)	146.3	323.0	139.8	**609.1**
2021 revenue	140.2	220.1	115.9	**476.2**
Foreign exchange impact	7.2	15.4	8.9	**31.5**
2021 revenue at 2022 exchange rates	147.4	235.5	124.8	**507.7**
Organic revenue increase (%)	**(1%)**	**37%**	**12%**	**20%**

£million	Power and Connectivity	Global Manufacturing Solutions	Sensors and Specialist Components	Total
2021 revenue	140.2	220.1	115.9	476.2
Acquisitions	15.2	–	–	15.2
2021 revenue (excluding acquisitions)	125.0	220.1	115.9	461.0
2020 revenue	125.1	197.5	109.2	431.8
Foreign exchange impact	(3.4)	(4.1)	(5.2)	(12.7)
2020 revenue at 2021 exchange rates	121.7	193.4	104.0	419.1
Organic revenue increase (%)	3%	14%	11%	10%

APM 2 – Effective tax charge:

£million	2022	2021
Adjusted operating profit	**47.1**	34.8
Net interest	**(6.7)**	(3.3)
Adjusted profit before tax	**40.4**	31.5
Adjusted tax	**(8.4)**	(6.2)
Adjusted effective tax rate	**20.8%**	19.6%

APM 3 – Return on invested capital:

£million	2022	2021
Adjusted operating profit	**47.1**	34.8
Average invested capital	**448.6**	382.4
Return on invested capital	**10.5%**	9.1%

APM 4 – Net capital and development expenditure (net capex):

£million	2022	2021
Purchase of property, plant and equipment	**(11.4)**	(14.6)
Proceeds from sale of investment property, plant and equipment and capital grants received	**0.3**	9.3
Capitalised development expenditure	**(2.3)**	(1.9)
Purchase of other intangibles	**(0.6)**	(0.5)
Net capital and development expenditure	**(14.0)**	(7.7)

APM 5 – Adjusted operating cash flow:

£million	2022	2021
Adjusted operating profit	**47.1**	34.8
Adjustments for:		
Depreciation	**13.9**	13.6
Amortisation of intangible assets	**2.2**	2.5
Share based payment expense	**4.8**	3.8
Other items	**0.5**	1.1
Increase in inventories	**(40.4)**	(42.6)
Increase in receivables	**(26.3)**	(15.7)
Increase in payables and provisions	**27.9**	42.0
Adjusted operating cash flow	**29.7**	39.5
Special payments to pension funds	**–**	(5.5)
Restructuring and acquisition related costs	**(11.1)**	(15.0)
Net cash generated from operations	**18.6**	19.0
Net income taxes paid	**(5.9)**	(4.7)
Net cash flow from operating activities	**12.7**	14.3

Reconciliation of KPIs and non IFRS measures

continued

APM 6 – Adjusted operating cash flow post capex:

£million	2022	2021
Adjusted operating cash flow	**29.7**	39.5
Purchase of property, plant and equipment	**(11.4)**	(14.6)
Proceeds from sale of property, plant and equipment and government grants received	**0.3**	9.3
Capitalised development expenditure	**(2.3)**	(1.9)
Purchase of other intangibles	**(0.6)**	(0.5)
Adjusted operating cash flow post capex	**15.7**	31.8

APM 7 – Working capital cashflow:

£million	2022	2021
Increase in inventories	**(40.4)**	(42.6)
Increase in receivables	**(26.3)**	(15.7)
Increase in payables and provisions	**27.9**	42.0
Items reported within other items in the statutory cashflow:		
Increase in provisions over trade receivables	**–**	1.6
Working capital cashflow	**(38.8)**	(14.7)

APM 8 – Free cash flow:

£million	2022	2021
Net cash flow from operating activities	**12.7**	14.3
Net cash flow from investing activities	**(22.3)**	(8.2)
Add back: Acquisition of business	**8.3**	0.5
Payment of lease liabilities	**(4.3)**	(3.9)
Interest paid	**(7.5)**	(4.0)
Free cash flow	**(13.1)**	(1.3)

APM 9 – Cash conversion:

£million	2022	2021
Adjusted operating profit	**47.1**	34.8
Adjusted operating cash flow post capex	**15.7**	31.8
Exclude: Property disposal proceeds as part of restructuring programmes	**–**	(9.1)
Adjusted operating cash flow post capex and excluding property disposals	**15.7**	22.7
Cash conversion	**33%**	65%

APM 10 – R&D cash spend as a percentage of revenue:

£million	2022	2021
Revenue (excluding GMS)	**294.0**	256.1
R&D cash spend	**11.0**	11.4
R&D cash spend as a percentage of revenue	**3.7%**	4.5%

SHAREHOLDER INFORMATION

Ex-dividend date for final dividend
27 April 2023

Record date for final dividend
28 April 2023

AGM and trading update
9 May 2023

Final dividend payment
26 May 2023

2022 half-year results
3 August 2023

Preliminary announcement of 2023 results
March 2024

Annual Report 2023
April 2024

DIVIDENDS

See page 32 for details on the dividend amount per share.

ANNUAL GENERAL MEETING (AGM)

The next AGM will be held on 9 May 2023 at 4.00 p.m. Details of the AGM procedure for 2023 are set out in detail in the enclosed Notice of Annual General Meeting.

ARTICLES OF ASSOCIATION

The Company's Articles of Association may only be amended by special resolution approved at a general meeting of the shareholders.

SHARE CAPITAL

The Company's issued share capital comprises a single class of share capital divided into ordinary shares of 25 pence each. All issued shares are fully paid. The share capital during the year is shown in Note 23 to the consolidated financial statements. The rights and obligations attaching to the Company's ordinary shares are set out in the Company's Articles of Association, a copy of which can be obtained from Companies House in the United Kingdom or by writing to the Group General Counsel and Company Secretary. Subject to applicable statutes, shares may be issued with such rights and restrictions as the Company may decide by ordinary resolution, or (if there is no such resolution or so far as it does not make specific provision) as the Board may decide.

Holders of ordinary shares are entitled to speak at general meetings of the Company, to appoint one or more proxies and, if they are corporations, to appoint corporate representatives and to exercise voting rights. Holders of ordinary shares may also receive a dividend, and on a liquidation may share in the assets of the Company. In addition, holders of ordinary shares are entitled to receive the Company's Annual Report and Accounts. Subject to meeting certain thresholds, holders of ordinary shares may require a general meeting of the Company to be held or the proposal of resolutions at Annual General Meetings.

VOTING RIGHTS AND RESTRICTIONS ON TRANSFER OF SHARES

On a show of hands at a general meeting of the Company, every holder of ordinary shares present in person or by proxy, and entitled to vote, has one vote and on a poll, every member present in person or by proxy, and entitled to vote, has one vote for every ordinary share held. You can find further details regarding voting at the Annual General Meeting in the Notice of the Annual General Meeting which accompanies this document. None of the ordinary shares carries any special rights with regard to control of the Company. Electronic and paper proxy appointments and voting instructions must be received by the Company's Registrars not later than 48 hours before a general meeting. A shareholder can lose their entitlement to vote at a general meeting where that shareholder has been served with a disclosure notice and has failed to provide the Company with information concerning interests in those shares. The Directors may refuse to register a transfer of a certificated share which is not fully paid, provided the refusal does not prevent dealings in shares in the Company from taking place on an open and proper basis.

The Directors may also refuse to register a transfer of a certificated share unless the instrument of transfer: (i) is lodged, duly stamped (if stampable), at the registered office of the Company or any other place decided by the Directors accompanied by the certificate for the share to which it relates and/or such other evidence as the Directors may reasonably require to show the right of the transferor to make the transfer; (ii) is in respect of only one class of shares; (iii) is in favour of a person who is not a minor, bankrupt or a person in respect of whom an order has been made on the grounds that such person is suffering from a mental disorder or is otherwise incapable of managing their affairs; or (iv) is in favour of not more than four transferees.

Transfers of uncertificated shares must be carried out using CREST and the Directors can refuse to register a transfer of an uncertificated share in accordance with the regulations governing the operation of CREST.

The Directors may decide to suspend the registration of transfers for up to 30 days a year, by closing the register of shareholders. The Directors cannot suspend the registration of transfers of any uncertificated shares without obtaining consent from CREST.

There are no other restrictions on the transfer of ordinary shares in the Company except: certain restrictions may from time to time be imposed by laws and regulations (for example, insider trading laws or the Market Abuse Regulations 2015); pursuant to the Company's share dealing code whereby the Directors and certain employees of the Group require approval to deal in the Company's shares; and where a shareholder with at least a 0.25 per cent 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.

The Company is not aware of any agreements between shareholders that may result in restrictions on the transfer of ordinary shares or on voting rights.

SHARE DEALING SERVICES

Shareview Dealing is a telephone and internet service provided by Equiniti. It offers a simple and convenient way of buying and selling TT Electronics plc shares.

Log on to www.shareview.co.uk/dealing or call 03456 037 037 between 8.00 a.m. and 4.30 p.m., Monday to Friday (except bank holidays), for more information about this service and for details of the rates and charges. Please note that telephone lines remain open until 6.00 p.m. for enquiries.

A daily postal dealing service is also available and a form, together with terms and conditions, can be obtained by calling 0371 384 2248*. Commission is 1.90 per cent with a minimum charge of £70.

SHAREGIFT

ShareGift is a charity share donation scheme for shareholders, administered by The Orr Mackintosh Foundation. It is especially for those who may wish to dispose of a small parcel of shares whose value makes it uneconomical to sell on a commission basis. Further information can be obtained at www.sharegift.org or from Equiniti.

MULTIPLE ACCOUNTS ON THE SHAREHOLDER REGISTER

If you have received two or more copies of this document, this means that there is more than one account in your name on the shareholder register. This may be caused by either your name or address appearing on each account in a slightly different way. For security reasons, the Registrars will not amalgamate the accounts without your written consent.

If you would like any multiple accounts combined into one account, please write to Equiniti Limited at the address given on this page.

SUBSTANTIAL SHAREHOLDING NOTIFICATIONS

The Company had been notified of the following voting rights attaching to TT Electronics plc shares in accordance with the Disclosure and Transparency Rules at 6 March 2023 and 31 December 2022.

So far as has been ascertained, no other person or corporation holds or is beneficially interested in any substantial part of the share capital of the Company.

SHAREHOLDER ENQUIRIES

Equiniti maintains the register of members of the Company. If you have any queries concerning your shareholding, or if any of your details change, please contact the Registrars:

Equiniti Limited
Aspect House
Spencer Road
Lancing
West Sussex
BN99 6DA

Telephone 0371 384 2396* (or +44 121 415 7047 if calling from outside the United Kingdom)

Equiniti also offers a range of shareholder information on-line at www.shareview.co.uk

WEBSITE

Information on the Group's financial performance, activities and share price is available at www.ttelectronics.com

* Lines are open from 8.30 a.m. to 5.30 p.m., Monday to Friday (except bank holidays).

	6 March 2023		31 December 2022	
	Number	%	Number	%
BlackRock, Inc	16,966,544	9.7	16,966,544	9.7
Aberforth Partners LLP	14,832,779	9.1	14,832,779	9.1
FIL Limited	9,037,571	5.1	9,037,571	5.1
Bennbridge Limited	8,984,103	4.9	8,984,103	5.1
Schroders plc	8,942,311	5.1	8,942,311	5.1
Slater Investments Ltd	8,915,000	5.1	8,915,000	5.1
M&G plc	8,764,166	5.0	8,764,166	5.0
Polar Capital LLP	8,539,130	4.9	8,539,130	4.9
Aberdeen Asset Management Ltd	7,835,077	4.8	7,835,077	4.8
NN Group N.V.	7,815,000	4.8	7,815,000	4.8
Franklin Templeton Management Ltd	7,590,000	4.6	7,590,000	4.6

GLOSSARY

Alternating Current	AC
Annual General Meeting	AGM
Alternative Performance Measure	APM
A TT employee performance initiative	BE Inspired
Department for Business, Energy & Industrial Strategy	BEIS
Basis point	bps
Command, Control, Communications, Computers, Integration, Surveillance and Reconnaissance	C4ISR
Compound annual growth rate	CAGR
Carbon Disclosure Project	CDP
Chief Operating Officer	COO
Chief Executive Officer	CEO
Chief Financial Officer	CFO
Cash Generating Unit	CGU
Consumer Prices Index	CPI
Certificateless Registry for Electronic Share Transfer	CREST
Defined Benefit	DB
Direct Current	DC
Digital Flight Control System	DFCS
Deferred Share Benefit Plan	DSBP
Employee Assistance Programme	EAP
Earnings Before Interest, Taxes, Depreciation and Amortisation	EBITDA
Employee Benefit Trust	EBT
Equality, Diversity and Inclusion	ED&I
Electronics Industry Citizenship Coalition	EICC
Executive Leadership Team	ELT
Electro-Magnetic	EM
Earnings Per Share	EPS
Enterprise Resource Planning	ERP
Environmental, Social and Governance	ESG
European Union	EU
Fair, Balanced and Understandable	FBU
Financial Conduct Authority	FCA
Financial Reporting Council	FRC
Financial Reporting Standards	FRS
Financial Times Stock Exchange	FTSE
Foreign Exchange	FX
Financial Year	FY
Generally Accepted Accounting Principles	GAAP
Pounds Sterling (£)	GBP
Gross Domestic Product	GDP
Greenhouse Gas	GHG
Global Manufacturing Solutions	GMS
Global Positioning System	GPS
Health and safety	H&S
Half (year)	H
Human Resources	HR
Health Safety & Environmental	HSE
International Accounting Standards	IAS
International Accounting Standards Board	IASB
International Financial Reporting Standards	IFRS
Internet of Things	IoT
Intellectual Property	IP
Investor Relations	IR
International Organisation for Standardisation	ISO
Information Technology	IT
Key Performance Indicator	KPI
Light Emitting Diode	LED
London Interbank Offered Rate	LIBOR
Limited liability partnership	LLP
Long-Term Incentive	LTI
Long-Term Incentive Plan	LTIP
Mergers and Acquisitions	M&A
Million	M/m
Magnetic Resonance Imaging	MRI
Morgan Stanley Capital International	MSCI
Megawatt-hour	MWh
Non-Executive Director	NED
Net Promoter Score	NPS
Organisation for Economic Co-operation and Development	OECD
Original Equipment Manufacturer	OEM
Power & Connectivity	P&C
Profit Before Tax	PBT
Printed Circuit Board Assembly	PCBA
Public Limited Company	PLC
Purchasing Managers' Index	PMI
The TT Remuneration Policy	Policy
Private Placement	PP
People, Social, Environmental and Ethics	PSEE
Quarter (year)	Q
Questions & Answers	Q&A
Research and Development	R&D
Responsible Business Alliance	RBA
Revolving Credit Facility	RCF
Chinese Yuan	RMB
Regulatory News Service	RNS
Return On Capital Employed	ROCE
Return on Invested Capital	ROIC
Retail Price Index	RPI
Restricted Share Plan	RSP
Sensors & Specialist Components	S&SC
Save As You Earn	SAYE
Science Based Targets initiative	SBTi
Streamlined Energy and Carbon Reporting	SECR
Senior Independent Director	SID
Sales, Inventory and Operations Planning	SIOP
Senior Leadership Team	SLT
Short-Term Incentive Plan	STIP
Science, Technology, Engineering and Mathematics	STEM
Size, Weight, Power and Cost	SWaP-C
Tonne	t
Task Force on Climate-related Financial Disclosures	TFCD
The Board of Directors of TT Electronics plc	the Board
UK Corporate Governance Code	the Code
TT Electronics plc	the Company
The Directors of TT Electronics plc	the Directors
TT Electronics plc and its subsidiaries	the Group
Total Shareholder Return	TSR
TT Electronics plc	TT
TT's values	TT Way
United Kingdom of Great Britain and Northern Ireland	UK
United Nations	UN
Underlying Earnings Before Interest, Taxes, Depreciation and Amortisation	Underlying EBITDA
United States of America	US/USA
Weighted Average Cost of Capital	WACC

CONRAN DESIGN GROUP

FSC
www.fsc.org
MIX
Paper from responsible sources
FSC® C016486

The material used in this Report is Heaven 42. Both the paper manufacturing mill and the printer are registered to the Environmental Management System ISO14001 and are Forest Stewardship Council® (FSC®) chain-of custody certified.

The Forest Stewardship Council® is dedicated to the promotion of responsible forest management worldwide and the FSC® label on this product ensures responsible use of the world's forest resources.

This Report is recyclable and Bio-degradable'

TT Electronics plc

Fourth Floor
St Andrews House
West Street
Woking
Surrey
GU21 6EB

Tel +44(0) 1932 825300
Fax +44(0) 1932 836450

For more information on
our business please visit
www.ttelectronics.com