ST Engineering

ANNUAL REPORT 2022

OUR CORPORATE PURPOSE

Harness technology and innovation to enable a more secure and sustainable world

It is the unifying purpose that aligns everything we do.

OUR GROUP ASPIRATION

Become a global technology, defence and engineering powerhouse

It is the singular winning long-term goal that all our businesses follow.

OUR CORE VALUES

Our Core Values guide every aspect of our business and are embedded in our culture – from the people we hire, to the way we work with each other and how we engage our partners and customers.

Integrity

Value Creation

Commitment

Courage

Compassion

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ST Engineering is a global technology, defence and engineering group with a diverse portfolio of businesses across the aerospace, smart city, defence and public security segments.

The Group harnesses technology and innovation to solve real-world problems, enabling a more secure and sustainable world.

Headquartered in Singapore, we employ about 25,000 people across our network of subsidiaries and associated companies in Asia, Europe, the Middle East and the U.S., serving customers in more than 100 countries.

We rank among the largest companies listed on the Singapore Exchange and are a component stock of the FTSE Straits Times Index, Dow Jones Sustainability Asia Pacific Index, iEdge SG ESG Transparency Index and iEdge SG ESG Leaders Index.

FINANCIAL HIGHLIGHTS

ORDER BOOK

+19%

$23.0b

2021: $19.3b

REVENUE

+17%

$9.0b

2021: $7.7b

EBITDA

+17%

$1,252.0m

2021: $1,071.7m

PROFIT BEFORE TAX

-6%

$597.5m

2021: $637.6m

NET PROFIT

-6%

$535.0m

2021: $570.5m

EARNINGS PER SHARE

-6%

17.18¢

2021: 18.30¢

DIVIDENDS PER SHARE

+7%

16.0¢

2021: 15.0¢

TOTAL SHAREHOLDER RETURNS

NM

-4.7%

2021: 2.4%

NM: not meaningful

RETURN ON EQUITY

-6%

22.3%

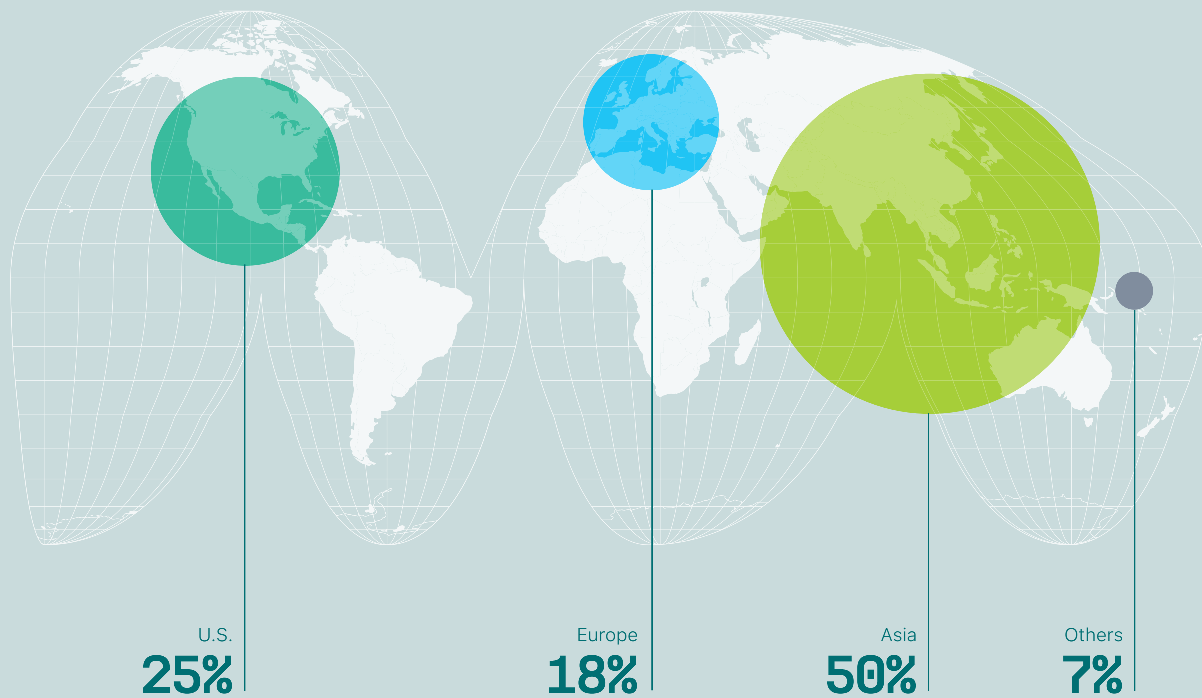
2021: 23.6%

REVENUE BY TYPE* ($b)

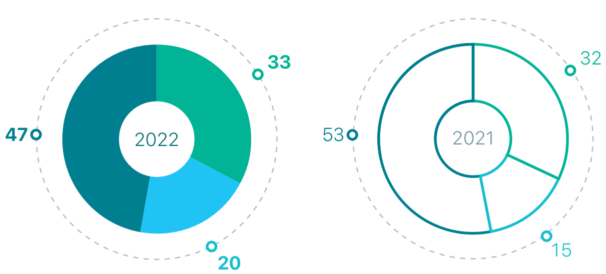
	Commercial	Defence
2022	6.0	3.0
2021	4.8	2.9

* Refers to revenue by products and services type.

REVENUE BY CUSTOMER LOCATIONS

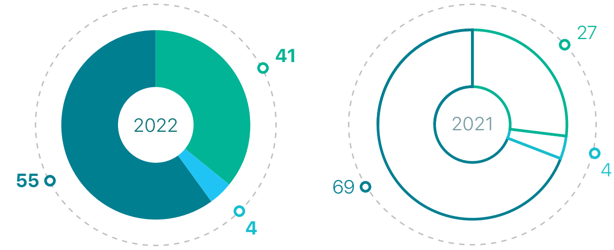


REVENUE BY SEGMENT (%)



	2022 ($m)	2021 ($m)
Commercial Aerospace	2,991	2,465
Urban Solutions & Satcom	1,772	1,191
Defence & Public Security	4,272	4,038
	$9,035m	$7,693m

EBIT BY SEGMENT (%)



	2022 ($m)	2021 ($m)
Commercial Aerospace	300.9	181.9
Urban Solutions & Satcom	29.2	25.8
Defence & Public Security	405.0	466.0
	$735.1m	$673.6m

Amounts may not add to totals shown due to rounding.

LETTER TO SHAREHOLDERS

KWA CHONG SENG
Chairman
Non-Executive Independent Director

VINCENT CHONG SY FENG
Group President & CEO
Executive Director

...our strategy for achieving sustainable growth is on track given our achievements in recent years.

Dear Shareholders

2022 was a year marked by considerable challenges but also significant opportunities. Even as much of the world recovered from the COVID pandemic, geopolitical stability was shaken by the conflict in Ukraine. Businesses grappled with energy price volatility, higher inflation, supply chain disruptions, global chip shortages and rising interest rates.

In such an environment, while we were cautious because of the short-term market outlook, we continued to take the long view. Ever since we embarked on our journey to transform ST Engineering, the Board and management team have demonstrated our commitment to making measured and sound decisions — reinforced by a willingness to take calculated and calibrated risks — to achieve our strategic long-term objectives.

At Investor Day 2018, we unveiled our plans to seek growth in selected domains while streamlining our portfolio, and at Investor Day 2021, we refreshed our five-year (2022-2026) mid-term targets to place the Group on a clear path forward in a continuously evolving world, post-COVID. Our aim is that by 2026 (using 2020 as the base year), we will have grown our revenue at a CAGR of two to three times global GDP growth rate, which would translate to a Group revenue of more than $11b by the end of the five-year plan, with net profits expected to grow in tandem. By 2026, we expect annual revenue from our Commercial Aerospace segment to exceed $3.5b, and annual revenue of our Smart City business to more than double to $3.5b. In addition, we expect that the annual revenue from our digital business — comprising the Cloud, AI Analytics and Cyber businesses — to triple to more than $500m.

We are confident that our strategy for achieving sustainable growth is on track given our achievements in recent years, especially our resilience against the COVID pandemic. Our results speak for themselves. In 2022, Group revenue was $9.0b while Group EBIT and Group Net Profit were $735m and $535m respectively. Between 2020 (the start of the pandemic) and 2022, Group revenue grew 26%, while our underlying operating performance (excluding government support) at Group EBIT and Group Net Profit levels was three times as strong. This recovery is significant given that more than 40% of our business was directly and negatively impacted by the pandemic. We closed 2022 with total contract value of $13.1b as all business segments maintained good contract win momentum, and a Group order book of $23b, which was 19% higher than the prior year and 50% stronger than when we went into 2020 at the start of COVID-19. Our robust order book, a leading indicator of growth, points to stronger business activities across all our segments. It also reflects a sharper focus on our customers, enabled by a more effective organisation structure put in place two years ago.

We closed 2022 with a Group order book of $23b...50% stronger than when we went into 2020 at the start of COVID-19.

SIGNIFICANT HIGHLIGHTS IN 2022

Highlights include the completion of the acquisition of TransCore, and major contract wins in all business segments, including international defence business which gained traction in the Middle East. Our Airbus Passenger-to-Freighter (P2F) conversion programme continued to book new orders and improved its gross profit margin as new conversion sites mature. At the same time, we have also divested ourselves of businesses that no longer fit our long-term strategic objectives, such as the U.S. Marine business. These achievements are important milestones towards our 2026 goals.

Stronger Smart Mobility business. We completed the acquisition of TransCore in mid-March 2022 and immediately focused on transitioning the business into the Group. We are pleased to report that, as planned, our investment in TransCore turned cash flow positive at the close of 2022, and we expect this acquisition to be earnings accretive to the Group from its second year.

TransCore's steadfast focus on customer excellence ensured continuity in project execution and strong contract wins as demonstrated by the significant contracts it secured in late 2022 to modernise the tolling infrastructure in New Jersey. We plan to grow the TransCore business outside of the U.S., bringing its strengths in design and build as well as operations and maintenance of end-to-end tolling solutions, into

LETTER TO SHAREHOLDERS

Southeast Asia, leveraging our strong track record built over the years in providing a strong suite of transportation solutions in these cities.

Beyond TransCore, our Smart Mobility business has been winning contracts for landmark projects around the world. Headlining our wins in 2022 was the contract for the new Kaohsiung MRT Yellow Line in Taiwan, where we will provide turnkey rail services and serve as overall project management and systems integration lead as part of a consortium with Siemens Mobility and Stadler Rail.

These developments bring us closer to becoming a market leader in Smart Mobility and will help us to build up our position in the Smart City space.

Airbus P2F conversion business takes off. According to IATA, 2022 was one of the strongest years for the air cargo industry. Unsurprisingly then, it was a big year for our Airbus P2F conversion business. At the programme level, we also turned gross profit margin positive in the last quarter of 2022, a significant milestone.

We completed our family of Airbus converted freighters solution suite when we redelivered our first freighter based on our A320P2F programme in July 2022. Other platforms within the family — the A330-300P2F, A330-200P2F and A321P2F — were redelivered in 2017, 2018 and 2020 respectively. Conversion slots for our A320/321P2F and A330P2F are fully booked through 2026.

Freighter conversion is our core competency, and we have invested in the Airbus P2F conversion capability and business well before COVID-19 expecting it to be profitable over the long run. While pent-up demand from the COVID pandemic may eventually subside, fundamental demand is still strong as freighter capacity planning by freighter airlines is long-term in nature, riding over multiple economic cycles.

This is also the reason we have increased our conversion capacity across our global network by adding Shanghai and Mobile, Alabama to our conversion sites in San Antonio, Texas; Dresden, and Singapore. To meet strong demand, we are collaborating with Turkish Technic and Ameco as third-party conversion houses to provide conversion services for our A330P2F programme. At the time of writing this letter, we announced our intent to collaborate with Sichuan Haite Hi-Tech for it to carry out conversions for our A321P2F programme.

These developments augur well for our Commercial Aerospace business, which is well on its way to achieving our 2026 target of more than $700m of annual revenue from the freighter conversion business.

Disciplined portfolio management continues. After a thorough review, we divested our U.S. Marine business, following years of challenges and losses in operating the shipbuilding and ship/rig repair businesses despite significant efforts to turn them around. The divestment enabled us to avoid future losses, while enabling management to focus on growth businesses.

In late 2022, we also decided to wind up our Autonomous (AV) Bus unit that was started in late 2015. We still firmly believe that autonomous buses are closer to being commercialised compared to other types of autonomous vehicles. The business needs are evident and the path to reaching the required levels of performance are also better known and more attainable. While we have made considerable technological progress, there are still technical and operational milestones to be reached. As the financial resources needed for this continuing effort are significant, after careful evaluation, we decided to withdraw from further AV bus development.

Our robust order book, a leading indicator of growth, points to stronger business activities...

Hence, future capex needed for this wound-up AV Bus business, and that of the U.S. Marine business will be avoided. In the six years since 2016 when we started our portfolio rationalisation, we have divested or closed 16 businesses including these two. As the operating environment for each line of business evolves, we will continue to prioritise businesses that play to our strengths, are attractive and are scalable. This way, our portfolio will be high-graded and will remain resilient in generating value for shareholders, customers and employees alike.

We will continue to prioritise businesses that play to our strengths, are attractive and are scalable.

Innovation culture to sustain technology and engineering core. As a technology, defence and engineering Group, we understand the need to sustain our technology and engineering core and we have committed to invest up to 5% of our annual revenue on R&D, of which up to 75% will be spent on digital technologies.

In addition, we continue to strengthen our engineering talent pool, attracting and recruiting the best in our journey to build a world-class team. For years, we have been driving innovation, establishing strategic collaborations, and sustaining an innovation culture that helps our engineers to expand their competencies as part of their professional development.

We have an integrated framework on how we think about innovation. This framework can take numerous forms and produces an array of outcomes. In providing a failure-tolerant space, our employees and engineers can better experiment, harness their creativity, and redefine boundaries. It is also in these spaces that we can unleash and take advantage of our collective genius.

In line with this, we have numerous innovation awards to recognise our employees and to encourage them to innovate. The *Best-of-Best Continuous Improvement Awards* seek to showcase the most outstanding improvements to work processes and drive cost efficiencies and excellence in whatever we do. The *InnoChamp Awards* recognise teams behind products, services, or business ideas that have been successfully launched within the last 12 months, while the *In.Vent Awards* focus on new venture innovations where teams are assessed on customer desirability, technical viability and business feasibility.

2022 FINANCIALS: STRONG RECOVERY IN UNDERLYING OPERATING PERFORMANCE

ST Engineering posted a 17% year-on-year (y-o-y) increase in Group revenue to $9.0b from $7.7b. Group EBIT improved 9% y-o-y to $735m from $674m despite a reduction of $203m in government support[1]. On a base operating performance (BOP) basis, excluding government support, energy inflation impact and TransCore transaction and integration (T&I) expenses, as well as the positive impact of a pension restructuring cost savings, Group EBIT increased by 55% y-o-y to $727m. This result was achieved through cost saving initiatives and business growth.

Group PBT was $597m, down 6% y-o-y from $638m and Group Net Profit was $535m, down 6% y-o-y from $571m, largely due to the virtual absence of government support in 2022. On a BOP basis, Group PBT and Group Net Profit each grew by close to 40%, on the back of cost saving initiatives and business growth.

Commercial Aerospace, Urban Solutions & Satcom and Defence & Public Security accounted for 33%, 20% and 47% of revenue respectively. By geography, customers from Asia, including Singapore accounted for 50% (compared to 58% in 2021), while customers from the U.S. and Europe accounted for 25% and 18% (was 20% and 16% respectively in 2021). The remaining 7% customers were

[1] All mentions of government support refer to COVID-19 related government support only

LETTER TO SHAREHOLDERS

from the rest of the world. By products and services type, Commercial revenue was $6.0b and Defence revenue was $3.0b.

Our performance at the business segment level also showed strength in key areas.

Revenue for **Commercial Aerospace** segment was $3.0b, up 21% from $2.5b though the aviation industry has yet to recover fully to pre-COVID level. EBIT grew 65% y-o-y to $301m from $182m, despite a $150m reduction in government support y-o-y, due to cost saving initiatives and business recovery.

The aviation industry gained momentum in its recovery from COVID-19 as travel restrictions across the world were further lifted, leading to the reopening of more routes. Increased demand for air passenger and air cargo also spurred new aircraft orders and freighter conversions, signalling confidence in the sustainable growth of air passenger and air freight post-COVID.

Our Aerostructures and Systems business saw several new developments during the year. The manufacturing business recovered steadily as the production rate improved in line with rising demand from OEMs. In addition, as mentioned earlier, the freighter conversion business also continued growing, with strong customer demand. Returning MRO demand was reflected in the healthy utilisation rate of all our facilities, which maintained, on average, an above 80% rate in 2022. Our airframe hangars were operating mostly at near full capacity.

We expect to see further recovery in aviation in 2023, especially in the Asia Pacific region. The reopening of China will also present more opportunities, enabling our local operations to go back to full capacity sooner and help raise the efficiency of our MRO output.

Revenue for **Urban Solutions & Satcom** segment grew 49% y-o-y to $1.8b from $1.2b, with contribution from TransCore. The segment EBIT was $29m, up 13% y-o-y from $26m despite TransCore T&I expenses, and in spite of Satcom's weakness resulting from the impact of global chip shortages and its higher investment in product development.

As part of returning to normalcy post-COVID, we saw a resumption of investments by some governments into infrastructure development. This led to more opportunities for large-scale projects, especially in the areas of Smart Mobility, IoT and Smart Security.

Our Mobility Rail business continued to win contracts for landmark projects around the world that underscore our competitive differentiation and demonstrate our ability to move up the value chain. Our AGIL® Smart Street Lighting control solutions continue to gain traction in various parts of the world, reinforcing our credentials in quality solutions that deliver superior lighting performance, reduce energy consumption and ease maintenance regimes.

While our Satcom business saw a gradual pickup in most of its markets, the global chip shortages continued to weigh down this business. Specific components used in our satcom products were still experiencing shortages due to imbalances of chip inventories. Even with mitigation measures to reduce business impact, we expect the shortage in chips on our Satcom business to improve only in 2023. Meanwhile, we have increased our investments in product development to better position our Satcom business towards virtualisation and the cloud as the industry moves towards a new hybrid of satellite and terrestrial Cloud and 5G networks.

We have committed to invest up to 5% of our annual revenue on R&D, of which up to 75% will be spent on digital technologies.

On a base operating performance basis, Group PBT and Group Net Profit each grew by close to 40%, on the back of cost saving initiatives and business growth.

Revenue for our **Defence & Public Security (DPS)** segment grew 6% y-o-y to $4.3b from $4.0b with contribution from all its sub-segments: Digital Systems & Cyber, Defence Aerospace, Land Systems and Marine. The segment EBIT was down 13% y-o-y to $405m from $466m in the absence of $51m government support received in the prior year and a $23m impact from energy inflation. If these factors were excluded, DPS EBIT would be 3% stronger y-o-y.

Geopolitical conflicts have increased the importance of national security and defence, leading many countries to expand their defence budgets. This translates into greater export opportunities for our International Defence business. We have identified opportunities that are compatible with our flagship platforms and solutions, including the Bronco All Terrain Tracked Carrier and its commercial variant, ExtremV that is designed for humanitarian assistance and disaster relief missions. The defence business pipeline has a long gestation period though, and it will take several years before these efforts show results.

One of our multi-year business development efforts did bear fruit in the Middle East. In 2022, we formed a notable defence partnership with Saudi Arabian Military Industries, consistent with our go-to-market approach of tapping on local defence champions to deliver differentiated defence solutions. Concurrently, we also won a set of new defence contracts worth over $300m from a customer in the Middle East.

Meanwhile, the Falaj 3-class Offshore Patrol Vessels project in UAE that we secured in 2021 is tracking well and has progressed to the Critical Design Review phase.

In previous annual reports, we mentioned that, together with Oshkosh Defense, we were bidding to produce the Cold-Weather All-Terrain Vehicle for the U.S. Army. Unfortunately, we were not successful in this bid despite delivering a competitive platform which met all technical and performance requirements. This experience, though, has been a valuable one, and we will learn from this and strive to make better inroads in this market segment.

On our Digital business, we continue to build up our core competencies in operational technology and cybersecurity to help governments and enterprises strengthen their security and protect their critical operating systems and data from evolving and complex threats. Digital business comprising Cloud, AI Analytics and Cyber businesses achieved a revenue of $385m in 2022, or more than doubled the revenue in 2020, on track to well exceed its 2026 target of $500m.

Our business updates and outlook are covered in the *Operating Review and Outlook* section on pages 28 to 51.

OPERATING MORE EFFICIENTLY

We reduced our unit operating expenses (per unit revenue)[1] to 11.7% in 2022 from 12.0% in 2021, and from 12.2% recorded in 2019 before the pandemic. We achieved this because of the Group's continued structural cost and operational efficiency capture, notwithstanding general inflationary pressure.

Capex in 2022 was about $760m, with a large part spent on supporting our Aviation Asset Management business for which we have near-term plans to securitise and recycle capital. Other portions of the capex went into supporting businesses across the Group, including the construction of new hangars.

[1] Excludes M&As transaction expenses

LETTER TO SHAREHOLDERS

BALANCED DEBT PROFILE

Post-TransCore acquisition, our balance sheet remained strong, with Aaa and AA+ ratings by Moody's and S&P respectively. 2022 operating cash flow decreased compared to 2021 due to higher net working capital to support growth in revenues as business recovery continues.

We issued US$700m in 5-year bonds and US$300m in 10-year bonds in May 2022 to partially term out the bridge financing for the TransCore acquisition. Looking at our debt interest rate profile, 53% of our debt is based on fixed rates while 47% is based on floating rates as of end 2022. We believe this is a balanced ratio, and this approach allows us to reduce interest expense volatility in both rising and falling interest rate environments.

The Group's weighted average cost of borrowing for FY2022 was 2.4%, a marginal increase compared to 2.3% in 2021. The weighted average borrowing cost of our existing fixed rate borrowings, comprising mainly bonds, lease obligations and fixed rate loans, is around mid-2%.

We continue to work towards reducing capital employed in our Group as appropriate, undertaking measures such as net working capital optimisation, portfolio rationalisation, and asset securitisation of our Aviation Asset Management business.

ENHANCING ESG EFFORTS

In 2022, we made substantial headway in our sustainability aspirations. In our 2022 Sustainability Report, we published our inaugural Task Force on Climate-related Financial Disclosures (TCFD) report. We also expanded the proportion of sustainability metrics linked to employee performance and developed a mandatory sustainability training module for all employees. We strengthened our Supplier Code of Conduct and increased our engagement with suppliers on ESG considerations. ST Engineering has also been included as a constituent of the Dow Jones Sustainability Index Asia Pacific, representing the top 20% of the 600 largest ESG-focused companies in the region.

Read our 2022 Sustainability Report

As well as the value delivered to shareholders, we made significant contributions to the communities where we operate. We serve our communities through a combination of volunteer work, skills-based contributions, as well as in-kind and monetary support to build an inclusive, resilient and vibrant society. We actively promote a purpose-driven giving culture through corporate initiatives and volunteerism among our employees.

We are honoured to be recipients of the National Awards (COVID-19) for our Group's contributions to Singapore's fight against COVID-19. The awards recognise the great teamwork and solidarity that our people demonstrated as they helped our customers and the community respond quickly to pandemic-related challenges. A special mention goes to our respiratory protection team for their tremendous efforts and 'can do' spirit in establishing local medical-grade surgical mask manufacturing capabilities from the ground up, helping to steer Singapore towards greater self-reliance in respiratory masks.

BOARD RENEWAL

In 2022, we made various changes to the Board. In April, Joseph Leong Weng Keong resigned. He had been a non-independent and non-executive director since June 2019. Teo Ming Kian was appointed as deputy chairman of the Board. Kevin Kwok, who was a member of the Audit Committee (AC), assumed the role of AC chairman in place of Quek See Tiat who relinquished his AC membership. In July, Quek See Tiat was re-designated as a non-independent and non-executive director following his nine-year tenure on the Board.

We remain steadfast in focusing on achieving sustainable business results based on our well-defined growth strategy.

CREATING VALUE NOW AND BEYOND

The Board of Directors has proposed a final dividend of 4.0 cents per share. Together with the quarterly interim dividends of 12 cents per share paid in 2022, the total dividend for 2022 will be 16 cents per share, after consistently paying 15 cents per share even in the depths of the COVID pandemic in 2020 and 2021. This translates to a dividend yield of 4.5%, computed using the average closing share price of the last trading day of 2022 and 2021. Notwithstanding our consistent and recently increased dividend payments, we will continue to work towards strengthening long-term shareholder returns across business and economic cycles.

We remain steadfast in focusing on achieving sustainable business results, based on our well-defined growth strategy with clear mid-term revenue and profit targets. We are executing well against our strategic plan, and our track record of producing results puts us in good stead to deliver shareholder value now and in the years ahead.

ST Engineering is a Group with a vision, a clear roadmap and the wherewithal to achieve long-term sustainable growth. With the support of our shareholders, customers and employees, we will continue to shape ST Engineering into becoming a global technology, defence and engineering powerhouse.

KWA CHONG SENG
Chairman
Non-Executive Independent Director

VINCENT CHONG SY FENG
Group President & CEO
Executive Director

28 February 2023

FAREWELL NOTE BY KWA CHONG SENG, BOARD CHAIRMAN

Dear Shareholders

As part of Board renewal, I am stepping down as Chairman of ST Engineering after being a director for 10 years, with nine of those years as Chairman. As such, this is my last letter to you. Teo Ming Kian, who was appointed as an independent director in August 2021 and Deputy Chairman since April 2022, will succeed me as Board Chairman.

During my service with the Group, I have witnessed the transformation of ST Engineering as it set its sights on pursuing global success and sustainable long-term growth.

Many major initiatives undertaken are foundational to the Group's future. First of all, the management team made significant changes to strengthen the Group. We simplified the Group's business structure, reduced the number of legal entities by streamlining its business portfolio, set up corporate shared services functions and harmonised over 30 corporate brands to one ST Engineering masterbrand. In 2021, the Group reorganised its legacy structure into one that is customer-centric and that facilitates growth in its core business, as well as in Smart City and International Defence businesses. The legacy structure had served us well, but in an evolving external environment, it had to be adjusted to better enable the execution of our global growth strategy.

The re-tooled Group is now more focused, and thus, better able to adapt to fast-changing business environments. To help investors better understand our growth story, the management team released and articulated the Group's five-year plan, with clear financial targets, at Investor Day in 2018 and 2021.

As part of our plan for long-term sustainable growth, the Group made several strategic acquisitions from 2019 to 2022 to expand our Aerospace and Smart City businesses. At the same time, the management team undertook a continuous portfolio review involving closing or divesting businesses that were non-core or that no longer fit into our strategic goals.

The Group also intensified its talent development initiatives, including focusing on developing women in leadership and technical roles. In addition, we strengthened our sustainability practices and enhanced disclosure to be more aligned with international standards.

Many of these initiatives involved taking calculated risks and making bold decisions to leverage Group scale and strength, channel resources to strategic growth areas, as well as support continual investments in technology and innovation to make a greater impact on the world stage with the aim of enhancing shareholder value.

With your continued support, we have accomplished much, especially in the last several years despite significant external challenges. Through all this, the Board worked with the management team in navigating those challenges, and successfully balanced between short-term needs and long-term success.

We have overcome what can be said to be our biggest challenge ever—the COVID pandemic—which tested the stamina and resilience of the whole organisation. As we are recovering from the pandemic at good pace, other macroeconomic challenges started to impact businesses.

Yet, we have built a record order book that is significantly higher than the pre-COVID period. It provides strong revenue visibility that will contribute to the further growth of the Group and is a leading indicator of our ability to achieve our five-year (2022-2026) financial targets and our growth trajectory.

In closing, I would like to say that it has been an honour to chair the ST Engineering Board. My priority as Chairman has always been to help accelerate value creation for our shareholders and our stakeholders based on a strong governance framework. I believe the Board and the management team have collectively succeeded in doing so and that the best is yet to come, given the strengthened foundation of the Group. I thank my fellow directors for their unwavering support during my tenure as Chairman.

I am confident that ST Engineering, under the chairmanship of Ming Kian, will continue to build on its track record and excel in the years ahead as the Group continues to move towards its vision of becoming a global technology, defence and engineering powerhouse.

CORPORATE INFORMATION

AS AT 28 FEBRUARY 2023

BOARD OF DIRECTORS

Kwa Chong Seng
(Chairman)

Teo Ming Kian
(Deputy Chairman)

Vincent Chong Sy Feng
(Group President & CEO)

Kevin Kwok Khien

Lim Ah Doo

Lim Chin Hu

Lim Sim Seng

Ng Bee Bee (May)

Lieutenant-General
Ong Su Kiat Melvyn

Quek See Tiat

Song Su-Min

Tan Peng Yam

Colonel Cai Dexian
(Alternate Director to
Lieutenant-General
Ong Su Kiat Melvyn)

AUDIT COMMITTEE

Kevin Kwok Khien
(Chairman)

Lim Ah Doo

Song Su-Min

EXECUTIVE RESOURCE AND COMPENSATION COMMITTEE

Kwa Chong Seng
(Chairman)

Lim Chin Hu

Lim Sim Seng

Teo Ming Kian

NOMINATING COMMITTEE

Lim Chin Hu
(Chairman)

Kwa Chong Seng

Lim Sim Seng

Ng Bee Bee (May)

Teo Ming Kian

RESEARCH, DEVELOPMENT AND TECHNOLOGY COMMITTEE

Tan Peng Yam
(Chairman)

Vincent Chong Sy Feng

Lim Chin Hu

Teo Ming Kian

RISK AND SUSTAINABILITY COMMITTEE

Quek See Tiat
(Chairman)

Vincent Chong Sy Feng

Kevin Kwok Khien

Lieutenant-General
Ong Su Kiat Melvyn

Song Su-Min

STRATEGY AND FINANCE COMMITTEE

Kwa Chong Seng
(Chairman)

Vincent Chong Sy Feng

Lim Ah Doo

Lim Chin Hu

Lim Sim Seng

Teo Ming Kian

COMPANY SECRETARY/ JOINT COMPANY SECRETARY

Low Meng Wai

Tan Wan Hoon

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AUDITORS

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7 Straits View
#12-00 Marina One East Tower
Singapore 018936

Lam Hock Choon
(Partner-in-charge)

Date of appointment:
15 May 2020

SHARE REGISTRAR

M & C Services Private Limited
112 Robinson Road #05-01
Singapore 068902

BOARD OF DIRECTORS

AS AT 28 FEBRUARY 2023

KWA CHONG SENG

CHAIRMAN
INDEPENDENT &
NON-EXECUTIVE DIRECTOR

Date of first appointment as Director:
1 September 2012

Date of appointment as Chairman:
25 April 2013

Date of last re-election as Director:
15 May 2020

Academic & Professional Qualification
- Degree in Mechanical Engineering, former University of Singapore
- Fellow of the Academy of Engineering Singapore

Other Directorships/Appointments – Present
- 5-Hour International Corporation Private Limited (Board Member and Strategic Advisor)
- Defence Science & Technology Agency
- Judicial Service Commission (Member)
- Public Service Commission, Singapore (Deputy Chairman)
- Renew Group Private Limited (Strategic Advisor)
- Smart Energy Systems, Inc

Other Directorships/Appointments – Past 5 years
- SeaTown Holdings Pte. Ltd.
- Singapore Exchange Limited* (Chairman)

Achievements
- Distinguished Engineering Alumni Award by the National University of Singapore in 1994
- Honorary Ningbo Citizenship in 1999
- Public Service Star at the Singapore National Day Awards 2005
- Public Service Star (Bar) at the Singapore National Day Awards 2016

TEO MING KIAN

DEPUTY CHAIRMAN
INDEPENDENT &
NON-EXECUTIVE DIRECTOR

Date of first appointment as Director:
1 August 2021

Date of appointment as Deputy Chairman:
21 April 2022

Date of last re-election as Director:
21 April 2022

Academic & Professional Qualification
- Bachelor of Engineering (First Class Honours) degree in Mechanical Engineering, Monash University, Australia
- Master of Science degree in Management Studies, Massachusetts Institute of Technology, USA

Other Directorships/Appointments – Present
- Global Innovation Index by World Intellectual Property Organization (Advisory Board Member)
- Interel Pte. Ltd.
- Temasek Foundation Ltd
- Temasek Lifesciences Accelerator Pte. Ltd. (Chairman)
- Temasek Life Sciences Laboratory Limited (Chairman)
- Temasek Life Sciences Ventures Private Limited (Chairman)
- Temasek Trust Ltd.
- TF IPC Ltd
- Vertex Venture Holdings Ltd (Chairman)
- Zinfinity Pte. Ltd. (Chairman)

Other Directorships/Appointments – Past 5 years
- JOil (S) Pte. Ltd. (Chairman and Alternate Director)
- Temasek Foundation Ecosperity CLG Limited (Chairman)
- Temasek Holdings (Private) Limited
- Tessa Therapeutics Pte Ltd (Chairman)
- Vertex Venture Management Pte. Ltd. (Chairman)

Achievements
- Degree of Doctor of Laws honoris causa by Monash University
- The Commander First Class – Royal Order of the Polar Star (Sweden)
- The Defence Technology Medal (Distinguished Leadership)
- The Meritorious Service Medal
- The Public Administration Medal (Gold)

* Listed company

VINCENT CHONG SY FENG

GROUP PRESIDENT & CEO
EXECUTIVE DIRECTOR

Date of first appointment as Director:
1 October 2016

Date of last re-election as Director:
22 April 2021

Date of next re-election as Director:
20 April 2023

Academic & Professional Qualification
- Bachelor of Engineering (First Class Honours) (Mechanical Engineering), National University of Singapore
- Executive leadership programmes, Thunderbird School of Global Management and the Columbia Business School
- Fellow of the Academy of Engineering Singapore

Other Directorships/Appointments# – Present
- JTC Corporation (Board Member, Member of Development Committee and Human Resource Committee)
- Jurong Port Pte Ltd (Director and Member of Management, Development & Compensation Committee)
- Mechanical Engineering Departmental Consultative Committee, National University of Singapore (Member)
- Singapore's Manufacturing, Trade and Connectivity Domain International Advisory Panel (Member)

Other Directorships/Appointments# – Past 5 years
- Emerging Stronger Taskforce (Member)
- Experia Events Pte. Ltd.
- International Advisory Panel for Advanced Manufacturing & Engineering, Ministry of Trade & Industry (Member)
- Singapore Airshow & Events Pte. Ltd.
- Singapore Quality Award Governing Council (Member)
- Temasek Defence Systems Institute (TDSI) Management Board, National University of Singapore (Member)

Achievements
- Distinguished Engineering Alumni Award by the National University of Singapore in 2021

Directorships excluded ST Engineering's subsidiary(ies)

KEVIN KWOK KHIEN

INDEPENDENT &
NON-EXECUTIVE DIRECTOR

Date of first appointment as Director:
1 October 2021

Date of last re-election as Director:
21 April 2022

Academic & Professional Qualification
- Bachelor of Arts (Honours) Economics, Accounting & Financial Management, University of Sheffield, UK
- Fellow, Institute of Chartered Accountants in England and Wales
- Fellow, Institute of Singapore Chartered Accountants

Other Directorships/Appointments – Present
- Sentosa Development Corporation
- Standard Chartered Bank (Singapore) Limited

Other Directorships/Appointments – Past 5 years
- Accounting Standards Council (Chairman)
- Keppel Offshore & Marine Ltd
- Mapletree North Asia Commercial Trust Management Ltd
- Singapore Exchange Limited*
- Wheelock Properties (Singapore) Limited

* Listed company

BOARD OF DIRECTORS

AS AT 28 FEBRUARY 2023

LIM AH DOO

INDEPENDENT &
NON-EXECUTIVE DIRECTOR

Date of first appointment as Director:
10 November 2015

Date of last re-election as Director:
22 April 2021

Date of next re-election as Director:
20 April 2023

Academic & Professional Qualification
- Degree in Engineering (Honours), Queen Mary College, University of London, UK
- Master in Business Administration, Cranfield School of Management, UK

Other Directorships/Appointments – Present
- GDS Holdings Limited*
- GP Industries Ltd*
- Olam Group Limited*@(Chairman)
- Singapore Technologies Telemedia Pte Ltd
- STT Communications Ltd
- STT Global Data Centres India Private Limited
- U Mobile Sdn Bhd

Other Directorships/Appointments# – Past 5 years
- ARA-CWT Management (Cache) Limited
- SembCorp Marine Ltd*
- STT GDC Pte. Ltd.
- Virtus HoldCo Limited

* Listed company
@ Olam Group Limited (OGL) succeeded Olam International Limited (OIL) as the public listed company on the Mainboard of the SGX-ST on 16 March 2022 pursuant to the scheme of arrangement undertaken by OIL which became effective on 15 March 2022. Consequently, Mr Lim Ah Doo was appointed as chairman and director of OGL and relinquished his appointments with OIL.
# Directorships excluded ST Engineering's subsidiary(ies)

LIM CHIN HU

INDEPENDENT &
NON-EXECUTIVE DIRECTOR

Date of first appointment as Director:
16 July 2018

Date of last re-election as Director:
21 April 2022

Academic & Professional Qualification
- Bachelor of Science, La Trobe University, Melbourne, Australia
- Diploma in Electrical & Electronics Engineering, Ngee Ann Polytechnic
- Fellow of the Singapore Institute of Directors

Other Directorships/Appointments# – Present
- Certis CISCO Security Pte Ltd
- G-Able (Thailand) Ltd
- Heliconia Capital Management Pte. Ltd.
- Kulicke & Soffa Inc*
- Ministry of Health/MOH Holdings Pte Ltd
  - ALPS Pte. Ltd.
  - Integrated Health Information Systems Pte. Ltd.
  - Singapore Health Services Pte Ltd
- Sentosa Development Corporation (Audit Committee Member)
- Singapore Exchange Limited*

Other Directorships/Appointments – Past 5 years
- Citibank Singapore Limited

Achievements
- Public Service Medal at the Singapore National Day Awards 2022

* Listed company
# Directorships excluded ST Engineering's subsidiary(ies)

LIM SIM SENG

INDEPENDENT &
NON-EXECUTIVE DIRECTOR

Date of first appointment as Director:
15 May 2015

Date of last re-election as Director:
22 April 2021

Date of next re-election as Director:
20 April 2023

Academic & Professional Qualification
- Bachelor in Business Administration from Yokohama National University, Japan
- Japanese Government Monbusho scholar

Other Directorships/Appointments – Present
- Building and Construction Authority (Chairman and Non-executive Board Member)
- DBS Securities (Japan) Company Limited
- DBS Vickers Securities Holdings Pte Ltd
- Federal Republic of Nigeria (High Commissioner)

Other Directorships/Appointments# – Past 5 years
- Nikko Asset Management Co., Ltd
- Singapore Land Authority

Achievements
- Institute of Banking & Finance Distinguished Fellow Award in 2015 (IBF Distinguished Fellow)
- May Day Award, Medal of Commendation 2015
- Public Service Medal at the Singapore National Day Awards 2018

Directorships excluded ST Engineering's subsidiary(ies)

NG BEE BEE (MAY)

INDEPENDENT &
NON-EXECUTIVE DIRECTOR

Date of first appointment as Director:
1 June 2020

Date of last re-election as Director:
22 April 2021

Academic & Professional Qualification
- Bachelor of Arts (Honours), University of Western Ontario, Canada

Other Directorships/Appointments – Present
- NTUC Enterprise Co-operative Ltd.
- Pan-United Corporation Ltd.* (CEO and Director)

Other Directorships/Appointments – Past 5 years
- Mercatus Co-operative Ltd*

Achievements
- NTUC, Friend of Labour
- NTUC, Meritorious Service

* Listed company

BOARD OF DIRECTORS

AS AT 28 FEBRUARY 2023

LIEUTENANT-GENERAL ONG SU KIAT MELVYN

NON-INDEPENDENT &
NON-EXECUTIVE DIRECTOR

Date of first appointment as Director:
8 June 2018

Date of last re-election as Director:
22 April 2021

Academic & Professional Qualification
- Bachelor of Science (Economics) (Honours), London School of Economics and Political Science, UK
- Master of Science (Development Studies), London School of Economics and Political Science, UK

Other Directorships/Appointments – Present
- CapitaLand Ascott Business Trust Management Pte. Ltd.[1] (as Trustee-Manager of Capitaland Ascott Business Trust*)
- CapitaLand Ascott Trust Management Limited[2] (as Manager of CapitaLand Ascott Real Estate Investment Trust*)
- Defence Science & Technology Agency
- JTC Corporation (Board Member)

Other Directorships/Appointments# – Past 5 years
Nil

Achievements
- Chief of Defence Force Commendation (New Zealand)
- Public Administration Medal – Silver (Military)
- Singapore Armed Forces Command Appointment Award
- Singapore Armed Forces Good Service Medal
- Singapore Armed Forces Long Service Award
- Singapore Armed Forces Long Service and Good Conduct Medal
- Singapore Armed Forces Overseas Service Medal, New Zealand

* Listed company
\# Directorships excluded ST Engineering's subsidiary(ies)
1 Formerly known as Ascott Business Trust Management Pte. Ltd.
2 Formerly known as Ascott Residence Trust Management Limited

QUEK SEE TIAT

NON-INDEPENDENT &
NON-EXECUTIVE DIRECTOR

Date of first appointment as Director:
1 July 2013

Date of last re-election as Director:
21 April 2022

Academic & Professional Qualification
- Bachelor of Science (Economics)(Honours), London School of Economics and Political Science, UK
- Fellow of the Institute of Chartered Accountants in England and Wales

Other Directorships/Appointments – Present
- Accounting Standards Council Singapore (Chairman)
- Centre for Liveable Cities Advisory Panel (Panel Member)
- Council of Estate Agencies (President/Council Member)
- Pavilion Energy Pte. Ltd.
- Pavilion Energy Spain, S.A.U.
- Temasek Foundation Ltd
- Temasek Life Science Laboratory Limited
- TF IPC Ltd.

Other Directorships/Appointments – Past 5 years
- Energy Market Authority (Board Member)
- Monetary Authority of Singapore (Board Member)
- Singapore Press Holdings Limited^
- Temasek Foundation Connects CLG Limited

Achievements
- Public Service Medal at the Singapore National Day Awards 2009
- Public Service Star at the Singapore National Day Awards 2014

^ Delisted from SGX-ST in 2022

SONG SU-MIN
INDEPENDENT &
NON-EXECUTIVE DIRECTOR

Date of first appointment as Director:
16 September 2018

Date of last re-election as Director:
21 April 2022

Academic & Professional Qualification
- Bachelor of Laws (Honours), University of Kent, Canterbury
- Singapore Bar
- Bar of England and Wales, Middle Temple

Other Directorships/Appointments – Present
Nil

Other Directorships/Appointments – Past 5 years
Nil

TAN PENG YAM
NON-INDEPENDENT &
NON-EXECUTIVE DIRECTOR

Date of first appointment as Director:
1 August 2021

Date of last re-election as Director:
21 April 2022

Academic & Professional Qualification
- Bachelor of Engineering (Electrical Engineering), University of Tasmania, Australia

Other Directorships/Appointments – Present
- Cap Vista Pte Ltd (Chairman)
- D'Crypt Pte Ltd
- Defence Science & Technology Agency
- DSO National Laboratories
- Integrated Health Information Systems Pte Ltd
- Land Transport Authority (Board Member)
- PUB Board Committee for Transformation (Member)
- Singapore University of Technology and Design, Board of Trustees (Member)
- SMRT Technical Advisory Panel (Chairman)
- Temasek Defence Systems Institute (TDSI) Management Board, NUS (Chairman)

Other Directorships/Appointments – Past 5 years
- Government Technology Agency (GovTech) (Board Member)
- National Environment Agency (Board Member)
- Tech Vista Pte Ltd (Chairman)
- Temasek Laboratories, NTU (Member)
- Temasek Polytechnic Board of Governors (Board Member)

Achievements
- Grand Cross of Naval Merit with White Mark (Spain)
- Royal Order of the Polar Star, Knight 1st Class (Sweden)
- The Public Administration Medal (Gold)

BOARD OF DIRECTORS

AS AT 28 FEBRUARY 2023

COLONEL CAI DEXIAN

ALTERNATE DIRECTOR TO
LIEUTENANT-GENERAL ONG SU KIAT MELVYN

Date of first appointment as Alternate Director:
1 October 2021

Academic & Professional Qualification
- Bachelor of Arts in Economics and International Relations, Stanford University, USA
- Master in Business Administration (with Distinction), INSEAD, Singapore

Other Directorships/Appointments – Present
Nil

Other Directorships/Appointments – Past 5 years
Nil

Achievements
- NATO International Security Assistance Force (Afghanistan) Medal
- Public Administration Medal (Bronze) (Military)
- Singapore Armed Forces Good Service Medal
- Singapore Armed Forces Long Service and Good Conduct (10 Years) Medal
- Singapore Armed Forces Long Service Award & Good Conduct (10 Years) Medal – 15 Years Clasp
- Singapore Armed Forces Overseas Service Medal, Afghanistan 2012
- United States Army Bronze Star Medal

DIRECTORS SEEKING RE-ELECTION

INFORMATION REQUIRED UNDER RULE 720(6) OF THE LISTING MANUAL OF SINGAPORE EXCHANGE SECURITIES TRADING LIMITED
[Information as at 28 February 2023]

VINCENT CHONG SY FENG

Age	53
Country of principal residence	Singapore
The Board's comments on this appointment (including rationale, selection criteria, board diversity considerations, and the search and nomination process)	Mr Vincent Chong is the Group President & CEO and an Executive Director of ST Engineering. His role as Group President & CEO is to integrate and leverage on the Group's strengths and capabilities to steer the Group towards its vision of becoming a global technology, defence and engineering powerhouse. Mr Chong has more than 20 years of global business and management experience and his leadership will continue to benefit ST Engineering and set the direction for growth of the ST Engineering Group.
Whether appointment is executive, and if so, the area of responsibility	Executive. Mr Chong oversees the business of the ST Engineering Group.
Job Title (e.g. Lead ID, AC Chairman, AC Member etc.)	Group President & CEO and Executive Director Member of • Research, Development and Technology Committee • Risk and Sustainability Committee • Strategy and Finance Committee
Working experience and occupation(s) during the past 10 years	President & CEO, ST Engineering (2016 – current) President & CEO (Designate), ST Engineering (2015 – 2016) Deputy CEO (Corporate Development), ST Engineering (2014 – 2015) President, Strategic Plans & Business Development, ST Aerospace (2014) Director, Asia Pacific Lubricants Sales, ExxonMobil Asia Pacific Pte Ltd (2013 – 2014) Downstream Senior Advisor, Corporate Strategic Planning, Exxon Mobil Corporation (2012 – 2013)
Shareholding interest in the listed issuer and its subsidiaries	3,069,256 shares
Familial relationship with any director and/or substantial shareholder of the listed issuer or of any of its principal subsidiaries	No
Conflict of interest (including any competing business)	No
Undertaking (in the format set out in Appendidx 7.7) under Rule 720 (1) has been submitted to the listed issuer	Yes
Other Directorships Past (for the last 5 years)/Present	Refer to page 15 of this Annual Report

Mr Chong confirmed that all responses under items (a) to (k) of Appendix 7.4.1 of the SGX-ST Listing Manual to be "No".

DIRECTORS SEEKING RE-ELECTION

INFORMATION REQUIRED UNDER RULE 720(6) OF THE LISTING MANUAL OF SINGAPORE EXCHANGE SECURITIES TRADING LIMITED
[Information as at 28 February 2023]

LIM AH DOO

Age	73
Country of principal residence	Singapore
The Board's comments on this appointment (including rationale, selection criteria, board diversity considerations, and the search and nomination process)	Mr Lim Ah Doo's leadership and background experience in finance, investment and corporate management will enhance board deliberations with a well-rounded perspective.
Whether appointment is executive, and if so, the area of responsibility	Non-Executive
Job Title (e.g. Lead ID, AC Chairman, AC Member etc.)	Independent Director Member of • Audit Committee • Strategy and Finance Committee
Working experience and occupation(s) during the past 10 years	Independent director of various listed companies
Shareholding interest in the listed issuer and its subsidiaries	112,300 shares
Familial relationship with any director and/or substantial shareholder of the listed issuer or of any of its principal subsidiaries	No
Conflict of interest (including any competing business)	No
Undertaking (in the format set out in Appendidx 7.7) under Rule 720 (1) has been submitted to the listed issuer	Yes
Other Directorships Past (for the last 5 years)/Present	Refer to page 16 of this Annual Report

Mr Lim confirmed that all responses under item (a) to (k) of Appendix 7.4.1 of the SGX-ST Listing Manual to be "No" save for item (j) (i) as disclosed below:-

PT Indosat: Mr Lim was non-executive independent Commissioner of PT Indosal Tbk (PT Indosat) from December 2002 to August 2008, and Chairman of the Audit Committee from June 2004 to June 2008. In November 2007, PT Indosat along with six other Indonesian telecommunications companies were investigated by Indonesia's anti-competition KKPU, on allegations of price fixing of charges for short text messages and breach of Anti-Monopoly Law of Indonesia. PT Indosat and eight other companies were also investigated by KKPU of concern of breaches of Article 27(a) of the Anti-Monopoly Law of Indonesia. There was no finding of breach of law by PT Indosat at the time Mr Lim left PT Indosat.

Asian Agri: Mr Lim was president of RGM International Pte Ltd (RGMI) from October 2003 to June 2007 and non-executive vice chairman of RGMI from June 2007 to November 2008. Mr Lim was also acting president of AAA Oils and Fats Pte Ltd (AAA) from June 2007 to November 2007 and non-executive deputy chairman of AAA from November 2007 to November 2008. RGMI provides strategy services and support to a global group of independent companies (the RGM Group) operating in the resources development sector. Each business group within the RGM Group operates independently with its own holding company and directors responsible for the operation of that business group. Asian Agri is a member of the RGM Group and AAA is a member of Asian Agri. Certain Indonesian companies of Asian Agri operating in Indonesia were investigated by the tax authorities of Indonesia in November 2006 for alleged non-payment of certain tax. The tax authorities of Indonesia had not confirmed any findings of breach of law at the time when Mr Lim left the RGM Group in November 2008. Mr Lim was not a member of the board nor was he concerned with the management of the companies under investigation.

DIRECTORS SEEKING RE-ELECTION

INFORMATION REQUIRED UNDER RULE 720(6) OF THE LISTING MANUAL OF SINGAPORE EXCHANGE SECURITIES TRADING LIMITED
[Information as at 28 February 2023]

LIM SIM SENG

Age	64
Country of principal residence	Singapore
The Board's comments on this appointment (including rationale, selection criteria, board diversity considerations, and the search and nomination process)	Mr Lim Sim Seng's strength and background experience in banking and management will enhance board deliberations with a well-rounded perspective.
Whether appointment is executive, and if so, the area of responsibility	Non-Executive
Job Title (e.g. Lead ID, AC Chairman, AC Member etc.)	Independent Director Member of • Executive Resource and Compensation Committee • Nominating Committee • Strategy and Finance Committee
Working experience and occupation(s) during the past 10 years	Group Executive, Consumer Banking Group & Wealth Management, DBS (2019 – current) Group Executive, Country Head, DBS Singapore (2010-2018)
Shareholding interest in the listed issuer and its subsidiaries	89,600 shares
Familial relationship with any director and/or substantial shareholder of the listed issuer or of any of its principal subsidiaries	No
Conflict of interest (including any competing business)	No
Undertaking (in the format set out in Appendidx 7.7) under Rule 720 (1) has been submitted to the listed issuer	Yes
Other Directorships Past (for the last 5 years)/Present	Refer to page 17 of this Annual Report

Mr Lim confirmed that all responses under item (a) to (k) of Appendix 7.4.1 of the SGX-ST Listing Manual to be "No".

GROUP EXECUTIVE COMMITTEE

VINCENT CHONG SY FENG

Vincent Chong Sy Feng, 53, is the Group President & CEO of ST Engineering and a Director of the ST Engineering Board since 2016.

Before his current role, he was the President & CEO (Designate) from late 2015, and prior to that, the Group's Deputy CEO (Corporate Development) from late 2014. He joined ST Engineering in early 2014 as President of Strategic Plans and Business Development of the Aerospace sector.

Vincent brings to the Group 20 years of global business experience from ExxonMobil, where he spent half of that time being based in Hong Kong, Japan, U.K. and the U.S. He held a wide span of senior positions in global and regional business management, refinery process engineering, industrial and retail operations, product marketing and strategic planning.

Vincent is a board member of JTC Corporation and Jurong Port, and a member of the Ministry of Trade and Industry's International Advisory Panel for Manufacturing, Trade and Connectivity. He had served on the Emerging Stronger Taskforce which reviewed how Singapore can build new sources of dynamism and stay economically resilient in a post-COVID world.

Vincent graduated in 1994 with First Class Honours in Mechanical Engineering from National University of Singapore and attended executive leadership programmes at Thunderbird School of Global Management and Columbia Business School. He is a fellow of the Academy of Engineering Singapore and was conferred the Distinguished Engineering Alumni Award by National University of Singapore in 2021.

CEDRIC FOO CHEE KENG

Cedric Foo Chee Keng, 62, is the Group Chief Financial Officer of ST Engineering.

Concurrent to his Group CFO role, Cedric oversees IT, Risk & Assurance, Procurement and Estates & Facilities for the Group.

Before joining ST Engineering in October 2016, Cedric was the Group Deputy President and Chief Financial Officer of Neptune Orient Lines Limited. Prior to that, Cedric served at Singapore Airlines as the Senior Vice President, Finance and Administration and subsequently, as the Senior Vice President for West Asia and Africa.

Cedric was also Chairman of JTC Corporation from 2008 to 2012 and of SPRING Singapore from 2003 to 2007.

Cedric graduated with a Bachelor of Science in Engineering (Naval Architecture and Marine Engineering) from University of Michigan, Ann Arbor, USA and received his Master of Science (Ocean Systems Management) from Massachusetts Institute of Technology, Cambridge, USA in 1985. He also attended executive programmes at Harvard and Kellogg Business Schools.

RAVINDER SINGH

Ravinder Singh, 58, holds concurrent appointments as the Group Chief Operating Officer (COO) (Technology & Innovation), and President, Defence & Public Security of ST Engineering.

Ravinder oversees the development of multi-domain technologies, and business innovation across the Group as its COO. He also leads the Group's businesses across Digital Systems, Cyber, Land Systems, Marine and Defence Aerospace as President, Defence & Public Security.

With over 30 years of technology and defence experience, Ravinder has held various management and leadership positions. He was President of the Group's Land Systems sector, then President, Defence Business and President of the Group's Electronics sector before he assumed his concurrent appointments on 1 January 2021. Prior to ST Engineering, Ravinder served as the Chief of Army, Singapore Armed Forces (SAF) and the Deputy Secretary (Technology), Ministry of Defence, Singapore. He was awarded the SAF Overseas Training Award (Academic) and was conferred the Public Administration Medal (Military), Silver and Gold.

Ravinder is the Deputy Chairman of National Environment Agency's Board, and a board member of the Agency for Science, Technology and Research (A*STAR). He is also a board member of DSO National Laboratories, and the Temasek Defence Systems Institute Management Board of the National University of Singapore, the Independent Review Panel of Ministry of Home Affairs and the Data Protection Appeal Panel for Ministry of Communications and Information.

Ravinder holds a Bachelor of Arts in Engineering Science (First Class Honours) and a Master of Arts in Engineering Science from University of Oxford. He was awarded the Singapore Armed Forces Postgraduate Scholarship and graduated from Massachusetts Institute of Technology with a Master of Science in Management. He attended the Advanced Management Program at Wharton Business School.

TAN LEE CHEW

Tan Lee Chew, 59, is President Commercial of ST Engineering.

Lee Chew oversees and drives growth for the Commercial cluster, which comprises three business areas: Commercial Aerospace, Urban Solutions and Satellite Communications which accounts for about half of the Group's revenue.

Before joining ST Engineering in September 2021, Lee Chew was the Managing Director, Worldwide Public Sector (ASEAN) from Amazon Web Services, responsible for leading new business growth through the adoption of AWS services as an enabler to deliver technology transformation at scale for organisations.

Prior to that, Lee Chew was with Hewlett-Packard Enterprise for more than 20 years, last serving as the Senior Vice President of global Hybrid IT Sales and Category Management based in Palo Alto, California, where she led the go-to-market planning and execution of product sales strategies for the company's Data Center Infrastructure and Software Defined technology portfolio globally.

Lee Chew is the President for the Women in Tech Chapter at the Singapore Computer Society. She is also a member of the Board of Governors for Temasek Polytechnic, the Board of the Infocomm Media Development Authority and the Advisory Board of EDPR Sunseap. In addition, she serves as the Vice Chairperson on the Board of the Singapore Heart Foundation. She is also the co-sponsor of Women@ST Engineering.

Lee Chew holds a Bachelor of Arts (Hons) in Philosophy from National University of Singapore.

TECH & INNOVATION

Technology and innovation lies at the core of what we do, and underpins what we do as a global technology, defence and engineering group. From sustainable innovations to disruptive technologies that push the innovation envelope, we harness technology and innovation to improve lives and make the world a more secure and sustainable one.

Our innovation approach comprises driving synergy and deepening capability building within the Group as well as leveraging external capabilities to accelerate innovation. We have also launched numerous innovation awards to recognise employees and encourage them to innovate.

More about our Innovation Approach

Strong Technology, Engineering & Innovation Community

Drive Synergy & Deepen Capability Building

- Business-driven Product Development
- Core Engineering Capabilities
- Strategic Technology Centres

Broaden Outreach to Leverage External Capabilities

- Research Translation @ ST Engineering
- Corporate Ventures & Open Innovation

Our R&D Investment

We take a prudent approach to R&D, focusing on investments driven by business and product roadmaps that support our business growth via differentiated products and solutions.

R&D Spend

R&D Activity	Funding Sources	Classification in Financial Statement	2022
Research Projects	Internal/External	**Research, design and development expenses**	**$131.2m**[1]
Development Projects/ IP Rights and Licences	Internal/External	**Capitalised development expenditure, commercial/ intellectual property rights and licences**	**$55.2m**[2]
Customer Funded R&D Projects	External	part of **Cost of Sales**	**$140.4m**
		Total R&D	**$326.7m**
		R&D Intensity over Revenue	**3.6%**

[1] see Note B3 in Notes to Financial Statements page 152
[2] see Note C3 in Notes to Financial Statements pages 172-173

SHOWCASING CONTINUOUS INNOVATION AT SINGAPORE AIRSHOW 2022

At Singapore Airshow 2022, ST Engineering showcased close to 100 of its innovations across its commercial and defence businesses as the largest exhibitor of the tradeshow.

The 2022 airshow was the first major trade and exhibition show that we participated in after the easing of air travel and border controls, providing an important platform for the Group to reconnect with its customers and other stakeholders in person.

The exhibits that ST Engineering put together featured new and proven solutions as well as solutions that had been enhanced or ready to go into commercialisation since their showcase at the last airshow.

Such solutions include the latest applications of its unmanned aircraft system, DroNet, in real-life missions at Singapore's reservoirs and Southern Islands; the new hybrid Terrex 8x8 Infantry Fighting Vehicle; and the all-new AGIL Smart City Operating System which centralises performance data into a single platform to provide analytics-driven insights that power future smart cities.

These exhibits fully demonstrated the Group's steadfast commitment in solving real-world problems with continuous innovation, which remained undeterred despite challenges posed by the pandemic.

Driving Innovation in ST Engineering

Establishing strategic collaborations and sustaining an innovative culture help our engineers to expand their competencies and accelerate growth for the business, as well as in their professional development. Throughout the year, we have numerous initiatives and programmes to drive an innovative culture.

Through **Research Translation @ ST Engineering**, our engineers work together with partner researchers to drive impactful translational research and develop commercially viable offerings that meet fast-evolving market needs and customer demands. This year, we bolstered these collaborations with the **ST Engineering Distinguished Professor Award** to recognise researchers with outstanding contributions to the strategic goal of achieving impactful research translation.

More about Research Translation @ ST Engineering

CI2 Programme & Best-of-Best Continuous Improvement Awards
Incremental improvements are the simplest form of innovation. CI2, an internal continuous improvement programme, drives operational excellence. This is done by consolidating, sharing, promoting, and implementing best practices across the Group, as well as aligning and standardising systems and processes for our technology and engineering community. The annual Best-of-Best Continuous Improvement Awards reward the most outstanding refinements made group-wide to improve existing work processes.

InnoChamp honours engineering teams that have launched outstanding innovations in the last 12 months. It celebrates our engineers who have worked tirelessly to see to the success of their innovations.

In.Vent focuses on the ideation and development of innovative products, technologies, solutions, and services that have the potential to capture new markets. Shortlisted teams will participate in a two-month full-time Venture Sprint to validate their ideas and develop an investible business plan.

Seminars on Engineering, Technology and Innovation
For engineers to deepen their domain knowledge, learn about the latest developments in emerging and trending technologies and better understand other engineering disciplines for collaboration, we host regular seminars covering a range of engineering, technology and innovation topics, such as Blockchain, 5G and end-to-end MRO solutions. By gaining knowledge, participants can adapt their work to better meet evolving customer needs and pivot accordingly to grow the business for the long-term.

COMMERCIAL AEROSPACE

WHAT WE ACHIEVED IN 2022

- **Redelivered the world's first A320P2F aircraft**
- **Expanded MRO offerings with LEAP-1B quick-turn services and new distributorships for aircraft components**
- **Increased freighter conversion capacity with new modification sites in China and the U.S.**

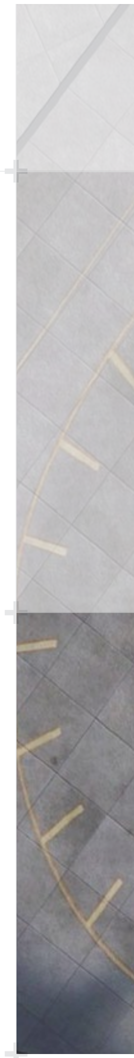
2022 OVERVIEW

The aviation industry gathered more momentum in its recovery from COVID-19 as travel restrictions across the world were further lifted, leading to the reopening of more routes. This provided the much needed lift for the MRO sector.

Increased demand for air travel and air cargo also spurred new aircraft orders and freighter conversions, signaling confidence in the sustainable growth of air travel and air freight post-pandemic. Aircraft OEMs including Airbus and Boeing reported year-on-year increases in deliveries on the back of air travel recovery which reached about 77% of December 2019's (pre-pandemic) levels by end 2022.

While the aviation sector experienced strong recovery, cost pressures remained a key concern as fuel and energy prices rose sharply during the year. Labour shortages and supply chain issues also continued to create near-term challenges for costs and capacity.

Amid these challenges, our Commercial Aerospace business continued its recovery trajectory by securing new contracts and delivering on orders. We also continued to invest in new capabilities and technologies as part of our plans to grow and futureproof our businesses.



We continued to leverage our expertise in nacelle manufacturing and aftermarket services to offer new solutions.

AEROSTRUCTURES AND SYSTEMS

Our Aerostructures and Systems business saw several new developments during the year that paved the way for continued growth. The manufacturing business recovered steadily as production rate improved in line with OEMs' rising demands. Our freighter conversion business continued its story of growth. We also made new developments in the areas of aircraft modification and Unmanned Air Systems (UAS), bringing new and exciting solutions to the market.

Nacelle and Composite Manufacturing

We continued to ramp up the production volume of our biggest nacelle programme, the A320neo, according to the requirements of the OEM, Airbus, and increased production of the aircraft platform from the monthly rate of 45 units in 2021 to around 50 in 2022. Orders for our other nacelle product lines such as the Bombardier Global 7500 and Boeing 767 Tanker stayed at healthy levels during the year.

As the sole supplier of composite floor panels for Airbus' commercial aircraft, our composite manufacturing activities also rose in tandem with increasing production by Airbus.

We continued to leverage our expertise in nacelle manufacturing and aftermarket services to offer new solutions when we took on the distributorship for the thrust reverser spare parts of CF6. This enabled us to provide reliable, round-the-clock component availability support to airlines and operators.

Airbus Passenger-to-Freighter (P2F) Conversions

Amid global macroeconomic pressures, the air cargo industry ended the year strong with full-year demand for air cargo coming close to pre-pandemic performance. This translated into another solid year for our freighter conversion business, as the number of aircraft we inducted for our Airbus P2F programme rose from 16 in 2021 to 29 in 2022.

Interest in our P2F solutions stayed robust, with a number of airlines placing repeat orders with us. New customers included Air Transport Services Group, which committed to a total of 29 A330P2F conversions. Such strong demand resulted in the conversion slots for our A320/321P2F and A330P2F programmes being fully booked through 2026.

We reached a significant milestone when we redelivered the world's first A320P2F aircraft. With all our Airbus P2F platforms now in operation, our programmes will be even more attractive to airlines seeking to grow a diverse fleet of freighter aircraft with proven solutions.

To grow our freighter conversion business, we continued to increase our capacity by setting up new modification sites in Shanghai, China and Mobile, U.S. To augment these efforts, we also entered into collaborations with Turkish Technic and Ameco, which will respectively provide third-party conversion services in Istanbul, Turkey and Chengdu, China for the A330P2F programme starting in 2023. At the time of writing this report, we announced our intent to work with Sichuan Haite Hi-Tech for it to carry out conversions for our A321P2F programme.

The air cargo industry ended the year strong, translating into another solid year for our freighter conversion business.

Engineers from the team behind our very first A320P2F aircraft which we redelivered and placed on lease in mid-2022.

From left:
Chan Kin Tuck, Technical Director;
Li Jiajun, Senior Engineer
and Toh Zheng Yong, Senior Engineer

Production volume of our nacelle programmes remained healthy and in line with OEMs' requirements.

We piloted a two-week offshore food delivery service using our DroNet solution with foodpanda and Sentosa Development Corporation.

Cabin Interiors and Engineering Solutions
Drawing on our deep structural modification capabilities and engineering expertise in freighter conversions, we entered into an agreement to design and convert an aerial firefighting platform based on the Boeing 757 aircraft for Galactic Holdings. In addition to serving Galactic Holdings' needs, moving into passenger-to-tanker conversion allows us to develop new modification capabilities and tap the aerial firefighting market, while contributing to global firefighting efforts and the protection of properties and lives.

Unmanned Air Systems
We continued to scale new heights in our DroNet solution through new collaborations and applications. At the start of the year, we formed a consortium with Sumitomo Corporation and Skyports to provide commercial Unmanned Aircraft (UA) services for shore-to-ship parcel delivery in Singapore. We also conducted a two-week pilot offshore food delivery service via drones with foodpanda and Sentosa Development Corporation. In addition, we joined hands with the Civil Aviation Authority of Singapore to determine the maturity of new UA-related technologies and assess their value and feasibility for operations in Singapore.

Building on the strong working ties with Skyports, we invested in its Series B funding round. We will marry our complementary strengths in Advanced Air Mobility and UA systems with that of Skyports' to advance our DroNet solution globally.

Returning MRO demand was reflected in the healthy utilisation rate of all our facilities, which maintained above 80% on average.

AEROSPACE MRO

The MRO industry saw clearer skies during the year, thanks to widespread distribution of vaccines, reopened borders and pent-up demand for air travel. Returning MRO demand was reflected in the healthy utilisation rate at all our facilities, which maintained above 80% on average in 2022, with the airframe hangars operating mostly near full capacity.

Airframe Services
We continued to foster longstanding relationships with our customers and secured a number of multi-year contracts from new and existing customers for their long-term needs. One of these customers was United Airlines, with whom we entered into an agreement to extend our heavy maintenance support to their additional narrowbody aircraft. The support will be provided at the airframe MRO complex we are developing at Pensacola International Airport. The two hangars that will be used to support United Airlines will begin construction in 2023.

Component / Engine Services
A healthy level of orders for component and engine services started streaming in especially during the later half of the year, which we had anticipated given that operators will not be able to postpone MRO services indefinitely by relying on engines and components with green time left.

More airlines also started contracting for their long-time component maintenance needs. Among the new component maintenance-by-the-hour contracts we secured was one from Vietjet to support the airline's entire fleet, one from Turkish Technic to support Turkish Airlines' fleet of Boeing 787s, and another from China Airlines Group to support China Airlines' A321neo and A330 aircraft as well as Tigerair Taiwan's A320neo aircraft.

During the year, we deepened our partnership with Safran when we signed a five-year agreement with Safran Aircraft Engines to provide engine maintenance offload for the CFM56-5B and -7B engines. This multi-year agreement will allow us to meet the forecasted rise of CFM engine MRO activities as air travel further recovers from the pandemic.

We are drawing on our structural modification capabilities to design and convert an aerial firefighting platform for Galactic Holdings.

We introduced new MRO solutions with LEAP-1B engine quick-turn services, which will expand to full MRO services by end-2023.

Our airframe facility in San Antonio, U.S., completed its very first A321P2F conversion after setting up conversion capabilities in 2021.

AVIATION ASSET MANAGEMENT

We continued to grow our aviation asset management business by building up our portfolio comprising aircraft engines, freighter aircraft and passenger aircraft. Our assets under management grew from US$1b in 2021 to US$1.8b in 2022.

We also intensified our efforts in marketing unique leasing solutions such as the bundling of aircraft leasing with MRO services. In addition, we entered into leasing partnerships with new customers, such as Raya Airways which placed a lease for four Airbus narrowbody P2F aircraft with us.

The JV we set up with Temasek for freighter aircraft leasing continued to acquire feedstock aircraft and build up its portfolio with A320/A321P2F aircraft. New aircraft assets included the world's first A320P2F which was placed on lease with Vaayu Group.

There is room for further recovery of our MRO business, especially in the areas of engine and component MRO as demand has yet to recover to the pre-pandemic level.

OUTLOOK

There are encouraging signs that the aviation industry has decidedly turned the corner and is embarking on a steady growth trajectory. However, we continue to navigate the economic landscape with caution. Beyond COVID-19, there are other risks or challenges which portend some degree of disruption.

The shortage of technician talent remains a challenge that raises the cost of maintenance and threatens fleet expansion projections. The imbalance in labour supply and demand will eventually be remedied by a combination of efforts from MROs and airlines to feed the technician pipeline and make efficiency gains, although this will take time.

Supply chain disruption is another issue due to factors encompassing raw materials, logistics and inflation challenges. We expect to face continual challenges from securing freighter conversion kits to spare parts. While it is difficult to say how long these challenges will last, we are minimising impacts through rigorous efforts in diversifying our supply chain.

These challenges notwithstanding, the aviation industry is poised to be a story of recovery and growth in 2023 as flying activities continue to rise in volume. There is room for further recovery of our MRO business, especially in the areas of engine and component MRO as demand has yet to recover to the pre-pandemic level. We also expect to see strong recovery by our manufacturing business as production volume continues to improve under sustained market demand for new aircraft deliveries.

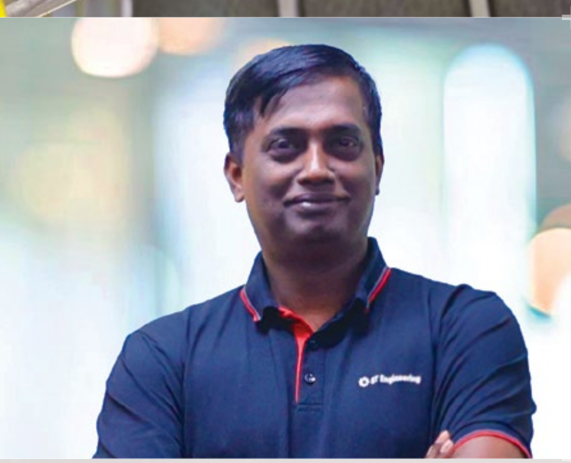
E-commerce, which is forecasted by industry experts to grow by 50 percent between 2021 and 2025, will continue to boost demand for freighter aircraft. E-commerce growth, when coupled with the replacement cycle of ageing freighters, will create a sustainable demand for dedicated freighters, long after air traffic has recovered to pre-COVID levels.

The aviation industry is poised to be a story of recovery and growth in 2023 as flying activities continue to rise in volume.

We continued to grow and diversify our talent pool of qualified aircraft maintenance technicians through various apprenticeship and on-the-job training programmes.

Robotic Spray Painting

We developed a robotic painting solution that eliminates dependency on human labour and imitates hand spray painting effectively with better quality and repeatability. The automation solution, which is specially built to carry out spray painting on engine parts, helps bring about higher paint consistency and reduce the need for rework.



The hangar of the future will have advanced technology and tools that help to offload repetitive manual tasks. As a result, more time can be dedicated to higher value work that makes better use of creativity and skills. As part of our efforts to modernise our aerospace facilities, my team and I are leveraging Robotic Process Automation technology to develop end-to-end automation solutions that not only help us improve productivity, but also increase safety and quality standards.

MURUGAVEL RAZANGAM
Senior Technical Manager
Smart Analytics

Composite Solutions that Enhance Energy Efficiency

Our innovative composite solutions are not just for aircraft, but can potentially be applied to other industries including construction. One such innovation is 'EcoFacade', which employs shading and insulation principles to maintain the optimal temperature within interiors. This improves energy efficiency through temperature control, making travel and urban living greener.

INVESTING IN THE FUTURE

Even as we navigate the path of recovery with caution and dexterity, we will continue to build on the breadth and depth of our aerospace solutions to strengthen our value-add, while building up our talent pipeline through training programmes and investment in new initiatives to support our long-term growth plans.

To effectively reduce our carbon footprint, we are joining hands with industry partners to develop robust and viable solutions.

Expanding Offerings with New Capabilities

Capability expansion is one key strategy to capture growth opportunities. For instance, we set up quick-turn services for the LEAP-1B engine in early 2022, and as part of our capability expansion plans to offer full MRO solutions for the engine, we are working with a testing and technology development solutions provider to develop LEAP-1B test capability at our Singapore facility. We target to have the LEAP-1B test capability ready by end-2023. Across our global facilities, we will also be introducing more and new solutions, such as nacelle MRO for more engine platforms at our nacelle manufacturing facility in the U.S. and engine MRO facility in China.

Capturing Growth with Higher Capacity

As part of our growth plans in Pensacola, U.S., we are developing an airframe MRO complex that will have a total of four hangars when completed. At the time of writing this annual report, two hangars are in operation while the last two hangars will begin construction in 2023. In addition to airframe MRO, we are also expanding our freighter conversion capacity by working with third-party conversion houses.

Enhancing Performance with Smart Technologies

We continue to raise productivity at our MRO and manufacturing facilities through the implementation of smart technologies. Apart from developing solutions in-house, we also work with third-party service providers to use their proprietary technologies to enhance our MRO work. For instance, our San Antonio facility uses PowerFleet's telematic solutions to provide real-time, data driven analytics and insights into its operations. At our engine MRO facilities in Singapore and Xiamen, we are leveraging GE Aviation's Test Cell Advisor, a new data analytics service, to provide added insights into engine performance analysis during testing.

Stepping Up on Sustainability Efforts

To effectively reduce our carbon footprint, we are joining hands with industry partners to develop robust and viable solutions. For instance, we partnered Safran Helicopter Engines through an MOU to study the use of Sustainable Aviation Fuel (SAF) to see how we can assist helicopter operators in their transition towards the use of SAF. To make our engine MRO facilities greener and more efficient, we are working with Calspan Aero System Engineering to incorporate energy and fuel-efficient technologies into our engine test cells. Moving forward, we will make even greater efforts to enhance our operations with sustainability features to further meet our sustainability goals and those of our customers.

KEY FOCUSES FOR 2023

- **Build up customer base for new MRO solutions and facilities**
- **Ramp up freighter conversion capacity and optimise production at new conversion sites**
- **Incorporate sustainable and smart features into operations and solutions for customers**

URBAN SOLUTIONS & SATCOM

WHAT WE ACHIEVED IN 2022

- **Reinforced Smart City leadership position through new market expansion and new business areas**
- **Expanded Smart City capabilities and moved up the Smart Mobility value chain**
- **Focused on satellite ground technology innovations**

2022 marked a year of uneven post-pandemic recovery with geopolitical tensions, supply chain bottlenecks and global inflation that continued to pose challenges for our Smart City business. Ongoing chip supply challenges continued to impact revenue opportunities for our Internet of Things (IoT) and Satellite Communications (Satcom) businesses, with the latter facing additional pressures due to the lingering effects of COVID-19 on travel-related segments.

Despite the headwinds, the impetus to build more resilient and sustainable cities in the wake of the pandemic unlocked opportunities. We saw encouraging business resumption in the areas of Smart Mobility, IoT and Smart Security in Asia, the Middle East and the Americas, enabling us to track well against our Smart City revenue target of $3.5b by 2026.

We maintained a steady contract win momentum, contributing to our Smart City track record of over 800 projects in more than 150 global cities. To maintain technology leadership, we kept our focus on capability building and R&D, introducing innovations that help cities address their urban challenges.

In March, we completed our TransCore acquisition and welcomed over 3,000 new members to our global ST Engineering family.

TransCore's integration into our business progressed well and its steadfast focus on customer excellence ensured continuity in project executions and healthy contract wins.

With cities looking to a technology-enabled future, our suite of Smart City solutions, laser focus on technology leadership and customer excellence, uniquely position us to help them build long-term resilience, achieve greater sustainability, enhance connectivity and most of all, ensure liveability for their communities.

We maintained a steady contract win momentum, contributing to our Smart City track record...

SMART MOBILITY

A key pillar in our Smart City growth strategy, our Smart Mobility business continued to help mobility operators achieve greater efficiency, operational reliability and sustainability outcomes through advanced technology.

Our Mobility Rail business continued to make strides by winning contracts for landmark projects around the world. These underscore our competitive differentiation and demonstrate our ability to move up the value chain. Headlining our wins this year was our $1.4b contract for the new Kaohsiung MRT Yellow Line in Taiwan where we will provide turnkey rail services and serve as overall project management and systems integration lead as part of a consortium with Siemens Mobility and Stadler Rail.

Other rail contract highlights include securing our first Passenger Information System contract in Canada for the Valley Line West in Edmonton, supplying our AGIL® Enterprise Asset Management System to Wuxi Metro in China, as well as various rail electronics solutions for the Taoyuan International Airport MRT extension in Taiwan and rail networks in Singapore such as the new Cross Island Line.

Our Mobility Road business continued to register growth with various wins including our first Integrated Traffic Management Platform in Thailand for the Bang Pa-In and Bang Yai intercity highways. In the U.S., TransCore secured turnkey tolling system contracts worth over $1b to modernise tolling infrastructure in New Jersey, as well as various projects in states such as Florida, Oklahoma, Pennsylvania, West Virginia, and in Dubai. At the same time, TransCore continued to work closely with its customer on the recommencement of the New York congestion pricing project. These demonstrate our strong customer relationships and TransCore's best-in-class solutions.

To extend our global reach, we inked partnerships across the mobility ecosystem, including with Strides to jointly pursue global Smart Mobility opportunities, and with traffic technology group SWARCO to provide end-to-end traffic and junction management solutions in global markets.

In parallel, we maintained our innovation focus and continued to develop solutions that help cities tackle their mobility challenges. Our latest release of the AGIL Smart Digital Junction Suite optimises traffic signal timings based on real-time traffic conditions, improving road network efficiencies while reducing carbon emissions. Other innovations include the new AGIL Smart Station Management System, enhanced AGIL Automatic Fare Collection System and AGIL PSD with Motorised Gap Filler for more inclusive mobility.

SMART UTILITIES AND INFRASTRUCTURE

Our AGIL Smart Street Lighting control solutions continued to gain traction in Singapore and various parts of the world, reinforcing our credentials in quality solutions that deliver superior lighting performance, reduce energy consumption and ease maintenance regimes.

We continued to grow our footprint in Brazil, securing new contracts to supply over 30,000 Light Control Units to the cities of Aracaju and Feira de Santana. In the U.S. city of Birmingham, we installed our Galaxy base station and street lighting solution for Alabama Power, going beyond lighting to provide city-wide network connectivity during the World Games 2022.
To help cities and facility managers gain actionable insights for optimised and enhanced facility performance management, we introduced our new AGIL Smart City Operating System, a centralised asset and data management platform that enables the digitalisation and automation of processes in buildings and across cities.

Accelerating our Smart City Growth with TransCore

With over eight decades of history, TransCore is a leader in the transportation industry in North America, providing innovative technological solutions and engineering services for next-generation applications encompassing:

- **Tolling systems:** Comprehensive hardware and software solutions with maintenance and operations services for roadside toll collection
- **Back office solutions:** Robust tolling account management software and customer service operations to support high-volume transaction processing
- **Congestion pricing:** Industry-leading system that improves urban traffic flow and reduces carbon emissions while generating recurring revenue for transportation infrastructure
- **ITS solutions:** Best-in-class solutions for real-time traffic and incident management, improved traffic flow and enhanced safety
- **RFID solutions:** Tags and readers for transportation applications across toll roads, airports, parking facilities, trucking fleets and rail

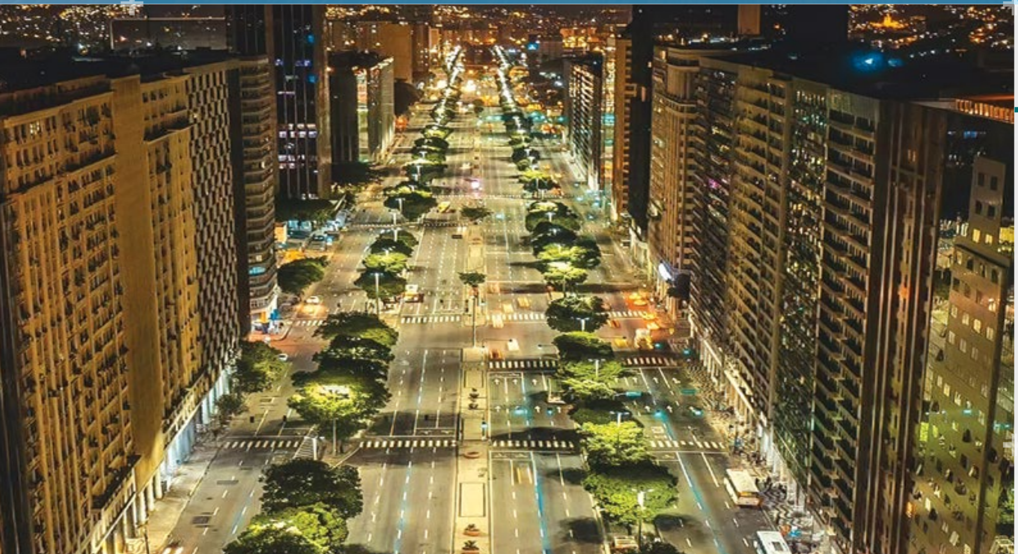
Headquartered in Nashville, Tennessee, TransCore has presence in 80 locations in the U.S. and the Middle East, with a staff strength of over 3,000. Its customers include 12 out of the 15 largest tolling agencies in the U.S., including some of the largest systems in the world. TransCore currently maintains over 30 toll collection systems across the U.S. and has full board RFID design, development, production, testing and qualification capabilities at its Albuquerque facility.

More about TransCore

Data centres are the backbone of the digital economy, yet they exert a huge impact on the environment. Through continuous innovation, we re-engineered our sustainable cooling technology to focus on cold water generation for cooling. Our Airbitat DC Cooling System enables data centres to reduce dependency on energy-intensive compressors, while significantly lowering energy consumption to operate more sustainably.

DR LI FUYUN
Head of Sustainable Cooling
Urban Solutions

More about our Airbitat DC Cooling System



Our AGIL Smart Street Lighting control solution is illuminating the streets of Brazil, reducing energy costs and improving quality of life for local communities.

We continued to win contracts for our integrated security management solutions in Singapore. To maintain technology leadership, we developed next-generation contactless Smart Security innovations that leverage AI, biometrics and automation. Our new AGIL Secure Biometric e-Gate solution is equipped with advanced multimodal biometric authentication technology that accurately verifies travellers' identities for quick and seamless border clearance. In another deployment, we worked with customers to pilot the next-generation Automated Vehicle Clearance System, using advanced biometric technology to enable robust and accurate identity authentication of car travellers for a seamless clearance experience.

URBAN ENVIRONMENT SOLUTIONS

We have always served as a strategic partner to Singapore, especially in times of need. Our medical-grade surgical mask business was set up to help establish local manufacturing capabilities and strengthen Singapore's supply chain resilience. We will continue to maintain these capabilities to ensure sufficient mask supply for our healthcare and frontline workers.

To green data centres, we launched the Airbitat DC Cooling System that delivers breakthrough cooling performance and reduces energy usage, enabling tropical data centres to reach a targeted Power Usage Effectiveness (PUE) of below 1.3.

SATELLITE COMMUNICATIONS

While our Satcom business saw a gradual pick up in most of its market segments, global chip shortages continued to weigh down the business. Despite the mitigative measures to reduce business impact, Satcom is expected to take time to recover.

Looking beyond the near-term challenges, we increased investments in product development and capability expansion to advance our vision of shaping the future of how the world connects. As part of our strategy to virtualise our satcom solutions on the cloud, we successfully demonstrated the first milestone towards fully virtualising our remote satellite modem in partnership with Microsoft Azure Space. This augments our ongoing work with the Digital IF Interoperability Consortium (DIFI) to define open standards in satellite ground technology.

In addition, our Manufacturing Competence Center in Belgium received European Space Agency certification which allows it to manufacture components used in spacecraft flight systems that meet European Cooperation for Space Standardization standards. This will help open doors to new opportunities in the spaceflight sector.

We kept our focus on driving innovation and achieved breakthroughs that revolutionise satellite connectivity, reliability and service agility. Our new MCX8000 multi-carrier satellite gateway innovation is engineered to offer the highest availability, reliability and density to support present and future broadcasting needs. We also partnered with Eclipse Global Connectivity and Smiths Interconnect to deliver an integrated airborne Intelligence Surveillance and Reconnaissance satellite communications capability for military aircraft, which is interoperable with current and future commercial and military satellites.

Meanwhile, our solutions continued to expand network connectivity around the world and improve lives, while helping customers capture growth opportunities. We secured a contract with Türksat to provide futureproofed ground systems for greater agility in service delivery across the Middle East and Africa. In addition, our award-winning Mx-DMA® MRC return technology is powering X2nSat and Dejero's cloud media production and IP news-gathering services to ensure reliable bandwidth for live broadcasts and disaster recovery communications.

Our solutions continued to expand network connectivity around the world and improve lives, while helping customers capture growth opportunities.

AGIL Smart Station Management System

The AGIL Smart Station Management System is a 3D virtualisation platform of a metro station integrated with a centralised control and management system that allows the real-time operating status of a station's subsystems to be monitored. This allows faulty equipment to be quickly located, subsystems to be automatically activated and shut down, and HVAC systems to be optimised, reducing electricity and resources to perform these manual tasks.

AGIL Smart Digital Junction Suite

The AGIL Smart Digital Junction Suite features an AI-driven edge processor and a cloud-based Central Management System that remotely monitors and manages traffic controllers at junctions. It also supports LiDAR sensors and emerging technologies such as V2X connectivity, serving as a future-proofed platform for tomorrow's smart cities.

Our satcom ground solutions are enabling NiAT to deliver essential communications services to unserved areas in Brunei.

Additionally, MEASAT has selected our Evolution-based satellite network to enhance connectivity services across Malaysia, while our solutions are enabling ComClark, NiAT and InterSAT to deliver critical connectivity for essential community services and education in Asia and Africa.

As a strategic partner to Singapore's space industry, we continued to contribute to its advancement by lending our expertise in satellite systems development and manufacturing to a consortium that is building and launching remote-sensing satellites. Our satellite imagery provided insights in maritime surveillance, forest hotspots detection and crop health analysis. Working with Brazilian plantation owners, our joint venture company ST Engineering Geo-Insights tapped on its AI-based GEOEARTH platform to accurately predict the optimal amounts of micronutrients required for precise areas over 5,000 hectares of land. This helped to optimise crop yield, improve efficiency and reduce greenhouse gas emissions.

Collaborating with Centre for Nature-based Climate Solutions at the National University of Singapore, we launched the Carbon Prospecting Dashboard, an interactive mapping software that will support the prospecting, development and management of nature-based carbon credit projects worldwide. The first-of-its-kind dashboard supports the preservation of carbon-rich, natural ecosystems by helping policymakers and investors identify where nature-based projects can be developed as potential sources of high-quality carbon credits.

OUTLOOK

As the world heightens its sustainability focus, the transition to a low-carbon economy will shape policy-making and the cities of the future. With cities resuming economic and urbanisation activities, harnessing digitalisation to strengthen resilience against future disruptions is set to be front and centre of urban planning.

The global shift towards sustainability, digitalisation and resilience bodes well for our Smart City business. We believe that our extensive suite of Smart City solutions and deep domain expertise, combined with a laser focus on technology leadership and customer excellence, will place us in a strong position to help cities pave their way to a more connected, resilient and sustainable future, and accelerate our Smart City growth.

Smart Mobility

Around the world, growing urbanisation and the increasing demand for digitalisation and sustainability will continue to spur investments in new rail and road infrastructure as well as future-oriented renewal programmes. The shift towards more personalised and sustainable end-to-end commuting solutions will drive more interconnected public transport networks, as well as advanced road and rail systems that improve reliability, efficiency and safety.

As the rail industry continues to be transformed by digitalisation, we aim to leverage our successes and pursue opportunities to move up the value chain as a turnkey rail solutions provider. In urban traffic management, emerging technologies such as edge computing, machine-to-machine communications and cellular vehicle-to-everything (C-V2X) technology are transforming the industry. In particular, C-V2X is set to play an important role in connected vehicles and 5G-enabled cities of the future, enabling more agile and insightful decision-making to reduce congestion and emissions while creating safer roads. We will be futureproofing our smart traffic management solutions with V2X capability to capitalise on growth opportunities in this emerging space.

...our extensive suite of Smart City solutions and deep domain expertise, combined with a laser focus on technology leadership and customer excellence, will place us in a strong position to help cities pave their way to a more connected, resilient and sustainable future...

With Mx-DMA MRC, we are unlocking tremendous flexibility and scale, opening up opportunities for our customers and allowing them to deliver a broader range of service levels at a lower cost structure without compromise. This innovation demonstrates our continued focus on delivering industry-leading technology that protects our customers' investments, today and in the future.

TEAM COMET
ST Engineering iDirect

More about Team Comet

With the need for very high speeds on the inbound, we pushed the boundaries of our Mx-DMA return technology to break the speed limit while increasing the flexibility and operational efficiencies that our customers depend on. This breakthrough will deliver the highest quality connectivity experience for users and enable our customers to offer the widest range of applications to expand their market share.

DAVE SUFFYS
Product Manager
Satellite IP Modems
ST Engineering iDirect

AGIL Secure Biometric E-Gate

Combining our expertise in robust security intelligence with highly accurate multimodal biometric authentication, the ICAO-compliant AGIL Secure Biometric E-Gate speeds up border control processes to enable quick, contactless and seamless traveller experiences.

With Asia's electric vehicle (EV) market poised for growth, the race to deploy EV charging infrastructure will continue to heat up. Our experience and capabilities in delivering an extensive and integrated suite of EV charging solutions will allow us to seize the opportunities that lie ahead.

The blend of emerging innovative technologies, broader adoption of cleaner vehicles and policy measures such as congestion pricing, can help cities holistically manage urban mobility for more seamless and greener journeys. We are confident that our differentiated Smart Mobility offerings, combined with robust go-to-market strategies and plans to expand our U.S. footprint through TransCore, will strengthen our position as a Smart Mobility market leader and unlock new growth opportunities.

Smart Utilities and Infrastructure

As cities grow, resource management needs to be more efficient to meet operational and sustainability goals. Through IoT technology combined with smart city operating platforms and digital twin technology, unprecedented operating insights, resource optimisation and efficiencies across verticals and entire cities can be achieved to elevate sustainability outcomes. We aim to build on our established success in enabling smart city infrastructure through devices and platforms to strengthen our IoT, Smart Street Lighting and Water Advanced Metering Infrastructure businesses in growth markets.

In parallel, cities need to stay resilient against physical and online threats – this is where advanced technology can provide peace of mind. In the post-pandemic future, contactless Smart Security operations leveraging biometric technology, AI automation and robotics built on robust cybersecurity technology, are set to be the new norm. We aim to leverage our deep expertise in robust integrated Smart Security management solutions to pursue innovations and opportunities in this space.

Satellite Communications

The satcom industry continues to transform and will see significant investments driven by several trends. These include a growing demand for satellite connectivity that is sparked by a boom in connected devices in the agriculture, maritime, mining and oil and gas markets as well as an expanding space defence market where commercial satcom ground assets will increasingly be deployed for critical missions and built-in redundancies. In addition, more powerful satellites entering the market coupled with a surge in multi-orbit deployments of HEO, GEO, MEO and LEO constellations will continue to supply terabit-level capacity to the market.

In tandem, the strong push for space-terrestrial network convergence, combined with the shift towards cloudification and virtualisation, will form the foundation for 5G infrastructure to create seamless hybrid networks that fuel new applications.

The intersection of new connectivity demand, network convergence and capacity supply surge will create opportunities for the ground segment – in reducing costs and providing seamless connectivity – to play a pivotal role in the industry's transformation. We will continue to strengthen our ecosystem partnerships and focus on driving innovation to improve the speed, scale, cost and agility of service delivery to set new benchmarks in seamless connectivity and enhance value for our customers.

As a ground segment leader, we are uniquely positioned to drive the industry forward through engineering innovations that bring ecosystems and technologies together to work as a unified network. To realise our vision of pioneering a fully digitised and virtualised ground infrastructure that will transform the economics, engagement models and technologies to rapidly expand global satcom accessibility, we will strengthen our product roadmap and capabilities in virtualisation, standardisation, orchestration as well as cloud and explore opportunities that will bring us closer to achieving our vision.

KEY FOCUSES FOR 2023

- **Sharpen Smart City go-to-market strategies to accelerate global growth**
- **Strengthen technology leadership and build new capabilities in digitalisation and sustainability**
- **Develop next-generation software-defined, cloud and 5G-enabled satellite communications platforms**

DEFENCE & PUBLIC SECURITY

WHAT WE ACHIEVED IN 2022

- **Expanded our Digital Business presence with the deployment of the largest Nutanix secured hybrid cloud infrastructure in Southeast Asia and set up the world's largest private cloud outside the U.S.**
- **Strengthened core competencies to help governments and enterprises strengthen cross-domain security and protect critical systems data**
- **Expanded our international defence footprint through teaming and joint venture agreements to augment our capabilities, as well as support in-country operations**

2022 was another eventful year. As the world adapted to living with COVID-19 and began to regain some degree of normalcy, the Russia-Ukraine conflict delivered yet another jolt to the global economy, causing further disruptions to supply chains and pushing up energy prices. The resulting inflation added more pressure on businesses.

Geopolitical conflicts highlighted the importance of national security and defence. Rising tensions among nations also added to the volatile global environment, leading to increased defence budgets in many countries and more export opportunities for our International Defence Business.

The landscape for our Digital Systems & Cyber business also underwent a transition. As digital transformation remained a focus for many businesses, Cloud, AI and Cybersecurity continued to be important issues and opportunities as businesses sought to capitalise on these new technologies to meet customers' evolving requirements and their own business operations in the evolving post-pandemic world.

DIGITAL SYSTEMS & CYBER

The Digital Systems & Cyber business continued to leverage the increasing digital transformation and urgent cybersecurity demands of our customers and stakeholders to deliver solutions for critical information infrastructure and enterprise systems that are smart, secure and sustainable.

To meet growing demand, we intensified efforts to grow our Digital business, particularly in the domains of AI, Cloud and

Cybersecurity. We also expanded our enterprise, defence and public security customer base locally and internationally.

One of the year's highlights was the deployment of the largest Nutanix secured hybrid cloud infrastructure in Southeast Asia. Delving into the future of mobility and healthcare, we partnered with Amazon Web Services to help our customers accelerate digital transformation with cloud as a key enabler.

Our core competencies in operational technology and IoT cybersecurity help governments and enterprises strengthen cross-domain security and protect critical system data...

We continued to build up our core competencies in operational technology and IoT cybersecurity to help governments and enterprises strengthen cross-domain security and protect critical system data from new and complex vulnerabilities. Our Cybersecurity products, comprising IP encryptors, encrypted data storage and data diodes, have been sold in more than 16 countries, with NetCrypt Mini encryptors being used by more than 16,000 remote workers to gain secured access to their organisations' networks. We also launched Wiz-Knight, a similar device targeted for the international market.

We infused AI technologies into our Emergency Response System for multi-language transcribing, enabling it to understand local accents. Emergency calls can now be transcribed in real time, the enhanced system will further reduce the time taken by the first responder to dispatch the necessary emergency services and resources.

Our training and simulation solutions gained international reputation as the MAK One suite of modeling and simulation solutions was selected to provide the common simulation software system for the Australian Army's Lands Systems Core 2.0 Program and to support Pakistan Air Force's large-scale synthetic battlefield training.

We continued to establish strategic partnerships with technology leaders to develop and offer value-added solutions for our customers. For our 5G-in-a-Box solution, we collaborated with Intel, Nokia and EdgeQ to develop an adhoc, rapid deployment of a Private 5G network where ruggedness, size, weight and power are major concerns. Capable of deployment in various settings, the 5G-in-a-Box is especially powerful when installed on a mobile platform, providing a non-infrastructure based private 5G Network. We are also exploring with partners to co-develop solutions in the domains of AI, Adaptive Learning, Training Simulators and Satellite Communications for overseas markets.

In the pursuit of new communications and connectivity technologies, we partnered with Singapore University of Technology & Design to research and develop advanced AI-enabled application platforms in air, land and maritime use cases. At their newly launched Future Communications Connectivity Lab, our 5G engineering teams will deep dive into a research project to provide a reliable and undisrupted connectivity solution for the operations of autonomous tugs and remote pilotage in coastal waters.

We continued to make inroads in our Unmanned Systems business, by adapting our Unmanned Surface Vessel (USV) technology to specific use cases which are risky, routine and manpower intensive. Following trials since 2019, we secured our first contract to deploy our USV for flotsam clearance in territorial waters.

We clinched two awards in the Digital Achievers Team category at the Tech Leader Awards 2022 for our Integrated Water Management System (IWMS) and Operational Medical Networks Informatics Integrator (OMNII). Organised by the Singapore Computer Society, the awards recognise individuals and teams with notable contributions in digital infrastructure, platforms and applications. We also received the CES 2022 Innovation Award by Consumer Technology Association for our NetCrypt Mini, the world's first ultra-small IP encryptor with multi-factor authentication protection.

Developed for Public Utilities Board (PUB) to digitalise its water management process, the IWMS provides real-time data on the status and health of operational systems at reservoirs and plants as well as minimises water supply disruptions through real-time detection and early intervention. The OMNII is a joint project with Singapore Civil Defence Force (SCDF), Ministry of Health and the Defence Science and Technology Agency. It serves as

ExtremV

With its configurable back cabin, the ExtremV is a single platform with multiple applications suitable for HADR missions. Based on the Bronco family of All Terrain Tracked Carrier, it is an amphibious, modular platform that can operate in 80% of the world's terrain.

We believe 'the whole is greater than the sum of its parts'. Innovative solutions we build comprise standalone digital technologies that can work together to bring a superior result when engineered in a right and productive way. For example, we can combine artificial technologies with any other digital technologies, combine 5G with satellite communications, or combine augmented reality, virtual reality, mixed reality to develop extended reality experiences. It's really exciting to think about the many possible combinations.

CLIFTON PHUA
CTO
Digital Systems

A key and critical approach to the evolving space of 5G is establishing the right ecosystem of technological and business partnerships. In adopting an open and collaborative approach to innovation, we are moving rapidly from ideation to piloting. This agile approach to our development of 5G products and solutions ensures that our customers can experience the potential of 5G early, ascertain its benefits and scale up adoption over time.

SEBASTIAN TAN
Head 5G Enterprise Communications and 5G,
Advanced Network & Sensor Systems
Digital Systems

5G-in-a-Box is a powerful, rugged edge computer server that combines multi-access edge computing and 5G mini-core network into a compact and transportable box. It allows adhoc, rapid deployment of private 5G networks on mobile platforms to provide reliable, secured connectivity to the network.

a critical platform for pre-hospital emergency care stakeholders like SCDF and hospitals' emergency departments by providing patient information to medical practitioners for timely decisions, thus improving the chances of patient survival.

LAND SYSTEMS

Expanding our international defence footprint remains a strategic focus area. We identified international opportunities that are compatible with our flagship platforms and solutions, including the Bronco All Terrain Tracked Carrier and its commercial variant ExtremV that is designed for Humanitarian Assistance and Disaster Relief (HADR) missions.

We made inroads in the HADR segment, working through distributors in Mexico and Peru, and are exploring other South American markets. In addition, we maintained our strong momentum in the sales of our 40mm munitions, with orders by new and repeat customers from Asia, Europe and the Middle East.

While the Oshkosh Cold-Weather All-Terrain Vehicle, which is based on our Bronco family of vehicles, completed trials in Alaska in early 2022, it did not progress further in the bid.

We continued to pursue other opportunities and avenues that will enable us to expand our global presence. These include teaming and joint venture agreements to augment our capabilities as well as supporting in-country operations through licensing or technology transfer. In July, we signed three agreements with the Saudi Arabian Military Industries for the provision of supplies and services of various defence equipment and capabilities as well as technical support and training.

Our U.S. specialty vehicles companies continued to secure new orders as the U.S. economy recovered post-COVID-19, but the industry faces new challenges, including inflationary pressures on material cost and supply chain delays.

As part of our smart manufacturing efforts, we launched the Land Systems Manufacturing Simulation Centre which utilises model-based manufacturing, to create a virtual twin environment for process validation and planning before production.

By using modelling and simulation technologies, we optimise the process, improve production quality and shorten time-to-market. This digital driven approach strengthens our engineering capabilities, increases agility to respond to customers' requirements and allows for scalability.

Expanding our international defence footprint remains a strategic focus area...

In tandem with the ongoing digitalisation of our manufacturing processes, we also upskilled our employees to equip them with relevant skills for the ever-progressive tech and engineering industry. More than 200 engineers and technicians will undergo the Factory Integrated Technology Workforce Upskilling Programmes that we will jointly develop with Temasek Polytechnic, as part of a larger three-year roadmap that covers engineering, operations, MRO, supply chain and facility management.

MARINE

After an internal strategic review, we divested our U.S. Marine businesses, comprising VT Halter Marine and ST Engineering Halter Marine and Offshore. The Marine business in Singapore, however, remains an important and core segment to the Group, along with Defence Aerospace, Digital Systems & Cyber, Land Systems and is unaffected by the divestment.

Our shipbuilding business in Singapore continued to do well. We delivered the last pair of the 5th Generation PT Class (5GPT) patrol boats to the Police Coast Guard (PCG), Singapore Police Force.

In June, the PCG commissioned 16 5GPT patrol boats. Based on our Super Swift series of fast patrol boat, the 5GPT patrol boat is the latest generation of patrol boats operated by the PCG. They are capable of high speed operations and swift manoeuvrability, including pursuit and arrest, surveillance and force protection, harbour patrol and security, as well as search and rescue.

NERVA SMS²

The NERVA Ship Management and Sensemaking System incorporates data analytics and machine learning, upgrading the nature of ship maintenance from reactive to predictive.

Our goal, now and for the future, is to bring the latest technology for virtual reality, simulation and visual displays to our customers. For critical training to be as effective as possible, visual immersion should be as realistic as it can be, and this leads our work in creating products that maximise mission training value, especially in complex and risky procedures for defence and public security applications.

RICCARDO ROVELLI
Regional Area Manager IT-DACH
ST Engineering Antycip

The Operational Medical Networks Informatics Integrator (OMNII), is a new critical digital platform that enables real-time communications and information sharing that results in better collaboration among emergency care stakeholders.

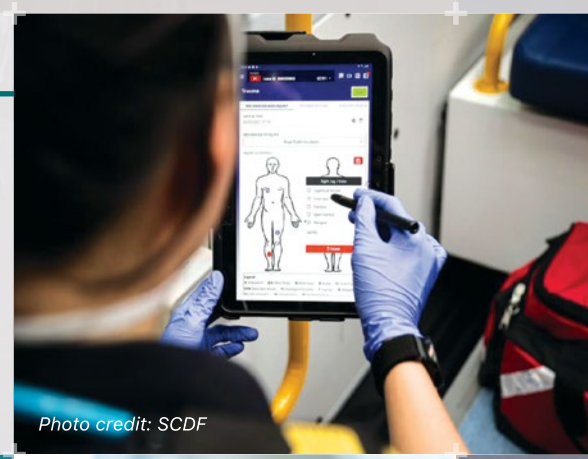


Photo credit: SCDF

The 5GPT patrol boats are designed specifically to operate with swift manoeuvrability and provide adequate stability. By integrating the technologically advanced NERVA Ship Management and Sensemaking system, we incorporate data analytics and machine learning into the patrol boats, equip them with automation and an open architecture design, and enable public security enforcers to execute missions safely and swiftly.

ALEX TING
Senior Manager
Engineering Design Centre (WESI)
Marine

We continue to make good progress on our other contracts, including the contract for the design and supply of platform equipment and technical assistance for four Falaj 3-class Offshore Patrol Vessels for the UAE Navy.

Our ship repair and conversion business also had a full year of ongoing projects comprising offshore, dredging and specialised vessels. Of these, we successfully delivered the mid-ship block on the Oranje trailing suction hopper dredger for Royal Boskalis Westminster N.V., as part of the Oranje lengthening project as well as converted the Fjell heavy lift vessel into a 14,000t fall pipe vessel.

We launched the Jurong Island Desalination Plant in April. Built by the consortium of Tuas Power and ST Engineering, along with PUB, Singapore's National Water Agency, the Jurong Island Desalination Plant is Singapore's fifth desalination plant and has a daily capacity of up to 137,000 cubic metres (about 30 million gallons) – the equivalent of 55 Olympic-sized swimming pools.

In December, we signed a teaming agreement with thyssenkrupp Marine Systems to provide warranty services and in-service support for four Invincible-class submarines that were built for the Republic of Singapore Navy.

DEFENCE AEROSPACE

We continued to work closely with our customers to enable them to meet and exceed their operational requirements. These customers include our close partners, the Royal Air Force of Oman and Lynden Air Cargo who have sent their C-130/L-382 aircraft to us every year for heavy maintenance for over two decades.

The Cybersecurity segment continues its strong growth momentum as businesses invest in IT security.

We deepened our relationships with strategic defence industry partners across the world, and signed MOUs for collaboration, in engineering and MRO with Airbus Defence and Space as well as AllClear Aerospace & Defence. We also made strong progress in our Smart MRO journey, with the operationalisation of smart tools management systems, digitalisation of work flows, remote aircraft tugs and aircraft proximity sensors for towing.

OUTLOOK

The IT landscape is ever-changing and the momentum of digital transformation shows no signs of slowing down as today's technological trends mature and are improved upon, even as new trends emerge.

AI is expected to continue to grow rapidly, with wide-ranging applications for nearly all industries and in our daily activities. Businesses will continue to use AI applications and platforms such as robotics to enhance business resilience and productivity as well as customer engagement. We continue to rigorously embed AI technologies, such as data processing and speech recognition, into our Enterprise applications. In addition, our Mission Critical Operations Centre and Emergency Response Systems have predictive analytics to drive greater operational efficiency and agility. Deep learning is one of the latest research trends in the field of AI which offers opportunities to go beyond the constraints of traditional machine learning.

As businesses continue to invest and expand their remote work capabilities, demand for cloud computing services such as Software-as-a-Service (SaaS), Infrastructure-as-a-Service (IaaS) and Platform-as-a-Service (PaaS) is expected to account for most of the growth in public cloud services. At the same time, we also watch with keen interest as traditional cloud solutions evolve to segments such as Multi-Cloud, Distributed Anywhere, Industry Clouds and Sovereign Clouds as well as emerging new technologies like edge computing which will improve bandwidth and response time. We continue to provide professional and managed services for customers to thrive in a multi and hybrid cloud environment powered by our Cloud Management Platform that meet their business requirements.

Project ‘Safe Track Installation’ re-engineered the manual task of track installation processes for our land platforms. Track linking, routing and clamping is now safer, easier and more efficient with the use of mechanised jigs and fixtures that aid in handling heavy components requiring precise coordination among technicians. This reduced the hazards of handling heavy machinery and tools, eased installation methods as well as eliminated reliance on other components.

The project won the Gold Award for Innovation at the Workplace Safety & Health Awards 2022. Always focused on workplace safety, we are always looking out for innovative methods to improve processes and minimise exposure to risks and hazards.

AUDREY CHUA
Principal Engineer, Manufacturing Engineering
Land Defence Systems

Hyperautomation happens when digital platforms take over end-to-end processes, orchestrating humans, machines, systems and bots in a single workflow. It is achieved through the use of technologies such as Machine Learning, Computer Vision, Natural Language Processing and Robotic Process Automation, all leveraging the scalability and reliability of today’s software platforms and cloud native services.

Through the design and delivery of intelligent automation solutions, we help our customers unlock opportunities from advanced digitalisation and new technologies.

TRACIE TEO
Assistant Vice President,
Digital Enterprise
Mission Software & Services
Digital Systems

As the global automotive market shifts towards electrification, our customers are naturally looking to extract operational benefits and values in sustainability from our ongoing development of hybridised electric vehicle products. The onus is on us as a technology and solutions provider to reach out to our customers promptly, listen to their needs and wants, and distil their voices into useful product value proposition. This way, our engineers and innovators can take pride and satisfaction in their hybridisation efforts on our vehicles to yield better fuel efficiency, lower total cost of ownership (TCO) and increase operational flexibility for our customers while contributing to a more sustainable world.

JASON LIM
Deputy GM, Engineering
Land Defence Systems

5GPT Patrol Boat

Designed for homeland security, the 5GPT patrol boats are capable of high-speed operations

The Cybersecurity segment continues to see strong momentum as businesses, large and small, invest in IT security software and cyber defences to protect themselves from breaches and cyberattacks. We are focused on strengthening our capabilities and differentiating ourselves as a trusted provider of end-to-end IT and OT cybersecurity solutions for critical infrastructure and high security enterprises. We also keep abreast of new developments and are conducting Deep Cybersecurity Research, including red teaming and vulnerability research through InnoEdge Labs, that we set up.

The outlook for our international defence business remains positive for the next few years. Countries have increased their defence budgets, mostly for military transformation and vehicle upgrades. With the increasing digitalisation of traditional military equipment, we see opportunities in applications of augmented reality, artificial intelligence, robots/drones, IoT and real-time data analysis in the operational concepts of future warfare. We continue to improve and enhance our current suite of defence solutions with these new technologies to support the demands of the modern battlefield for superior situational awareness and quicker decision making.

An example is the new hybrid Terrex, displayed at the Singapore Airshow 2022 as the centrepiece of the Group's manned-unmanned teaming (MUM-T) concept. Its Vehicle Operation Cockpit gives a 360° see-through view for complete situational awareness and Automatic Target Detection and Tracking capabilities for enhanced fighting operations. The vehicle also serves as a central Crew Control Station and launchpad for UAV/UGV MUM-T operations. Its Drive-By-Wire design provides for the possibility of future capability expansion, including unmanned autonomous operations.

We will also work with partners who are looking to localise production, as part of countries' efforts to overcome the supply chain challenges that they have experienced in the past few years.

Our Marine business continues to sharpen its design and shipbuilding competencies. Our range of multi-mission vessels serves a wide range of missions, including maritime security, search and rescue operations as well as Humanitarian and Disaster Relief.

Leveraging our strong track record in ship repair, we are also looking to expand our footprint internationally in the repair and overhaul of naval vessels and pursue opportunities to provide design, materials and project management through intellectual property and technology transfer. We continue to enhance our service offerings to our ship repair customers, which include retrofitting of ships for green fuel and conversion of vessels to support the growing segments such as the offshore wind segment. Responding to the growing demand for end-to-end maintenance and logistics support, we are offering our comprehensive maintenance and a proprietary fleet logistics information system which uses data analytics and machine learning to ensure the operational readiness of our customers' vessels and enhance the lifetime of their fleet.

Keeping pace with new technologies as well as growing environmental concerns, we continue to work on innovative concepts including autonomous vessels and developments in renewables and decarbonisation solutions.

Our Singapore Marine business continues to be strategic and core.

KEY FOCUSES FOR 2023

- **Continue to provide professional and managed services for customers to thrive in a multi and hybrid cloud environment and develop progressive solutions alongside emerging new technologies**
- **Capture opportunities in applications of augmented reality, artificial intelligence, robots/drones, IoT and real-time data analysis in the operational concepts of future warfare**
- **Invest and strengthen our defence capabilities to better support our customers**

FINANCIAL REVIEW

STRONG REVENUE GROWTH AND SIGNIFICANT IMPROVEMENT IN BASE OPERATING PERFORMANCE IN FY2022

In FY2022, the Group's revenue grew strongly and its base operating performance improved significantly.

The Group posted a 17% year-on-year (y-o-y) increase in revenue from $7.7b to $9.0b, contributed by all its business segments. Group earnings before interest and tax (EBIT) improved 9% y-o-y to $735.1m from $673.6m despite a reduction of $203m in COVID-related government support. On a base operating performance (BOP) basis excluding government support, energy inflation impact of $36m and TransCore transaction and integration (T&I) expenses of $30m, as well as the positive impact of pension cost savings of $72m, Group EBIT increased by 55% y-o-y to $727m. This result was achieved through cost savings initiatives and business growth.

Group Profit attributable to shareholders (Net Profit) was $535m, down 6% y-o-y from $571m. If government support, energy inflation, TransCore T&I expenses, and tax-exempt effect of Jobs Support Scheme, as well as the positive impact of pension cost savings were excluded, Group Net Profit on a BOP basis would be 39% higher y-o-y at $549m.

The Group won sizeable new contracts during the year culminating in a robust order book of $23.0b as at the end of 2022, of which $7.2b is expected to be delivered in FY2023.

The Board has proposed a final dividend of 4.0 cents per share. Together with the three quarterly interim dividends of 4.0 cents per share paid in 2022, the total dividend for FY2022 will be 16.0 cents per share.

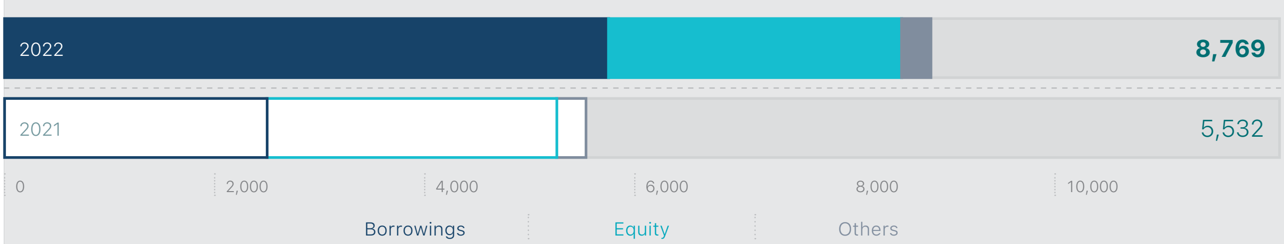
FINANCIAL POSITION

As at 31 December 2022, the Group's total assets at $14,964m were higher by $4,448m as compared to the prior year, due largely to the acquisition of TransCore, investments in aviation assets as well as increase in business volume.

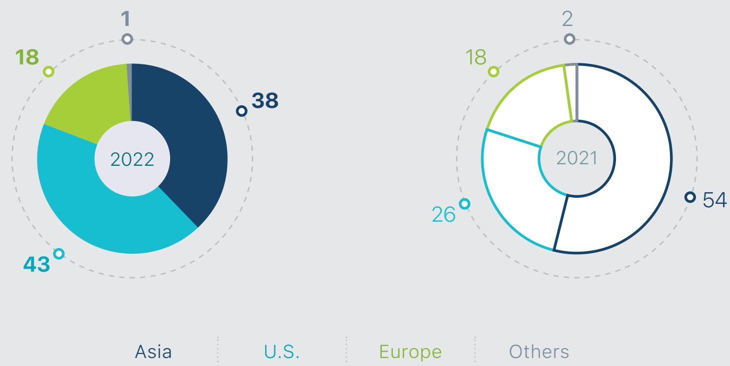
The average capital employed in FY2022 was $8,769m, an increase of $3,237m from $5,532m in FY2021. The higher average capital employed was attributable mainly to the higher borrowings for the acquisition of TransCore and aviation assets.

TOTAL ASSETS DEPLOYMENT ($m)

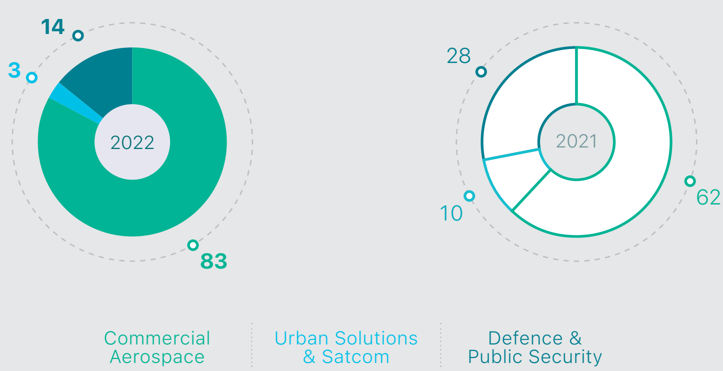
CAPITAL EMPLOYED ($m)



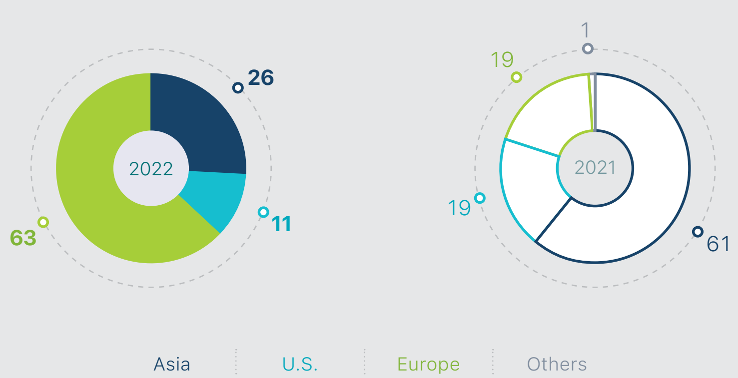
TOTAL ASSETS BY GEOGRAPHY (%)



CAPITAL EXPENDITURE BY SEGMENTS (%)



CAPITAL EXPENDITURE BY GEOGRAPHY (%)



CAPITAL EXPENDITURE

In FY2022, the Group invested $763m (2021: $312m) in capital expenditure, attributable to Commercial Aerospace ($635m), Urban Solutions & Satcom ($25m) and Defence & Public Security ($103m). Major capital expenditure included aviation assets, hangars, data centres, production equipment and upgrading of IT infrastructure.

FINANCIAL REVIEW

TREASURY MANAGEMENT

Given its international operations, the Group is exposed to various financial risks, including foreign exchange, liquidity, interest rate and credit risks. The Group has established treasury policies and guidelines to mitigate these risks.

Treasury activities are handled by the Group's wholly owned entity, ST Engineering Treasury Pte. Ltd. (STET), to ensure effective management of the Group's liquidity and financial risk exposures.

During the year, the Group updated the $5b Multicurrency Medium Term Note Programme (MTN Programme) and the U.S. Commercial Paper Programme (USCP Programme) established on 18 March 2020 and 26 August 2019 respectively.

The MTN Programme was amended and updated to the $5b Global Medium Term Note Programme (GMTN Programme) on 18 April 2022. Under the GMTN Programme, its wholly-owned subsidiaries, ST Engineering RHQ Ltd., STET and STE TransCore Holdings, Inc. (STE TCH) can issue notes (Notes) from time to time, in various amounts and tenors and may be fixed rate notes, floating rate notes, zero coupon notes, index linked notes, dual currency notes or a combination of any of the foregoing.

On 5 May 2022, STE TCH issued a US$700m 3.375% Notes due 2027 and a US$300m 3.75% Notes due 2032. The net proceeds of these issues were used by STE TCH to refinance part of the short-term USCP issued for the acquisition of TransCore. STET had entered into Treasury Locks (T-Locks) in anticipation of the issuance of the Notes and settled the T-Locks in its favour. The interest expenses incurred on the Notes were reduced through the amortisation of the T-Locks settlement gains.

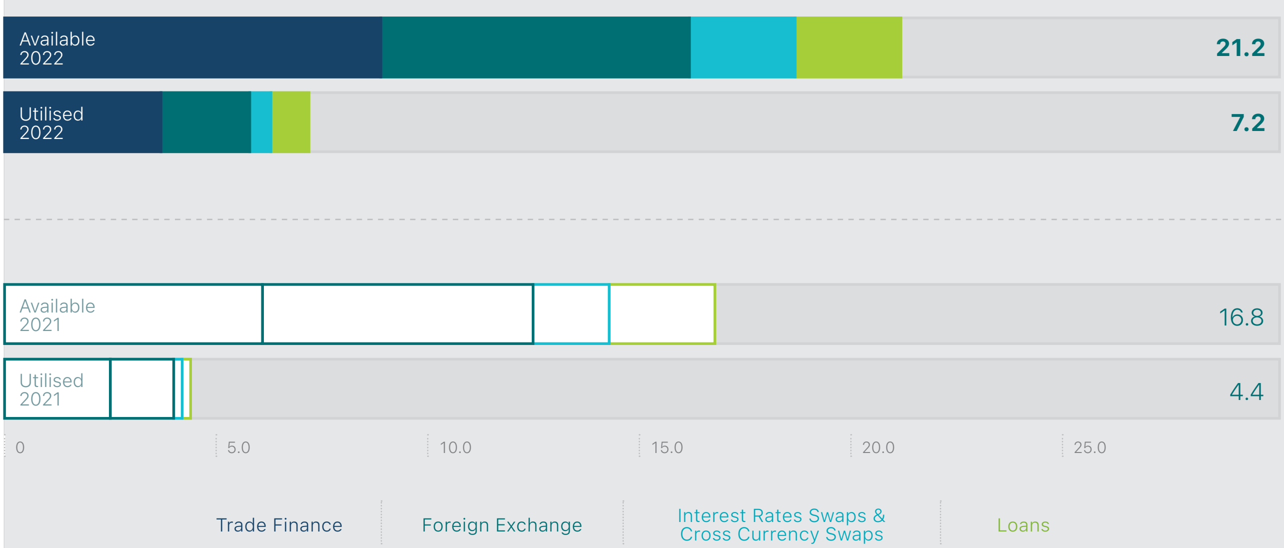
On 29 August 2022, the Group completed the update of the USCP Programme to include STE TCH as an issuer, in addition to ST Engineering North America, Inc., with the total limit remaining the same at US$3.0b. The committed revolving credit facility to backstop the USCP Programme was concurrently revised to US$2.2b.

Banking Facilities

The Group has banking facilities of approximately $21.2b (2021: $16.8b) as at 31 December 2022 to support business operations in the areas of trade finance, hedging and credit.

As at 31 December 2022, the Group has utilised $7.2b or 34% of its total available facilities (2021: $4.4b or 26%) with $14.0b or 66% (2021: $12.4b or 74%) remaining available.

BANKING FACILITIES* ($b)



* excludes US$2.2b committed revolving credit facility to backstop USCP.

Foreign Exchange
The Group has receivables and payables denominated in foreign currencies. Where possible, the Group offsets currency exposures across its business units before hedging the remaining currency exposures in the market via foreign exchange forward contracts. The main currencies transacted in 2022 for the Group were USD and EUR.

During the year, the Group engaged in approximately $8.6b (2021: $3.3b) equivalent of foreign exchange transactions. As at 31 December 2022, $2.1b (2021: $1.5b) remained as outstanding foreign exchange transactions.

Liquidity
The Group's cash and cash equivalents, stood at $0.6b as at 31 December 2022 (2021: $0.8b).

Borrowings
The Group's borrowings including lease obligations were higher at $6.5b as at 31 December 2022 (2021: $2.1b).

Apart from the lease obligations, the Group's borrowings comprised the medium term notes, USCP, and short-term and long-term bank loans. Details of the Group's borrowings are presented in Notes E4 to the Financial Statements (pages 227 to 232).

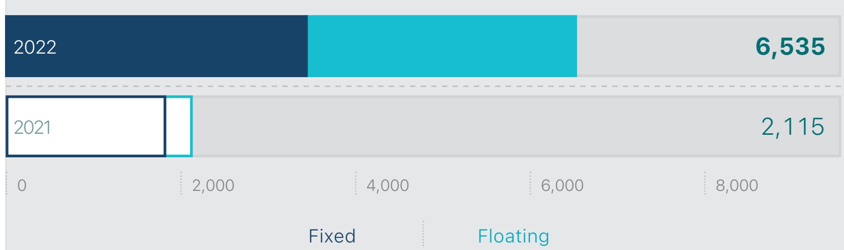
The gross debt/EBITDA ratio and net debt/EBITDA ratio as at 31 December 2022 of 5.2 times and 4.7 times respectively were higher compared to 2021's 2.0 times and 1.2 times respectively following the debt-financed acquisition of TransCore.

ST Engineering's credit ratings remain strong at Aaa (outlook negative) and AA+ (stable) by Moody's and S&P respectively.

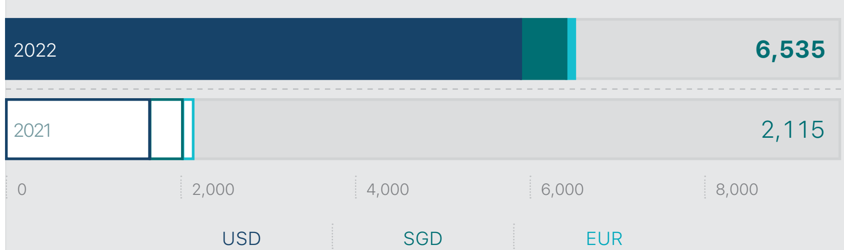
	2022	2021
Gross Debt	**6,535**	2,115
Gross Debt / EBITDA Ratio	**5.2**	2.0
Net Debt	**5,933**	1,299
Net Debt / EBITDA Ratio	**4.7**	1.2

BORROWING PROFILE BY MATURITY ($m)

BORROWING PROFILE BY FIXED AND FLOATING RATES ($m)



BORROWING PROFILE BY CURRENCY ($m)



FINANCIAL REVIEW

CASH FLOWS

In FY2022, the Group generated operating cash flow of $673m, used $4,571m in investing activities and obtained $3,698m from financing activities to end the year with cash and cash equivalents (CCE) of $602m.

Operating Activities
The Group generated cash of $673m from its operating activities in FY2022, which was lower than the prior year due to increase in working capital to support increase in business volume and new projects.

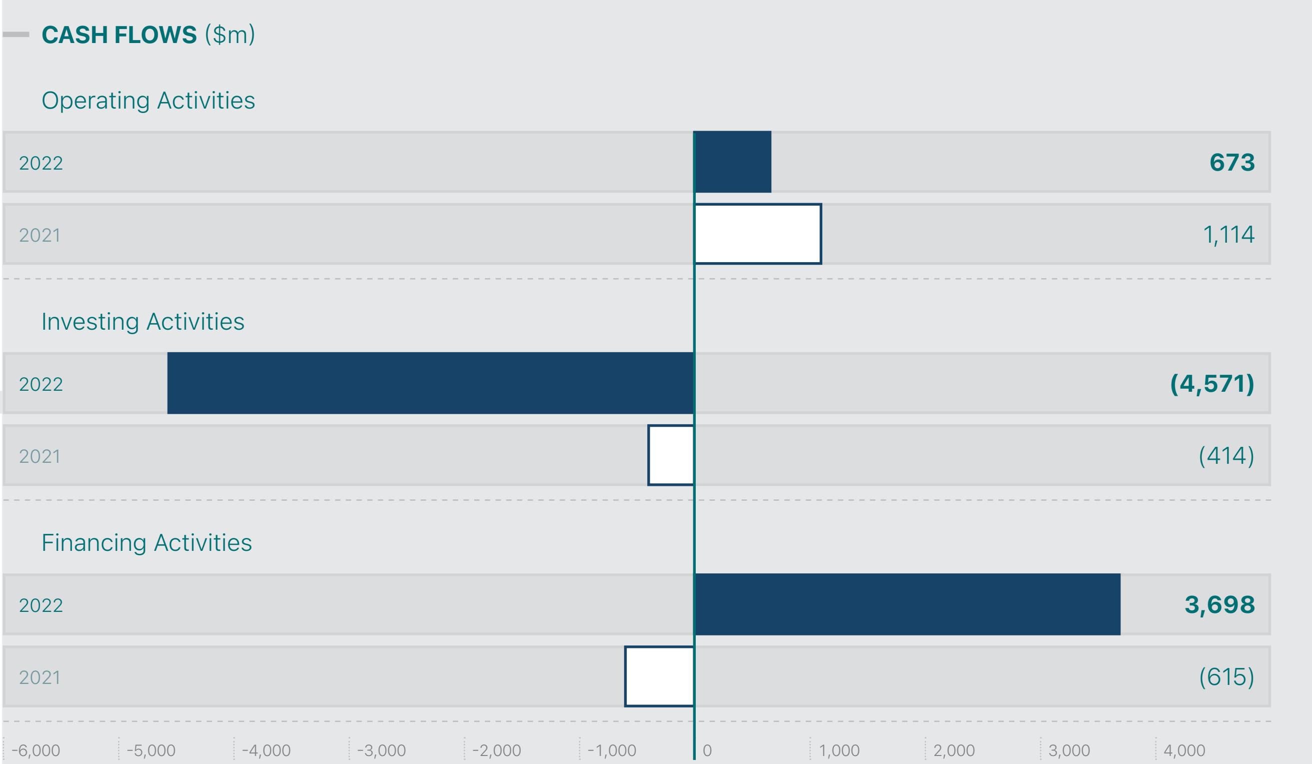
Investing Activities
Net cash used in investing activities of $4,571m in FY2022 was attributable mainly to the Group's acquisition of TransCore ($3,630m), investment in property, plant and equipment ($763m) and additions to intangible assets ($203m).

Financing Activities
Net cash from financing activities of $3,698m in FY2022 was mainly attributable to proceeds from medium-term note issuance ($1,385m), net proceeds from issuance of commercial papers ($2,353m), and net proceeds from bank loans ($712m), partially offset by the payment of dividends ($686m).

SIGNIFICANT ACCOUNTING POLICIES

The Group's financial statements are prepared in accordance with Singapore Financial Reporting Standards (International) (SFRS (I)). The significant accounting policies are presented at the end of each Notes to the Financial Statements (pages 142 to 268).

The Group has applied the same accounting policies and methods of computation in the preparation of the financial statements for the current reporting period and are consistent with those used in the previous financial year. The adoption of the new and revised SFRS(I) and related interpretations that are mandatory for financial year beginning on or after 1 January 2022 has no significant impact on the financial statements of the Group or the Company in the current financial year.



TOTAL SHAREHOLDER RETURN

In calendar year 2022, ST Engineering paid total dividends of 22.0 cents per share, comprising (i) final dividend of 10.0 cents per share for financial year 2021 paid in May 2022 and (ii) three quarterly interim dividends for financial year 2022 of 4.0 cents per share each paid in June 2022, September 2022 and December 2022. Based on the average share price of $3.56, the total dividend per share of 22.0 cents paid in calendar year 2022 translates to a dividend yield of 6.2%[1].

ST Engineering's share price at the end of the year was $3.35, a 10.9% decrease y-o-y. With a dividend yield of 6.2%, total shareholder return (TSR) for 2022 was negative 4.7% (being 6.2% less 10.9%).

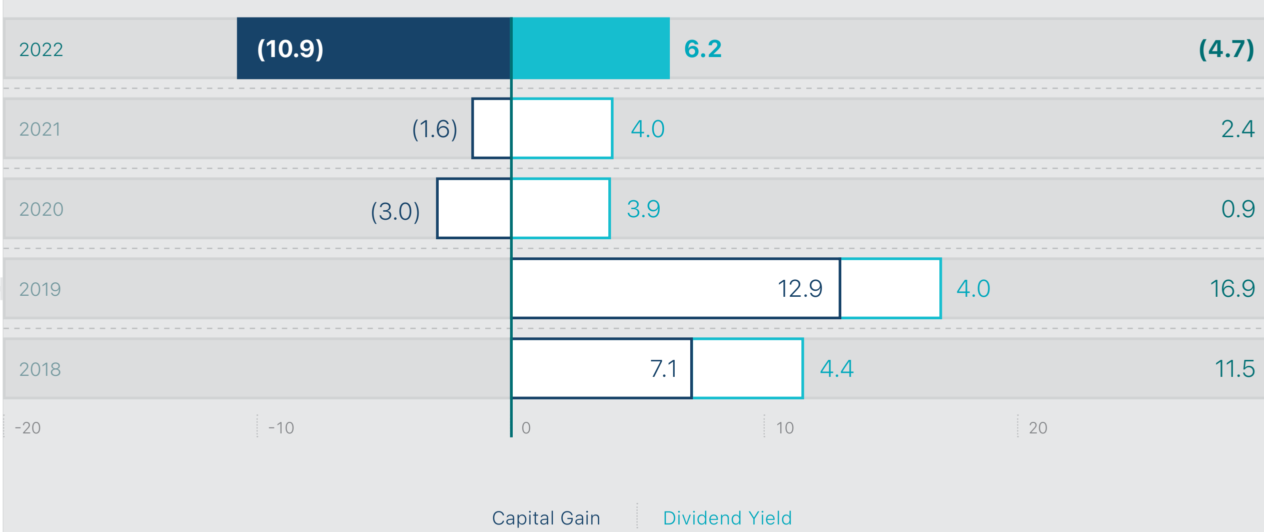
WEIGHTED AVERAGE COST OF CAPITAL (WACC)

The Group's WACC[2] for 2022 was 5.0% (2021: 5.0%).

[1] For the purposes of TSR computation, dividend yield based on dividends paid to shareholders during the "calendar year" is used. If TSR is computed on the basis of dividends paid or proposed against the performance of "financial year" 2022, total dividend per share of 16.0 cents and dividend yield of 4.5% would be used instead. TSR computed on this "financial year" basis would be negative 6.4% (being 4.5% less 10.9%).

[2] Calculated in accordance with established Group policy.

TOTAL SHAREHOLDER RETURN (%)



FINANCIAL REVIEW

5-Year Key Financial Data	2022	2021	2020	2019	2018
Income Statement ($m)					
Revenue	**9,035**	7,693	7,158	7,868	6,698
Profit					
EBIT	**735.1**	673.6	596.4	731.9	654.3
PBT	**597.5**	637.6	534.4	695.2	620.7
Net Profit	**535.0**	570.5	521.8	577.9	494.2
Balance Sheet ($m)					
Property, plant and equipment, and right-of-use assets	**2,658**	2,352	2,296	2,289	1,743
Intangible and other assets	**6,255**	2,877	2,686	2,622	1,753
Inventories	**1,684**	1,261	1,269	1,312	1,184
Trade receivables, contract assets, and advances and other receivables	**3,765**	3,210	2,982	2,845	2,477
Bank balances and other liquid funds and funds under management	**602**	816	731	453	416
Current liabilities	**8,005**	4,680	4,289	5,446	3,851
Non-current liabilities	**4,306**	3,168	3,100	1,584	1,187
Share capital	**896**	896	896	896	896
Treasury shares	**(36)**	(33)	(24)	(27)	(9)
Capital and other reserves	**66**	2	18	(37)	46
Retained earnings	**1,473**	1,548	1,402	1,390	1,313
Non-controlling interests	**255**	255	282	269	288
Financial Indicators					
Earnings per share (cents)	**17.18**	18.30	16.74	18.53	15.85
Net assets value per share (cents)	**77.03**	77.49	73.59	71.32	72.00
Return on sales (%)	**6.0**	7.4	7.3	7.5	7.7
Return on equity (%)	**22.3**	23.6	22.8	26.0	22.0
Return on capital employed (%)	**6.9**	10.4	9.6	12.3	13.6
Dividend					
Gross dividend per share (cents)	**16.0**	15.0	15.0	15.0	15.0
Dividend yield (%)	**4.5**	4.0	3.9	4.0	4.4
Dividend cover	**1.1**	1.2	1.1	1.2	1.1
Productivity Data					
Average staff strength (numbers)	**23,420**	22,405	23,103	22,494	21,418
Revenue per employee ($)	**385,786**	343,355	309,842	349,794	312,724
Net profit per employee ($)	**22,844**	25,465	22,588	25,693	23,076
Employment costs ($m)	**2,597.8**	2,128.2	1,948.1	2,291.7	1,999.1
Employment costs per $ of revenue ($)	**0.29**	0.28	0.27	0.29	0.30
Value added per employee ($)	**166,888**	145,673	129,893	155,338	137,092
Value added per $ of employment costs ($)	**1.50**	1.53	1.54	1.52	1.47
Value added per $ of gross property, plant and equipment ($)	**0.85**	0.75	0.73	0.87	0.76
Value added per $ of revenue ($)	**0.43**	0.42	0.42	0.44	0.44

REVENUE ($b)

$9.04b

2022	**9.04**
2021	7.69
2020	7.16
2019	7.87
2018	6.70

PROFIT BEFORE TAX ($m)

$597.5m

2022	**597.5**
2021	637.6
2020	534.4
2019	695.2
2018	620.7

NET PROFIT ($m)

$535.0m

2022	**535.0**
2021	570.5
2020	521.8
2019	577.9
2018	494.2

ORDER BOOK ($b)

$23.0b

2022	**23.0**
2021	19.3
2020	15.4
2019	15.3
2018	13.2

INVESTOR RELATIONS

In 2022, ST Engineering continued to proactively engage the global investment community through group and one-on-one meetings, conference calls, investor conferences and roadshows.

We maintained strong links with sell-side analysts and continued to be well covered by 14 analysts who issue regular reports. We monitor analyst, industry and media reports closely as part of our efforts to continuously improve disclosures and investor relations practices.

During the year, at the release of our half-yearly financial results, we held hybrid in-person and virtual briefings for sell-side analysts, institutional investors, shareholders and media. We augmented these half-yearly briefings with 1Q and 3Q Market Updates briefings for the sell-side analysts. We discussed financial performance, business updates and how the management team navigated a challenging operating environment marked by inflationary pressures, higher energy price, global chip shortages, labour availability and supply chain disruptions. In the 1Q2022 Market Updates, we covered an information session on our Digital business comprising Cloud, AI Analytics and Cybersecurity, highlighting its industry trends and growth drivers, providing further information on our roadmap to triple this business to more than $500m by 2026. In the 3Q2022 Market Updates, we provided an update on TransCore post-acquisition. Apart from these briefings, we hosted sell-side analysts and institutional investors to our ST Engineering Pavilion at Singapore Airshow 2022, and brought a group of sell-side analysts to tour our Commercial Aerospace facilities in Singapore.

We met with our shareholders and investors in select cities in Europe, the UK, the U.S. and Canada. We also engaged investors, ESG related research and rating agencies to communicate the Group's sustainability framework, priorities and goals. Relevant functions and departments such as Sustainability, Human Resources and Risk & Assurance also participated in these meetings. We value these exchanges as they help to sharpen our ESG disclosures.

Retail investors are important stakeholders to us. We strongly encourage them to attend our annual general meetings and they are welcome to contact us directly via email or telephone.

Our 25th Annual General Meeting (AGM) was held virtually in April. Shareholders were encouraged to submit their questions ahead of the AGM and our responses were posted on SGXNet and on our corporate website five days before the meeting.

The Chairman along with our Group President & CEO answered questions which were posted live by shareholders during the meeting. We also conducted live voting during the AGM. Shareholders who were unable to attend the meeting had appointed Chairman or others as their proxy(ies) to vote on their behalf.

We maintain an updated corporate website that serves as the primary source of corporate information, financial data, sustainability as well as business updates and developments. A dedicated Investor Relations (IR) section contains a wealth of investor-related information including stock exchange announcements, investor presentations, financial results and annual reports as well as information on Shareholder Meetings. Material information is posted on the IR section immediately after release to SGXNet to ensure fair, equal and prompt dissemination of information.

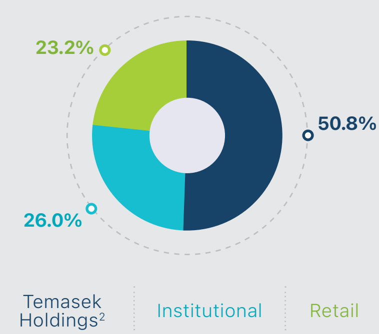
Our IR communication principles and mechanism of engagement are captured in our Investor Relations Policy, available in the 'Investor Relations' section of our website. We constantly review our level of disclosure to align with best practices and to ensure that we provide information necessary for investors to make well-informed investment decisions.

Visit our Investor Relations webpage

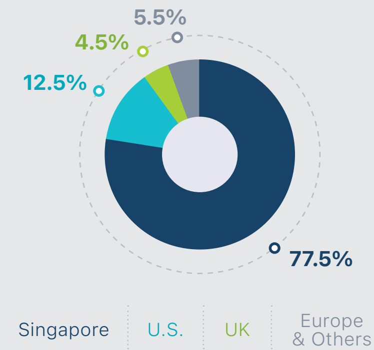
SHAREHOLDER PROFILE

Temasek Holdings remains our largest shareholder with about 50.8% of total issued shares as at 30 December 2022. Another 26% was held by institutional shareholders and the remaining 23.2% held by retail shareholders. In terms of geographic distribution, Singapore shareholders held approximately 77.5%, followed by those in the U.S. (12.5%), UK (4.5%) and Europe and others (5.5%).

SHAREHOLDINGS BY TYPE[1] (%)



SHAREHOLDINGS BY COUNTRY OF RESIDENCE[1] (%)



Notes

[1] Shareholding profile was derived from analysis of ST Engineering's share register as at 30 December 2022.

[2] Total shareholdings of Temasek Holdings and Vestal Investments as at 30 December 2022.

2022 INVESTOR RELATIONS CALENDAR

Jan-Mar	• DBS Vickers Pulse of Asia Conference • Sell-side analysts and institutional investors' visit to ST Engineering Pavilion @ Singapore Airshow • FY2021 Results release and briefing • Post-FY2021 Results institutional investor meetings • CITIC CLSA ASEAN Conference 2022
Apr-Jun	• Nomura Investment Forum Asia • 1Q2022 Market Updates briefing • U.S. NDR • UK/Europe NDR
Jul-Sep	• 1H2022 Results release and briefing • Post-1H2022 Results institutional investor meetings • 29th Annual CITIC CLSA Flagship Investors' Forum 2022
Oct-Dec	• Sell-side analysts' visit to Aerospace facilities (Singapore) • Toronto NDR • 3Q2022 Market Updates briefing

Supplemented by group and one-on-one IR meetings throughout the year

AWARDS HIGHLIGHTS

BUSINESS EXCELLENCE

Top Five Most Attractive Engineering and Natural Sciences Employers in Singapore
By Universum

Billion Dollar Club 2022
By The Edge Singapore
- Industrial Conglomerates
- Industrial Goods
- Consumer Goods Conglomerates
- Overall Sector Winner

Charity Platinum Award
By Community Chest, Singapore

Best Places to Work 2022 (Large Company)
By Washington Business Journal
- iDirect Government

Aviation 100 (Global) Asia-Pacific Freighter Deal of the Year
By Airline Economics
- Commercial Aerospace

Aviation 100 (Asia Pacific) Freighter Deal of the Year
By Airline Economics
- Commercial Aerospace

Aviation 100 (Asia Pacific) MRO of the Year
By Airline Economics
- Commercial Aerospace

Top Ten Companies Recognised for AI Ethics and Governance
By Singapore Computer Society
- Digital Systems

Asia Pacific Japan Momentum Partner of the Year
By Nutanix
- Digital Systems

Competitive Win Partner of the Year
By CyberArk
- Cyber

Total Defence Awards
By Ministry of Defence, Singapore
- Land Systems

PRODUCT & SERVICE EXCELLENCE

Teleport Technology of the Year
By World Teleport Association
- ST Engineering iDirect

Maritime Mobile Innovation
By Mobile Satellite Users Association (MSUA)
- ST Engineering iDirect

Best Managed Electrical & Mechanical Systems – Project Partner
By Land Transport Authority, Singapore
- Urban Solutions

Innovation of the Year
By Aviation Week & Network
- Commercial Aerospace's DroNet

Tech Leader Awards 2022
By Singapore Computer Society
- Digital Systems

Army Capability Development Award
By Singapore Armed Forces
- Digital Systems

Best Outsourced Contact Centre of the Year (Above 100 seats) Silver Award
By Contact Centre Association of Singapore
- Digital Systems

CES 2022 Innovation Award
By Consumer Technology Association
- Cyber

Defence Technology Prize 2022 Team (Research & Development) Award
By Ministry of Defence, Singapore
- Autonomous Underwater Vehicle

Defence Technology Prize 2022 Team (Engineering) Award
By Ministry of Defence, Singapore
- Next Generation Army Command and Control Information System
- Airborne System

OPERATIONS & PEOPLE EXCELLENCE

MRO Leader of the Year
By Aviation Week & Network
- Jeffrey Lam
  President
  Commercial Aerospace

ASMI Meritorious Award (Gold)
By Association of Singapore Marine Industries
- Phua Siang Ling
  SVP/Head Project Directorate,
  Shipbuilding Marine

Best Contact Centre Team Leader of the Year (Above 100 seats) Bronze Award
By Contact Centre Association of Singapore
- Jassica Ong
  Executive, e-Services
  Mission Software & Services
  Digital Systems

WSH Officer Award
By Workplace Safety and Health Council, Singapore
- Ting Seng Kwong Melvin
  Senior Executive
  Advanced Material Engineering
  Land Systems

WSH Innovation Award
By Workplace Safety and Health Council, Singapore
- Land Systems

Safety and Health Award Recognition for Projects (SHARP)
By Workplace Safety and Health Council, Singapore
- Urban Solutions
- Marine

National Awards (COVID-19)
By Prime Minister's Office Singapore
- ST Engineering
- ST Engineering Innosparks
- Gareth Tang, EVP/Head, Robotics and Autonomous Solutions & Urban Environment Solutions

Urban Solutions was awarded the Best Managed Electrical & Mechanical Systems – Project Partner award for their work on the communication systems on the Thomson-East Coast Line.

ST Engineering iDirect's multiservice Dialog platform and high-speed MDM5010 modem won the Maritime Mobile Innovation award for powering ultra-high speed broadband connectivity at sea.

Drone taking off from charging station which is part of the drone network solution, DroNet, that won the innovation award by Aviation Week & Network.

The teams behind the Integrated Water Management System and Operational Medical Networks Informatics Integrator won Tech Leader Awards for their digital innovations that have made a positive impact in society.

The Mobility Rail team celebrating their wins for six projects at the WSH SHARP Awards 2022. Teams and individuals across ST Engineering brought home awards in three categories.

SUSTAINABILITY DASHBOARD

GHG Emissions

37%

reduction over 2010 base year

Green Energy

13%

of electricity consumption from Singapore operations derived from renewable energy

Supply Chain

$350m

Value of purchases from SMEs in Singapore

Accident Rate

0.4

RFR*

23.9

RSR*

1

Fatality

Recognition

Included in Dow Jones Sustainability Asia Pacific Index as

Top 20%

of **600** largest companies in the region, based on long-term ESG criteria

Research and Development

$327m

spent on R&D in 2022

Learning and Development

22.5

average training hours per employee

Bribery and Corruption

Zero

bribery and corruption cases in 2022

Corporate Community Contributions

About

$2.9m

worth of community contributions by the Group and its employees

People Managers

15%

of male employees are people managers

14%

of female employees are people managers

* Recordable Frequency Rate
Recordable Severity Rate

SUSTAINABILITY IS IN OUR DNA...

BOARD STATEMENT

The Board of Directors oversees the management, including the review of material environmental, social and governance factors for ST Engineering and takes them into consideration when setting the Group's strategic direction.

We remain steadfast in positively impacting people's lives and the health of our planet by operating responsibly in our communities and in the wider global ecosystem. We create value by addressing real-world problems, including those related to climate change, urbanisation, pandemics, public safety and evolving security challenges. We harness technology and innovation to enable a more secure and sustainable world.

In the medium term, we will focus on our decarbonisation pathways, and the opportunities and risks from climate change.

We link a range of operational, financial and non-financial key performance indicators to our material ESG factors to encourage the adoption of strategies and practices that are aligned to the sustainable and long-term success of the Group.

Read our 2022 Sustainability Report

AND IS INTEGRATED INTO OUR STRATEGY AND OPERATIONS

Sustainability is deeply embedded in ST Engineering. Our focus on 'People, Planet, Profit' is aligned with our plans for growth.

In 2022, we set up the Green Technology Taskforce to explore frontier green technologies that can help us use technology and innovation to address climate change. This presents opportunities for the Group.

Moving forward, we continue to strive to identify more synergies between sustainability and the future growth of our business.

CHERYL CHAN
Group Chief Strategy & Sustainability Officer

SUSTAINABILITY IS CRITICAL FOR OUR LONG-TERM SUCCESS

Creating value for our stakeholders in a sustainable manner is essential to the Group's success. Our business processes reflect long-term and multi-stakeholder considerations, balancing customers' needs of today with the world's needs of tomorrow.

We believe in doing well while doing good. This includes offering products and solutions that enable our customers to operate sustainably while conducting our business ethically and responsibly.

We support inclusive development, nurturing an ecosystem that promotes the continuous growth of our business. We facilitate this by contributing to the communities that we operate in and developing our people.

Integrating sustainability into our strategy and operations ensures that our business remains resilient in the midst of an uncertain and volatile world.

WE CONDUCT OUR BUSINESS RESPONSIBLY

As a Group, we are committed to protecting human rights and adhere to all labour laws and regulations where we operate.

We provide safe and healthy working conditions, and respect the dignity of the individual. We have zero tolerance for unethical labour practices such as child labour, forced labour, slavery and human trafficking in any of our operations.

We prohibit discrimination and harassment at our workplaces. We support the right to freedom of association and encourage effective communication and consultation with our employees.

We do not design, produce or sell anti-personnel mines, cluster munitions and white phosphorus munitions or any of their related key components.

WE CONTRIBUTE TO GLOBAL GOALS

ST Engineering is a participant of the United Nations Global Compact (UNGC). We support its Ten Principles and are also committed to advance the broader objectives of the United Nations Sustainable Development Goals (UN SDGs).

We affirm our support of all 17 UN SDGs and have identified six goals where the Group has more contributions in terms of our internal practices, and in the products and services we offer to our customers.

Our contributions to these six goals are also reflected in the 10 material ESG factors of the Group.

WE SUPPORT
UN GLOBAL COMPACT

SUSTAINABLE DEVELOPMENT GOALS

ACCOUNTABILITY BEGINS AT THE TOP

We believe that success is built on a culture of sustainability in the organisation and is dependent on strong, committed and accountable leadership.

The Board provides strategic direction and considers sustainability issues, including the management of material Environmental, Social and Governance (ESG) factors when formulating the Group's strategies and policies.

The Board's Risk and Sustainability Committee (RSC) oversees risk, internal controls and sustainability matters.

The Group P&CEO, supported by the Group Executive Committee, is accountable to the Board for the implementation of these strategies and directions.

Ultimate Accountability
Board of Directors

Oversight on Behalf of the Board
Risk and Sustainability Committee

Leadership
Group P&CEO, Group Executive Committee & Group Senior Business Council

Direction & Execution
Business Areas | Group Functions

Technology & Innovation | Operational Excellence | Sustainability

The Group Chief Strategy & Sustainability Officer ensures that sustainability is a core part of our business, and that ESG considerations are integrated into our business strategies and plans.

WE ENGAGE WITH OUR STAKEHOLDERS

Our six material stakeholders were identified based on the magnitude that these parties can impact or be impacted by the Group's activities.

Engaging our stakeholders regularly enables us to understand and address their concerns. These relationships are critical to our business and enable us to grow in an inclusive and resilient way.

OUR STAKEHOLDERS

- Customers
- Employees & Other Workers
- Local Communities
- Suppliers & Collaborators
- Shareholders & Investors
- Regulators & Governments

Read about our responsibility to and our engagement with our stakeholders in our Sustainability Report

WE DO OUR PART AGAINST CLIMATE CHANGE

A WHOLE OF ST ENGINEERING EFFORT

We recognise the impact of climate change and support the efforts to address it both globally and locally where we operate. We do our part to reduce greenhouse gas (GHG) emissions and adopt environmentally friendly practices in our business, as well as encourage our employees to inculcate similar habits in their daily lives. We develop products and solutions that will help our customers reduce their carbon footprint as they journey towards net zero.

Our Board oversees the Group's sustainability matters, including those related to climate change, through the RSC.

SHAPING OUR CULTURE

Employees contribute to the global climate agenda on two levels: operational and personal.

Employees are consistently innovating to improve operational efficiencies, including the use of new technology and methods. A key focus is the reduction of the impact our products and solutions have on the environment, while boosting their efficacy and competitiveness.

Our employees also participate in group-wide Eco-Initiatives which we initiated in 2021. These efforts across many of our business units collectively cultivate an eco-conscious culture and help shape our habits at our workplaces as well as in the communities we live in.

Our Target:

↓50% Reduction* in absolute GHG emissions by 2030

* from a 2010 baseline

Employees from our Land Systems business partnered with South West Community gardeners and received the Gold award in the Singapore Gardeners' Cup 2022. The team spent weeks to plan, prepare and build their garden themed "The Dance of Dragonflies" using recycled materials such as aluminium cans, ring pulls, used wood and stones.

The Eco-Initiatives activities changed my mindset about sustainability. I learnt that sustainability is something that can be done by each and every individual. Simple acts such as disposing waste into designated bins or even just bringing your own water bottle when you're out can add up and have a positive impact on our planet.

ASHLEY NGUYEN
Executive Procurement (Singapore)

WE MINIMISE RISKS WHILE MAXIMISING OPPORTUNITIES

In 2022, we partnered with a global consultant to conduct a climate risks and opportunities assessment of our businesses as part of our journey to align with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD).

We reviewed the physical risks that might impact our businesses under the Representative Concentration Pathway 8.5 scenario, and used the International Energy Agency Net Zero Emissions 2050 scenario to assess our transition risks. We concluded that the climate-related physical and transition risks impacting our business were minimal. However, we will continue to monitor these risks through our Enterprise Risk Management Framework and Emerging Risks Framework.

We also looked into how some of our key suppliers are potentially affected by climate change. This journey to assess our supply chain risks will be undertaken continuously as the business and global environment evolves.

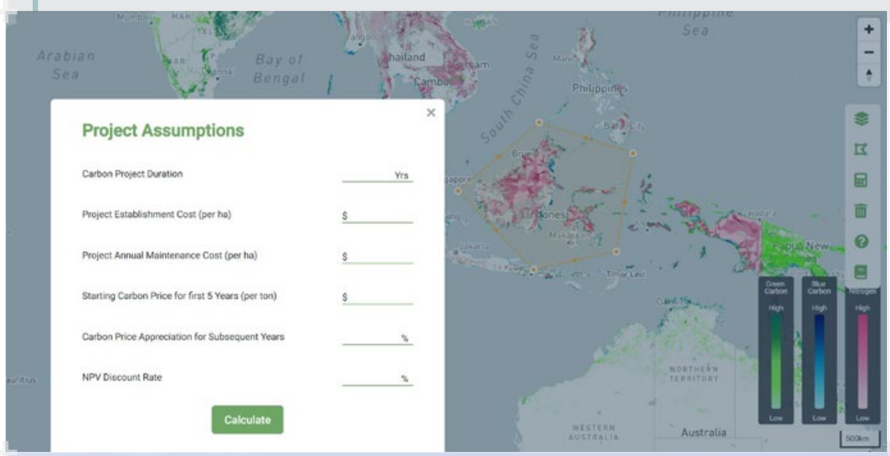
The world's focus on leveraging technology and innovation to address the challenges of climate change presents opportunities for the Group. As part of the TCFD journey, the Group has identified opportunities that may arise from the resulting market shifts.

Read more about our environmental protection efforts and our journey in our Sustainability Report

Carbon Prospecting Dashboard

At the 2022 World Economic Forum – Champions for Nature event in New York, ST Engineering Geo-Insights (our satellite data and geospatial analytics business) and the Centre for Nature-based Climate Solutions of the National University of Singapore, jointly launched the Carbon Prospecting Dashboard.

This dashboard is an interactive, open platform software that supports the prospecting, development and management of nature-based carbon credit projects worldwide. It enables policymakers and investors to identify high potential areas that can be developed for high-quality carbon credits by taking into account factors such as the estimated yield of carbon credits.



OUR SOLAR JOURNEY

ST Engineering has made significant strides in our decarbonisation journey. By 2022, we have reduced our carbon emissions by 37% and our carbon intensity by more than 50% compared to 2010.

Solar PV programmes have made a significant contribution to this effort. In Singapore alone, we have installed an equivalent of over 17 football fields of solar PV panels with a combined capacity of 16.8 megawatt-peak (MWp).

Our U.S. sites have also started on their solar implementation efforts. For example, our aerospace facility in San Antonio installed a 0.3 MWp solar PV system on six of its hangar roofs and is considering an expansion.

We have embarked on a study to identify additional renewable energy options for our U.S. business units. This will accelerate the adoption of renewable energy and reduce our overall GHG emissions.

WE BRING OUR PEOPLE ALONG IN OUR JOURNEY TOWARDS SUCCESS...

ENABLING THE DEVELOPMENT OF OUR PEOPLE

At ST Engineering, we are committed to ensuring that our employees are continuously equipped with the right skill sets, knowledge and opportunities to grow to their full potential. We empower our employees by focusing on four approaches: leadership and career development, leveraging on web-based self-directed learning, digital upskilling as well as offering scholarships and staff sponsorships.

As part of our ongoing efforts to develop our people, we enhanced our manager development framework, curated new training programmes, augmented our rotation and development programmes, and focused on gearing up a highly capable, digital ready workforce.

All these serve to build up our employees' repertoire of experiences, skills and knowledge to help ST Engineering achieve its aspiration to be a global technology, defence and engineering powerhouse.

Average Training per Employee

22.5 hours

MOU with Temasek Polytechnic

Digitalisation, robotics and automation present endless opportunities for our engineers and technicians to learn and grow at work, so that they can perform their tasks more effectively and efficiently.

We signed a Memorandum of Understanding with Temasek Polytechnic in Singapore to collaborate on the upskilling of our engineers and technicians. This is part of an ongoing partnership to jointly develop the Factory Integrated Technology Workforce Upskilling Programme that will train more than 200 of our engineers and technicians in digitalisation, automation and eFacilities Management/eLogistics.

BUILDING A PASSIONATE AND ENGAGED WORKFORCE

Listening to our employees is a critical part of our people engagement strategy. It is important to provide employees with a platform to share their experiences and provide feedback as we build a purpose-driven and engaged workforce while growing our business. We do this through regular townhalls and engagement sessions.

We also conduct employee engagement surveys for our employees to provide feedback, with our latest survey done in 2022 and supported by a market leader in employee engagement.

A Choice Employer

Ranked

No. 4

of the **100** Most Attractive Employers for Engineering/ Natural Sciences students

Annual Convention 2022

The Annual Convention 2022 was based on the theme of Innovation, Sustainability and People Excellence. The event drew 1,200 ST Engineering employees in person and 800 employees dialing in from our business units around the world. The convention provided employees with the opportunity to be updated on the Group's strategic direction to capture sustainable growth, as well as engage in conversations with business leaders on topics such as talent retention and continuous learning.

Read more about our people strategy in our Sustainability Report

STRENGTHENING TOTAL WORKPLACE SAFETY AND HEALTH

The health and safety of our workers, whether physical or mental, is paramount to ST Engineering's business operations.

In 2022, two individuals and four teams from ST Engineering were recognised for their workplace safety and health (WSH) efforts by the WSH Council in Singapore and were awarded a total of nine awards and two commendations at the national WSH Awards 2022.

We also partnered with an external vendor to operate a 24-hour Employee Support Programme for employees and their immediate family members, where they can reach out for support on work-life issues.

We are sad to report that a fatal accident occurred in December 2022. We implemented a group-wide Safety Time-Out across all Singapore entities, reviewed our material handling operations and intensified safety inspections. We also continued to emphasise the importance of workplace safety across our businesses.

Keeping the workplace accident-free for all our stakeholders remains a top priority throughout ST Engineering.

Read more about our approach to the Total Workplace Safety and Health of our employees in our Sustainability Report

Team Bonding at ST Engineering MOVEment

ST Engineering MOVEment is both a charity drive and a healthy lifestyle campaign that aims to encourage our employees to stay fit and healthy. In 2022, ST Engineering MOVEment was kicked off with a carnival, team bonding games and a ceremonial flag-off at the Bay East Garden. The team category of ST Engineering MOVEment was an effective way to encourage team building and bonding.

AND RECOGNISE THE STRENGTH IN OUR GLOBAL WORKFORCE

EMBRACING DIVERSITY & INCLUSION

Our diverse workforce helps to inculcate a dynamic culture that provides opportunities for the exchange of ideas, innovation and personal growth.

This can be achieved and sustained in an environment that fosters mutual respect and values a good mix of capabilities, perspectives and ideas.

We facilitate this by working on four key areas:

- **Gender** – we focus on women empowerment and gender equality through initiatives such as Women@ST Engineering, and unconscious bias training programmes
- **Generation** – we focus on fostering an environment where members of a multi-generational workforce collaborate and learn from one another, and provide mutual support in a fast evolving world
- **Geography** – we focus on encouraging the exchange of ideas and perspectives across diverse work cultures that leads to creative and innovative solutions
- **Persons with Disabilities (PwDs)** – we focus on promoting an environment where PwDs have equal access to opportunities for growth and development

WORKFORCE PROFILE

Employees

78% male | 22% female

Supervised Workers

83% male | 17% female

People Managers

15% of male employees are people managers | 14% of female employees are people managers

Women@ST Engineering

Women@ST Engineering supports our diversity and inclusion efforts through the engagement of both our female and male colleagues in the areas of addressing unconscious bias in the workplace and facilitating inclusive professional development. We also complement our employees' management of their roles in their personal lives in areas such as family caregiving, health and wellness. In 2022, we had the pleasure of inviting Ms Sim Ann, Senior Minister of State, Ministry of Foreign Affairs & Ministry of National Development to join us at our Leadership Forum as one of the panel members and speakers. The event provided an opportunity for our employees to hear from high-achieving professional men and women on their personal journeys. The discussion also helped promote a better appreciation of the issues faced by women both at the workplace and at home.

My recent trip to Singapore and Malaysia has allowed me to have fruitful exchanges with diverse stakeholders, as I had the opportunity to meet with colleagues from Group level corporate functions to align business priorities and share best practices. This is consistent with our approach to building robust and globally integrated Management Systems by forging strong partnerships and engaging in joint efforts with colleagues across geographies.

Together with my colleagues from ST Engineering iDirect's U.S. operations and Group Sustainability, I visited Malaysia to engage with a leading supplier. We learnt about each other's sustainability priorities, discussed the carbon footprint of our products and conducted a quality audit. Our meetings were productive and deepened our partnerships with our colleagues and our supplier.

GUY DE WINNE
VP Global Performance
ST Engineering iDirect (Belgium)

My overseas assignment in Hong Kong helped me gain a more holistic understanding of the Group's operations. Being able to apply a different lens of culture, communication and working styles to our local landscape is valuable. The experience allowed me to be more mindful and introspective of our own working practices, hence enhancing the mindset of bettering ourselves and the Group.

SAMANTHA LEE
Manager
Group Strategy & Sustainability
(Singapore)

During my overseas stint, I was given the opportunity to be part of the Passenger-to-Freighter (P2F) Programme team that was ramping up the conversion capabilities at our MRO facilities in the U.S. I learnt to work with people from diverse backgrounds to contribute towards the success of the programme. The experience has been enriching and fulfilling, both personally and professionally.

ANG LIANG SHENG
Manager
Production Planning and Control
MAE (U.S.)

SUSTAINABILITY

WE CONTRIBUTE TO THE COMMUNITIES WE OPERATE IN

OUR ECONOMIC CONTRIBUTIONS

We contribute economically to the communities we operate in through local procurement, direct and indirect employment, dividends to shareholders, taxes paid to governments, and investment in community programmes.

Direct Economic Value Generated and Distributed

Group Economic Contribution	($m)
Bought-in materials and services	5,254
Employee wages, salaries and benefits	2,591
Dividends and interest paid	823
Government taxes and levies	79

Read more about our economic contributions, how we manage our economic performance and achieve productivity in our Sustainability Report

WE BUY LOCALLY AND WORK WITH SMALL AND MEDIUM ENTERPRISES (SMEs)

Our supply chain is diverse due to the range of businesses, as well as the multiple geographies where we operate. Where possible, we strive to buy locally in the countries we operate in. In 2022, our Singapore operations alone had over 9,800 suppliers. Of these, 73% are based in Singapore, 17% in Europe and North America, and the remaining 10% in other parts of the world.

We have created a thriving local ecosystem through our spend on SMEs. With the spend on SMEs and our collaborative efforts to upgrade their capabilities, they are in turn able to support the Group's growth in technology, product capability and competitiveness.

Read more about our supply chain and our efforts to buy locally and help SMEs in our Sustainability Report

Value of Purchases from SMEs in Singapore

$350m

WE SERVE OUR COMMUNITIES

Recognising that our lives are deeply intertwined with the communities where we operate, we persevere to do good as we do well, so that we flourish together.

We serve our communities through a combination of volunteer work, skills-based contributions as well as in-kind and monetary support. We do this to build an inclusive, resilient and vibrant society. We actively promote a purpose-driven giving culture through corporate initiatives and volunteerism among our employees.

Our outreach efforts are guided by three focus areas: Improving lives through charitable gifts, enriching lives through education, and touching lives through engineering.

Contributed about

$2.9m*

in community contributions

Over

$530,000

to Community Chest's SHARE programme

$438,000

to President's Challenge 2022

$120,000

towards STEM education

* Includes other donations and sponsorships not listed here.

Received

Charity Platinum Award

from Community Chest in Singapore

Over

1,200

internship positions to grow STEM* talent

* Science, technology, engineering and mathematics

SUSTAINABILITY

Keep Fit and Do Good

Over 4,500 employees in Singapore and the U.S. participated in ST Engineering MOVEment - a four-week physical wellness corporate initiative to walk, run or cycle for charity. Based on total mileage achieved by the participants, more than $470,000 was raised to help the underserved groups.

Special Ground-Up Initiative: MOVEment T-shirt as Fundraiser

Employees donated $13,000 to The Straits Times School Pocket Money Fund in Singapore when collecting their ST Engineering MOVEment T-shirts.

Peeled! Chopped! Cooked! Packed! Delivered!

We volunteered at food charity, Willing Hearts, in Singapore. Together with other volunteers, we prepared and delivered over 10,000 meals to beneficiaries including the elderly, disabled, low-income families and migrant workers, in over 70 locations within a single day.

From the Heart

Our employees in Singapore volunteered at Lions Befrienders to engage seniors through handicrafts.

Enabling Disaster Relief through our Satellite Technology

Our technology enabled the Verizon Frontline Disaster Response Team to support the community in the aftermath of Hurricane Ian in Florida, U.S. Our modems inside "Big Red", a climate-controlled trailer for first responders, helped to re-establish cellular connectivity where infrastructure had been damaged to resume mission-critical voice and data services, so that responders can effectively assess the damage, share information and take recovery actions.

Community Champion

As Food For Neighbours' first Community Champion, we fed more than 1,700 students nutritious food at 29 middle and high schools in Northern Virginia, U.S. Employee volunteers also collected and sorted over 18,000 pounds of food for its Red Bag Program.

SUSTAINABILITY

International Volunteer Day

We organised a volunteer event on International Volunteer Day at Xin Yuan Community Care, a charity in Singapore, to spread cheer to their seniors. On top of putting up a mini concert, folding origami flowers and hearts together, and treating more than 100 beneficiaries to a hearty lunch, we also gave out hundreds of goodie bags comprising daily essentials and donated $22,000 to Xin Yuan for its daily operations.

Expertise Sharing and Industry Consultancy

We contribute to a better world by way of employees sharing their engineering and technological expertise via taking on external appointments. These include serving as the Chairman of the Singapore Blockchain Innovation Steering Committee to help strengthen Singapore's blockchain ecosystem and facilitate the adoption of blockchain systems for real-world applications; leading the Women in Tech Chapter at the Singapore Computer Society to build confidence and nurture interests in women of all ages and backgrounds for a more vibrant technology sector, as well as being part of the Digital Committee for the social service sector and helping to chart its digital strategy for broad-based digitalisation and stakeholder satisfaction.

Food Donation Drive

We organised a four-day food donation drive for Ju Eng Home, a nursing home with over 500 senior citizens in Singapore. More than 1,500 items were collected based on a wish list. The items were sorted and packed in-house before delivery to the nursing home.

CORPORATE GOVERNANCE REPORT

WHILE HOLDING OURSELVES TO HIGH ETHICAL STANDARDS

Good corporate governance is the foundation for long-term value creation of the Group. This report sets out ST Engineering's corporate governance processes, practices and activities in 2022 with specific reference to the principles and provisions of the Singapore Code of Corporate Governance 2018 (the Code). The Board is pleased to report that the Company has complied with the principles and substantially with the provisions of the Code. Variations from any provision of the Code are explained in this report.

BOARD MATTERS

The Board's Conduct of its Affairs (Principle 1)

The Board is accountable to shareholders for overseeing the effective management of the Company. To this end, the Board relies on the integrity, commitment, skills and due diligence of its management, its external advisors and auditors and hold Management accountable for performance. The Board puts in place a Code of Business Conduct and Ethics, sets appropriate tone-from-the-top and desired organisational culture, and ensures proper accountability within the Company.

In addition to its statutory responsibilities, the Board reserves the following key matters for its decision:

- setting the Group's strategic objectives including appropriate focus on value creation, innovation and sustainability and ensuring that decisions made are consistent with these objectives;
- approval of annual budgets, major funding proposals, investment and divestment proposals in accordance with the approved delegation of authority framework;
- appointment of the Group President & Chief Executive Officer (Group President & CEO), Board succession and appointments on Board and Board Committees;
- appointment and removal of the Company Secretary;
- approval of terms of reference of Board Committees and any revisions;
- review of the risk management framework and sustainability performance; and
- approval of the unaudited half-yearly and audited full-year results, and quarterly dividend payout prior to their release.

CORPORATE GOVERNANCE REPORT

In the discharge of its functions, the Board is supported by six Board Committees to which it delegates specific areas of responsibilities for reviewing and decision making. The Board decides on matters that require its approval and clearly communicates this to Management in writing. The Board Committees are formed with clear written terms of reference setting out their compositions, authorities and duties, including reporting back to the Board. Details of authorities and duties and summary of key activities of the respective Board Committees are disclosed under the sub-section of each committee in this report.

The Group President & CEO, Vincent Chong, is accountable to the Board. He is supported by the Key Management Executives of the Group (EXCO) comprising Group Chief Financial Officer (Group CFO), Group Chief Operating Officer (Technology & Innovation) and President, Defence & Public Security, and President Commercial.

Director Induction, Training/Development
For the onboarding of a Board member, a formal letter is sent to a Director upon his/her appointment setting out his/her statutory obligations, duties and responsibilities as a Director. He/She is also given key information of the Group and the Company, as well as the terms of reference for the respective Board Committees.

An induction programme is organised for a new Director on the strategic direction, sustainability efforts and performance of the Group as well as his/her duties and obligations under the statutory compliance and corporate governance framework. The induction programme includes briefings by Presidents/Business Heads of various business areas including facility visits, where applicable, to enable them to develop a good understanding of the Group's businesses and operations.

The Board is routinely updated on the relevant laws, Singapore Exchange Securities Trading Limited (SGX-ST or the Exchange) continuing listing obligations and accounting standards requiring compliance, and their implications to the Group, so as to enable each Director to properly discharge his/her duties as a Board member and Board Committee member.

Depending on their skill sets and background, Directors are sponsored to attend relevant courses, conferences and seminars to better equip them with the appropriate skills and knowledge to fulfil their governance role and to comply with Directors' obligations. Directors are provided with opportunities to develop and maintain their skills and knowledge at the Company's expense. Where there are statutory and regulatory changes that affect the obligations of Directors, the Company will update the Board and, where the changes are substantive, through briefings organised by external legal counsel. During the year, the Board underwent the sustainability training course organised by Singapore Institute of Directors. The Company arranged numerous briefings and trainings to the Board on matters such as global economic and political outlook, anti-bribery and corruption training, updates on legislative or regulatory changes and also organised overseas site visits in 2022.

In addition, the Directors were also informed of relevant courses organised by Singapore Institute of Directors or other external professional organisations for their enrolment.

The Directors' trainings and developments were funded by the Company. For new Director without any prior experience as a Director of an issuer listed on the Exchange, the Company will arrange for the Director to attend training as prescribed by the Exchange.

Board Meetings
The Board convenes scheduled meetings on a quarterly basis to review the business performance and key activities of the Group and to deliberate significant business proposals. The Board and Board Committee meetings and the Annual General Meetings of the Company are scheduled in advance so that the Directors are able to attend these meetings.

Board members participate actively in Board discussions, and decisions are taken objectively in the interests of the Company. Where warranted by particular circumstances, ad-hoc/special Board meetings may be convened to consider corporate actions requiring the Board's guidance or approval.

To facilitate the Board and Board Committees' decision-making process, the Company's Constitution provides for Directors to participate in virtual meetings. If a Director is unable to attend a Board or Board Committee meeting, he/she will still receive all the materials to be tabled for discussion at that meeting, and where required, separate briefing sessions are arranged. Decisions of the Board and Board Committees may also be obtained via circulation.

At the end of every scheduled quarterly Board meeting, the Chairman allocates time for its non-executive Directors to meet without the presence of Management.

Information furnished to the Board is an ongoing process, which includes monthly consolidated management reports on the financial performance of the Group and the businesses.

On a quarterly basis, the management reports would also include key business highlights and capital expenditure of the Group and the businesses to keep the Board apprised of business investments and performance updates.

The Board also has separate and unrestricted access to the Senior Management, the Company Secretary, internal and external auditors, risk management and sustainability teams. The Board may also seek independent professional advice, if necessary, to enable them to discharge their duties effectively. All engagements of external advisers are at the Company's expense.

The Board and Board Committee members are provided with complete, adequate, relevant and timely information on matters to be discussed or considered at meetings.

The Board has, at all times, exercised independent judgment to make decisions, using its collective wisdom and experience to act in the best interests of the Company as a whole and not of any particular group of shareholders or stakeholders.

Board met

6 times

in 2022

Any Director who has an interest that may conflict with a subject under discussion by the Board, declares his/her interest and recuses himself/herself from the information and discussion of the subject matter and abstains from decision. Each Director is also required to submit details of his/her associates upon his/her appointment to the Board and on an annual basis or as and when relevant changes occur, for the purpose of monitoring interested persons transactions.

The Company has adopted half-yearly reporting and provides business updates in the first and third quarters to the market and analysts alike. Board, Audit Committee as well as Risk and Sustainability Committee meetings continue to be held quarterly.

During the year, the Board met quarterly to consider, among other things, the approval and release of the FY2021 and 1H2022 results, including the review of the 1Q2022 and 3Q2022 Market Updates, declaration of quarterly interim dividend, updates on significant events relating to the Company and information concerning industry-related developments. The Board also scheduled additional meetings to discuss and deliberate on the strategic direction and growth of the Group.

CORPORATE GOVERNANCE REPORT

Details and attendance at Board and Board Committee meetings in 2022 are tabulated below.

Board Members' Details			Meeting Attendance Report*							
			● Chair of the Board/ Board Committee				○ Member of the Board/ Board Committee			
	Independent (I)/ Non-Independent (NI)	Executive (E)/ Non-Executive (NE)	Board#	AC	ERCC	NC	RD&T	RSC	SFC	AGM
			Number of meetings held in FY2022							
Names			6	5	3	2	3	5	6	1
Kwa Chong Seng (Chairman)	I	NE	● 6/6		● 3/3	○ 2/2			● 6/6	● 1/1
Teo Ming Kian[1] (Deputy Chairman)	I	NE	○ 6/6		○ 3/3	○ 2/2	○ 3/3		○ 3/3	○ 1/1
Vincent Chong Sy Feng (Group P&CEO)	NI	E	○ 6/6				○ 3/3	○ 5/5	○ 6/6	○ 1/1
Kevin Kwok Khien[2]	I	NE	○ 6/6	◐ 5/5				○ 5/5		○ 1/1
Leong Weng Keong Joseph[3]	NI	NE	○ 1/1							
Lim Ah Doo	I	NE	○ 6/6	○ 5/5					○ 2/2	○ 1/1
Lim Chin Hu	I	NE	○ 6/6		○ 3/3	● 2/2	○ 3/3		○ 6/6	○ 1/1
Lim Sim Seng	I	NE	○ 6/6		○ 3/3	○ 2/2			○ 6/6	○ 1/1
Ng Bee Bee (May)	I	NE	○ 6/6			○ 2/2				○ 1/1
LG Ong Su Kiat Melvyn[5]	NI	NE	○ 6/6					○ 5/5		
Quek See Tiat[4]	NI	NE	○ 6/6	● 2/2				● 5/5		○ 1/1
Song Su-Min	I	NE	○ 6/6	○ 5/5				○ 5/5		○ 1/1
Tan Peng Yam	NI	NE	○ 6/6				● 3/3			○ 1/1
COL Cai Dexian[5] (Alternate to LG Ong Su Kiat Melvyn)	NI	NE	○ 4/6							○ 1/1

AC-Audit Committee, ERCC-Executive Resource and Compensation Committee, NC-Nominating Committee, RD&T-Research, Development and Technology Committee, RSC-Risk and Sustainability Committee, SFC-Strategy and Finance Committee, AGM-Annual General Meeting

* Refer to meetings held/ attended by each Director.
# Included a Board Executive Session without the presence of Management.
1 Appointed as Deputy Chairman of the Board on 21 April 2022.
2 Appointed as Chairman of AC on 21 April 2022.
3 Ceased as Director on 1 April 2022.
4 Ceased as Chairman and member of AC on 21 April 2022.
5 LG Ong was away on duty, COL Cai attended the AGM on his behalf.

Role of Company Secretary
The Company Secretary/Joint Company Secretary attends all Board meetings and ensures that board procedures are followed, as well as prepares minutes of Board proceedings. The Company Secretary/Joint Company Secretary facilitates communication between the Board, its Committees and Management, and advises the Board on governance matters including their disclosure obligations. The Company Secretary/Joint Company Secretary also assists with the induction of new Directors and the coordination of training for Board members to keep the Board up to date on corporate governance matters. The appointment and removal of the Company Secretary/Joint Company Secretary is a matter for the Board as a whole to decide.

Board Composition and Guidance (Principle 2)

Board Composition and Diversity
The Board has an appropriate level of independence and diversity of thought and background in its composition to enable it to make decisions in the best interests of the Company.

The Board comprises 12 Directors and an Alternate Director. COL Cai Dexian is the Alternate Director to LG Ong Su Kiat Melvyn. LG Ong, in his position as Chief of Defence Force, may be called away on duty at times and may not be able to attend all Board meetings. COL Cai is fully apprised of all Board matters, receives notices to attend Board meetings and Board papers, as well as Board resolutions by circulation. As an Alternate Director, he is in a position to act on behalf of LG Ong in the latter's absence.

In FY2022, Leong Weng Keong Joseph stepped down as Director.

The Board has adopted a Board Diversity Policy since 2019. The Company recognises and embraces the benefits of diversity on the Board, and views diversity at the Board as an essential element in supporting the attainment of its strategic objectives and its sustainable development. In FY2022, the Board Diversity Policy was revised to reflect the commitment to having female representation on the Nominating Committee (NC) and to include and consider female candidates in the Board appointment selection process. The NC will consider candidates on merit against objective criteria and with due regard for diversity on the Board.

The Board, through the NC, has robust processes in reviewing and assessing the size and composition of the Board and succession planning, taking into consideration the age, skill sets, knowledge, experience, background, gender, tenure, independence of Directors and other relevant factors. The Board also recognises that diversity is not limited merely to gender or any personal attributes and believes that having experienced Directors with an independent mindset is important for the Board to be effective.

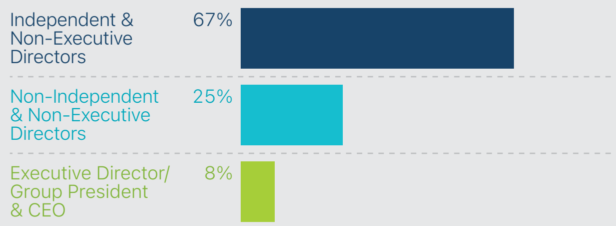
There are two female Directors on the Board. The Board aims to add at least one more female Director to the Board by FY2024.

The Directors' ages range from the forties to seventies, and they have served on the Board for various tenures. The Board consists of members with established track records in defence, business leadership and professional experience and expertise in energy, finance (including audit and accounting), investment banking, engineering and technology, legal, business management, human resources, cybersecurity, sustainability and risk and management domains. Each Director brings to the Board an independent perspective based on his/her training and professional expertise to enable the Board to make balanced and well-considered decisions.

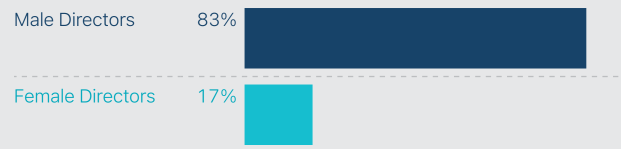
The Board of Directors with their combined business, management and professional experience, knowledge and expertise, provide the core competencies to allow for diverse and objective perspectives on the Group's businesses and directions. Having considered the scope and nature of the operations of the Group, the NC and the Board are satisfied that the current composition and size of the Board provide for diversity and allow for informed and constructive discussion and effective decision making at Board and Board Committee meetings.

CORPORATE GOVERNANCE REPORT

Independence



Gender Diversity



Board Independence

The Board has 11 non-executive Directors of whom eight are independent Directors. The Code requires non-executive Directors to make up a majority of the Board and the SGX Listing Manual requires one-third of the Board to comprise independent Directors. Our Board composition is in compliance with these requirements.

The independence of each Director is determined upon appointment and reviewed annually, and as and when circumstances by the NC, in accordance with the requirements of the SGX-ST Listing Manual, the Code and where relevant, the recommendations set out in the Practice Guidance accompanying the Code.

The Board, taking into account the views of the NC, affirmed that the independent Directors are Kwa Chong Seng, Teo Ming Kian, Kevin Kwok Khien, Lim Ah Doo, Lim Chin Hu, Lim Sim Seng, Ng Bee Bee (May) and Song Su-Min. The Board comprises majority independent Directors including Board Chairman. Each of the members of the NC and the Board recused himself/herself from the deliberations on his/her independence.

Kwa Chong Seng, Teo Ming Kian, Kevin Kwok Khien, Lim Ah Doo, Lim Chin Hu, Lim Sim Seng and Song Su-Min declared that each of them does not have any relationships with the substantial shareholder, no management relationship and no business relationship with the Company and its group of companies, that could interfere, or be reasonably perceived to interfere, with the exercise of their independent business judgement in the best interests of ST Engineering.

Kwa Chong Seng attained his nine years of service on the Company's Board on 1 September 2021. The Company sought and obtained Shareholders' approval at its AGM held in April 2021 by way of a two-tier vote pursuant to Rule 210 (5)(d)(iii) of the SGX-ST Listing Manual, for Kwa Chong Seng to continue to be considered as independent Director with effect from 1 September 2021. The approval for Mr Kwa to be considered as independent Director remains in force until the earlier of the retirement or resignation of Mr Kwa or the conclusion of the third AGM following the passing of the resolution.

The Board had confirmed its previous determination that Mr Kwa remains objective and independent in Board and Board Committee deliberations. He constructively challenges Management during Board and various Board Committee meetings on which he serves and his extensive experience enables him to provide wise counsel and guidance to facilitate sound decision-making. Mr Kwa's length of service on the Board neither interferes with his exercise of independent judgment nor hinders his ability to act in the best interests of the Company. On this basis, the Board is of the view that Mr Kwa will be able to continue to discharge his duties independently with integrity and competency.

Teo Ming Kian stepped down as a non-executive Director of Temasek Holdings (Private) Limited (Temasek), which is a substantial shareholder of the Company, in September 2022. During his tenure in Temasek, he was not a nominee of Temasek on the Board of ST Engineering. His role on the Temasek board was non-executive in nature and he was not involved in the day-to-day conduct of the business of Temasek. Mr Teo was also not directly associated with Temasek in that he was not accustomed or under an obligation, whether formal or informal, to act in accordance with the directions, instructions or wishes of Temasek in relation to the corporate affairs of ST Engineering. It also did not generate any issue that may affect his independence as a Director of ST Engineering. The NC had previously determined that Mr Teo's position in Temasek would not have any conflict or did not impair his ability to act with independent judgement in the discharge of his duties and responsibilities as a Director. The Board had also previously viewed that the relationships set out above do not interfere with the exercise of Mr Teo's independent business judgement in the best interests of ST Engineering. Mr Teo remains as an independent Director.

Lim Sim Seng is the Group Head of Consumer Banking Group and Wealth Management of DBS Bank (DBS). DBS is one of the many banks which ST Engineering group companies have a banking relationship with. All transactions between DBS and ST Engineering group companies are conducted in the ordinary course of business and at arm’s length on normal commercial terms. Our facilities with DBS are under Corporate Banking and not Consumer Banking or Wealth Management. Mr Lim is not involved in the day-to-day business operations of ST Engineering. He only receives Director’s fees. Mr Lim recused himself from discussions and decisions involving DBS’s dealings with ST Engineering group companies. With the aforesaid, the NC determined that business relationships between ST Engineering group companies and DBS would not affect Mr Lim’s independence. The Board is of the view that the relationships set out above do not interfere with the exercise of Mr Lim’s independent business judgement in the best interests of ST Engineering and therefore, he is considered an independent Director.

Sister of Ng Bee Bee (May) is an Executive Director (Corporate Banking) in United Overseas Bank (UOB) Singapore, but she is not overseeing the banking relationships of ST Engineering group companies with UOB. UOB is one of the many banks with which ST Engineering group companies have a banking relationship. All transactions between UOB and ST Engineering group companies are conducted in the ordinary course of business and based on normal commercial terms. The NC determined that her sister’s position in UOB would not have any conflict or affect Ms Ng’s independence. In the event of any engagement of UOB requiring the Board’s approval, Ms Ng will recuse herself from discussions on UOB’s dealings with ST Engineering group companies. The Board is of the view that the relationships set out above do not interfere with the exercise of Ms Ng’s independent business judgement in the best interests of ST Engineering and therefore, she is considered an independent Director.

Quek See Tiat, who has served more than nine years on the Board, has been re-designated as non-independent non-executive Director on 1 July 2022 when he reached his nine-year tenure.

Song Su-Min is a partner of Allen & Gledhill LLP (A&G). Ms Song does not hold 5% or more interest in A&G. The fees received by A&G for the services rendered to ST Engineering group companies were not material or significant in the context of A&G or ST Engineering group for the relevant period. Ms Song is not involved in legal services rendered by A&G to ST Engineering group companies and the selection and appointment of legal counsels for the provision of legal services to ST Engineering group companies. She is not involved in the day-to-day business operations of ST Engineering. She only receives Director’s fees. In the event of any engagement of A&G requiring the Board’s approval, Ms Song will recuse herself from discussions and decisions involving A&G’s dealings with ST Engineering group companies. With the aforesaid, the NC determined that business relationships between ST Engineering group companies and A&G would not affect Ms Song’s independence. The Board is of the view that the relationships set out above do not interfere with the exercise of Ms Song’s independent business judgement in the best interests of ST Engineering and therefore, she is considered an independent Director.

CORPORATE GOVERNANCE REPORT

LG Ong Su Kiat Melvyn is considered as non-independent non-executive Director given his position as Chief of Defence Force of Ministry of Defence.

Tan Peng Yam is considered as non-independent non-executive Director given his position as Chief Defence Scientist of Ministry of Defence.

Chairman and Chief Executive Officer (Principle 3)

The Chairman and Group President & CEO roles and responsibilities are kept separate in order to maintain effective oversight. The recommendation in the Code for a lead independent Director is not applicable as the Chairman and the Group President & CEO are separate individuals and are not related. No individual or small group of individuals dominates the Board's decision-making process. The Group President & CEO and Senior Management regularly consult with individual Board members and seek the advice of members of the Board Committees through meetings, telephone calls, as well as by email.

The Chairman is responsible for leading the Board and ensuring the effective functioning of the Board to act in the best interests of the Company and its shareholders. The Chairman facilitates the relationship between the Board, Group President & CEO and Management, engaging them in open dialogue over various matters including strategic issues, sustainability, safety, risks and business planning processes and promotes high standards of corporate governance. He ensures that discussions at the Board level are conducted objectively and professionally where all views are heard and key issues are debated in a fair and open manner. The Chairman also ensures that adequate time is provided for discussion of strategic issues and key concerns at Board meetings. He represents the views of the Board to the shareholders and ensures effective communication with shareholders and other stakeholders.

Vincent Chong as an executive Director and Group President & CEO, is accountable to the Board for the conduct and performance of the Group. He collaborates closely with non-executive Directors for the long-term success of the Group. He has been delegated authority to make decisions within certain financial limits authorised by the Board. He is supported in his work by the Senior Management.

Board Membership and Board Performance (Principles 4 and 5)

The Board is supported by the following Board Committees:

- Audit Committee
- Executive Resource and Compensation Committee
- Nominating Committee
- Research, Development and Technology Committee
- Risk and Sustainability Committee
- Strategy and Finance Committee

Nominating Committee

Lim Chin Hu (Chairman)
Kwa Chong Seng
Lim Sim Seng
Ng Bee Bee (May)
Teo Ming Kian

The NC comprises five members, all of whom (including the NC Chairman) are independent Directors. Under its terms of reference, the NC is responsible for reviewing the composition of the Board and identifying suitable candidates to the Board, in particular, candidates with the appropriate qualifications, skill sets and experience who are able to discharge their responsibilities as Directors. Shortlisted candidates are recommended to the Board for approval. The NC is also responsible for reviewing and determining the independence of non-executive Directors annually, conducting Board performance evaluation, reviewing succession planning for the Board and its committees, including the Chairman and the Group President & CEO, as well as Key Management Executives, and reviewing Director training and professional development programmes according to the needs of each individual Director.

NC met

2 times

in 2022

Selection and Appointment Process
The NC conducts review of Board composition annually to plan for Board succession and future needs. The NC is also continually engaged in the Board renewal process of ST Engineering, having regard to the skills, experience and industry expertise needed for a balanced Board composition to, among other things, oversee governance, safety, risks and sustainability within the Group's businesses.

When the need for a new Director is identified, potential candidates are identified from various sources including independent professional firm of consultants, internal references or recommendations made by Directors. The NC will ensure that female candidates are included for consideration. Nevertheless, Board appointments will be made based on merits, taking into account the attributes, contributions and the experiences the candidates can bring to enhance the Board's effectiveness.

The NC will assess a shortlist of candidates according to the type of expertise needed. The NC will also assess a candidate's character, independence and experience to ensure that he/she has the requisite standard of competence to carry out his/her duties as a Director of a listed company. The NC will then make recommendation to the Board for approval.

Succession Planning
The NC is tasked to oversee and review the succession planning process for Board renewal including that of the Chairman of the Board, having regard to achieving a balance of skills, diversity, independence, knowledge and attributes required of an effective Board. The NC also oversees and reviews the succession planning process for the Group President & CEO and Key Management Executives. While reviewing the succession plans, the NC will take into consideration the Company's strategy and objectives including the factors that affect the long-term success of the Company, the orderly replacement of Directors and Key Management Executives and contingency planning for preparedness against sudden and unforeseen changes.

In relation to Board, a formal process has been put in place for the Board renewal including the selection and appointment of new Directors. A skills matrix is used to assess and monitor the overall balance, diversity and quality of the Board and shape succession plans, Board evaluation and the appointment and reappointment of Directors to ensure that the Board has an optimal composition that contributes to higher effectiveness and align to the Company's strategy and objectives. Board and Board Committee appointments require the approval of the Board.

In FY2022, Teo Ming Kian was appointed as Deputy Chairman of the Board as part of the Board's renewal and succession planning. Kevin Kwok Khien was also appointed as Audit Committee Chairman in place of Quek See Tiat due to latter's non-independent status upon reaching his nine-year term.

The NC appreciates the importance of succession planning for Group President & CEO and Key Management Executives. The Company has a robust succession planning process which involves:

- Reviewing the key proficiencies and qualities required for identified positions
- Identifying and developing internal and external candidates
- Ensuring that candidates possess the necessary proficiencies and qualities
- Catering for contingency succession needs
- Driving development and retention plans for potential candidates

Maximum Board Representation
The NC reviews directorships of the Board and determines if a Director is able to and has been adequately carrying out his or her duties as a Director, taking into consideration the Director's number of listed company board representations and/or other principal commitments, the results of the recent peer assessment of the Directors, and their actual conduct and involvement on the Board and/or Board Committees, including availability and attendance at the scheduled meetings and ad-hoc meetings.

The NC noted the list of other directorships held by our Directors, taking into consideration their principal commitments. Based on the FY2022 individual Director assessment, all Directors were well prepared for the Board and Board Committee meetings and expressed thoughtful, honest concerns and opinions on issues presented at the meetings.

CORPORATE GOVERNANCE REPORT

The Board has considered and agreed not to set guidelines for a maximum directorship that a Director can hold. Annually, an incumbent Director is asked to affirm that he/she has adequate time to devote to his/her Board responsibilities. ST Engineering Board members are selected on the basis of their ability to contribute to the Board through their relevant skill sets, experience, calibre and willingness to devote time.

In addition, each Director is required to provide an annual affirmation of commitment to his/her Board responsibilities. With these considerations, the Board is of the view that setting a maximum number of board representations for our Directors is not needed.

Re-election of Directors
The NC is responsible for renewal and succession plans to ensure Board continuity. At each Annual General Meeting (AGM), one-third of the Directors with those longest in office since his/her last re-election have to retire pursuant to the Constitution. Effectively, this results in all Directors having to retire at least once every three years or even earlier, in compliance with Rule 720(5) of the SGX-ST Listing Manual. A retiring Director may submit himself/herself for re-election. Under this provision, Kwa Chong Seng, Vincent Chong Sy Feng, Lim Ah Doo and Lim Sim Seng will retire at the 2023 AGM. Except Kwa Chong Seng who has decided not to offer himself for re-election, the remaining retiring Directors, being eligible, have offered themselves for re-election.

In accordance with Rule 720(6) of the SGX-ST Listing Manual, the information relating to the retiring Directors seeking re-election can be found on pages 21 to 23 of this Annual Report.

Each of the retiring non-executive Directors has confirmed that he does not have any relationship with his fellow Directors nor with the Company and its substantial shareholders.

The Board, acting on the recommendation of the NC and taking into consideration the composition and progressive renewal of the Board as well as each retiring Director's competencies, contribution and performance (such as attendance, preparedness and participation), proposes that each of the retiring Directors be re-elected at the Company's 2023 AGM. Each of the members of the NC and the Board recused himself from participating in his own review.

Board Evaluation
The NC has the responsibility of developing and overseeing the process and criteria for performance evaluation of the Board, each of its Board Committees and individual Directors and may engage an external facilitator to assist in the conduct and performance evaluation process. The NC will propose the objective performance criteria and process on how the Board's performance may be evaluated for the Board's approval before carrying out the evaluation.

The NC is of the view that the engagement of an independent external consultant once every three years to conduct the Board evaluation process will provide the Board with an independent perspective of the Board's performance, including benchmarking against peer boards and provide insights on best practices.

An independent external consultant was last appointed to conduct the Board evaluation process for FY2021.

For FY2022, the NC conducted an annual Board Evaluation internally to gauge the effectiveness of the Board and Board Committees as well as the individual Board member's performance. The performance criteria were similar to that adopted in FY2021.

The performance criteria for the Board and Board Committees included board composition, board independence, board processes, board performance, CEO development and succession planning, Director development and management, Board Committee effectiveness covering general evaluation of Committees, Committee self-evaluation and open questions for Directors to provide their feedback on board effectiveness.

The performance criteria of individual Directors' peer evaluation included contribution, knowledge and abilities, teaming, integrity, and overall performance to the Board and/or Board

Committee(s). The outcome of the evaluation of individual Director's performance aims to assess whether a Director is willing and able to constructively challenge and contribute effectively to the Board and demonstrate commitment to his/her roles on the Board.

The evaluation was conducted by requiring each Director to complete a questionnaire on the performance of the Board and Board Committees and Directors' peer evaluation. A report on Board and Committee evaluation and the Directors' feedback was reviewed by the NC and shared with the Board, in consultation with the NC. The report indicated that the Board and Board Committees continue to function effectively. The Board also took on board the recommendations and feedback in the report on areas for improvement. In respect of the Individual Director's performance, the NC and Board Chairmen act on the results of the evaluation and arrange for one-to-one feedback session with the Director, where necessary.

SFC met

6 times

in 2022

Strategy and Finance Committee

Kwa Chong Seng (Chairman)
Vincent Chong Sy Feng
Lim Ah Doo
Lim Chin Hu
Lim Sim Seng
Teo Ming Kian

The Strategy and Finance Committee's (SFC) role includes guiding Management in the development and execution of the Group's annual and five-year plans, growth strategies, as well as deliberating and approving tender proposals which meet established contract value limit.

The SFC has incorporated sustainability and ESG factors in the Group's five-year plan. Details of the Group's efforts in this area can be found in our Sustainability Report.

The SFC also reviewed the 2023 Budget prior to submission to the Board for approval.

Research, Development and Technology Committee

Tan Peng Yam (Chairman)
Vincent Chong Sy Feng
Lim Chin Hu
Teo Ming Kian

Under its terms of reference, the Research, Development and Technology Committee's (RD&T) role includes setting policies and direction for strategic R&D investments and related activities, promoting R&D and inculcating innovative culture, identifying areas of synergy with respect to R&D capabilities, facilities and resources, as well as identifying new technologies that will enhance the core businesses of the Group.

RD&T met

3 times

in 2022

Please refer to page 26 of this Annual Report for details on the Company's Technology & Innovations activities and expenditures.

REMUNERATION MATTERS

Procedures for Developing Remuneration Policies (Principle 6)

Level and Mix of Remuneration (Principle 7)

Disclosure on Remuneration (Principle 8)

Executive Resource and Compensation Committee

Kwa Chong Seng (Chairman)
Lim Chin Hu
Lim Sim Seng
Teo Ming Kian

The Executive Resource and Compensation Committee (ERCC) comprises four members, all of whom (including the ERCC Chairman) are independent Directors. The ERCC performs the role of the remuneration committee. The members of the ERCC have held senior positions in large organisations and are experienced in the area of executive remuneration policies and trends.

CORPORATE GOVERNANCE REPORT

All decisions at any meeting of the ERCC are decided by a majority of votes of the ERCC members present and voting (the decision of the ERCC shall at all times exclude the vote, approval or recommendation of any member who has a conflict of interest in the subject matter under consideration).

Under its terms of reference, the ERCC performs the following duties and responsibilities:

Executive Remuneration General Framework

- Reviews and recommends to the Board the Group's general framework for determining executive remuneration including the remuneration of the Group President & CEO, Key Management Executives and other senior management executives (collectively referred to as "Senior Management Executives").

Executive Director and Senior Management Executives

- Reviews and recommends to the Board the entire specific remuneration package and service contract terms for the Group President & CEO, who is also the executive Director.

- Considers, reviews, approves and/or varies (if necessary) the entire specific remuneration packages and service contract terms for the Senior Management Executives of the Group. For FY2022, the Board reviewed and approved the specific remuneration packages and service contract terms for the Key Management Executives.

ERCC met

3 times

in 2022

Non-Executive Director Remuneration

- Reviews and recommends to the Board the remuneration framework (including Directors' fees) for non-executive Directors.

Equity-based Plans

- Approves the design of equity-based plans and reviews and administers such plans.

Executive and Leadership Development

- Oversees the development of Management with the aim of a continual build up of talent and renewal of strong and sound leadership to ensure the continued success of the Group and its businesses.

- Approves appointments to Senior Management Executive positions within the Group.

For FY2022, Aon Solutions Singapore Pte Ltd (Aon) was engaged as remuneration consultant (Remuneration Consultant) to provide professional advice on Board and executive remuneration matters. Aon and its principal consultant are independent and are not related to the Group or any of its Directors.

Executive Remuneration Structure

Remuneration for the Senior Management Executives comprises a fixed compensation, variable cash-based incentives, share-based incentives and market-related benefits.

A. Fixed Compensation:

The fixed compensation comprises the base salary and compulsory employer's Central Provident Fund (CPF) contributions.

B. Variable Cash-based Incentives:

The variable cash-based incentives include the Performance Target Bonus (PTB) and EVA-based Incentive Scheme.

Performance Target Bonus

The PTB is a cash-based incentive for Senior Management Executives which is linked to the achievement of annual performance targets that will vary depending on their job requirements.

Individual performance objectives are set at the beginning of each financial year. The performance targets are in financial, people, operational, customer and sustainability areas aligned to the business' strategic goals. These objectives are cascaded down to a select group of key executives creating alignment between the performance of the Group, Company and the individual.

The individual PTB payouts for the Group President & CEO and Key Management Executives are determined by the ERCC based on the Group's, Company's and individual performance at the end of the financial year.

EVA-based Incentive Scheme
The EVA-based Incentive Scheme (EBIS), which is linked to the Company's economic value-add and financial performance forms part of the short-term incentives for the Senior Management Executives.

Under the plan, a portion of EBIS bonus declared for the financial year will be paid out annually, while the remaining portions will be deferred in an EVA bank. Amounts in the EVA bank are at risk because negative EVA will result in a clawback of EVA accumulated in the bank. This mechanism encourages the Senior Management Executives to work for sustained EVA generation and to adopt strategies that are aligned with the long-term interests of the Group.

In addition, the Group has a clawback facility with respect to the EVA bank in the event of a restatement of the financial results of the Group subsequent to an earlier misstatement, and provisions for the forfeiture of the remaining EVA bank balance on termination due to misconduct or fraud resulting in any financial loss to the Group.

Based on the ERCC's assessment, the Group has met the predetermined targets in FY2022.

C. Share-based Incentives:
Shares which were granted in FY2022 were based on the Singapore Technologies Engineering Performance Share Plan 2020 ("PSP2020") and the Singapore Technologies Engineering Restricted Share Plan 2020 ("RSP2020" and together with the PSP2020, the "2020 Share Plans") approved and adopted by shareholders of the Company at the 23rd AGM held on 15 May 2020.

The 2020 Share Plans have malus and clawback rights which allow the ERCC to cancel all or part of any award to the extent not yet released to the participant, and to exercise the right to clawback the monetary value of shares which have been released to the participant within a six-year clawback period, if certain exceptional circumstances occur in relation to that participant. Such exceptional circumstances include:
- the grant of the relevant award being based on inaccurate financial statements;
- the participant having engaged in conduct which resulted in or contributed to any financial loss or reputational harm to the Company or the Group; and
- the participant having engaged in misconduct or committed fraud or breach of trust or duty in relation to the Company or the Group.

Share grants under the 2020 Share Plans during FY2022 did not exceed 0.5% of the total number of issued shares of the Company (excluding treasury shares and subsidiary holdings), which is the yearly limit set by the ERCC for the 2020 Share Plans.

The aggregate number of shares issued and/or to be issued and the aggregate number of existing shares (including treasury shares) delivered and/or to be delivered, pursuant to the 2020 Share Plans, does not exceed 5% of the issued share capital of the Company (excluding treasury shares).

Details of the abovementioned share plans and grants are set out in the Share Plans section of the Directors' Statement from pages 119 to 123 of this Annual Report.

PSP2020
The objective of the PSP2020 is to motivate Senior Management Executives to strive for sustained growth and performance of the Group.

Performance share awards are generally granted on an annual basis and are conditional on the Group meeting targets set for a three-year performance period. The performance measures used in performance share grants are:
- Absolute Total Shareholder Return (TSR) taking reference to the Group's Cost of Equity; and
- Earnings Per Share (EPS) growth against pre determined EPS growth targets over the relevant performance period.

A minimum threshold performance is required for any shares to be released at the end of the applicable performance period. The actual number of performance shares released will depend on the achievement of predetermined targets over the applicable performance period, capped at 170% of the shares granted.

CORPORATE GOVERNANCE REPORT

The release of the shares is also conditional on satisfactory individual performance at the end of the performance period.

The performance share awards granted during FY2020 were conditional upon the performance of the Group from financial years 2020 to 2022. For this grant, the Group has partially met the predetermined target performance levels set.

RSP2020
The objective of the RSP2020 is to retain and motivate managers and above to strive for sustained long-term growth of the Group. The plan also aims to foster a share ownership culture among employees within the Group and to better align employees' incentives with shareholders' interests. The RSP2020 allows for restricted share awards to be granted to non-executive Directors ("NED Awards") as part of their remuneration in respect of their office as such in lieu of cash. Such awards, which are meant to align the interests of the Directors with those of shareholders, will consist of fully paid shares with no vesting periods or performance conditions imposed although the Directors will be required to hold the shares for certain moratorium periods.

Restricted share awards are generally granted on an annual basis. Save for NED Awards, restricted share awards are generally conditional on the Group meeting a target set for a one-year performance period. The performance measure used in such restricted share grants is:

- Return on Capital Employed (ROCE)

Under such awards, a minimum threshold performance is required for any shares to be released after the end of the applicable performance period. The shares will vest equally over a four-year period, subject to continued employment with the Group and maintaining a satisfactory performance rating for the financial year preceding each tranche of vesting.

The restricted share awards granted during FY2022 were conditional upon the performance of the Group in FY2022. For this grant, the Group has met the predetermined performance threshold level set.

D. Market-related Benefits:
The benefits provided are comparable with local market practices.

The Code requires a company to disclose the names and remuneration of the CEO and at least the top five key management personnel (who are not also Directors or the CEO). Details of the remuneration package for the Group President & CEO are provided in the Summary Remuneration Table for Directors on page 95. Details of the remuneration packages for the Key Management Executives are provided in the Summary Remuneration Table for Key Management Executives on page 96.

In performing the duties as required under its Terms of Reference, the ERCC ensures that remuneration paid to the Senior Management Executives are strongly linked to the achievement of business and individual performance targets.

This link is achieved in the following ways:

a. Allocating a significant portion of executives' remuneration to be subjected to performance conditions and vesting schedules.
b. Incorporating appropriate individual performance objectives for awarding of annual PTB. The performance targets are in financial, people, operational, customer and sustainability areas aligned to the business' strategic goals.
c. Linking variable incentives to Group's performance conditions such as EVA, ROCE, EPS growth and Absolute TSR and requiring those conditions to be met for the incentives to be awarded or vested.
d. Setting realistic yet stretched performance targets each year to motivate a high degree of business performance with emphasis on both short and long-term quantifiable objectives.

An annual Pay-for-Performance Alignment study is conducted by the Remuneration Consultant and reviewed by the ERCC. The findings indicate strong Pay-for-Performance alignment for the Group in terms of both absolute and relative performance.

Under the Code, the compensation system shall take into account the risk policies of the Group, be symmetric with risk outcomes and be sensitive to the time horizon of risks. Having considered this, the ERCC has incorporated the following risk adjustments in the remuneration structure:

a. Setting a prudent funding mechanism of annual bonus;
b. Subjecting and deferring the vesting of 2020 Share Plans to pre-determined performance conditions and potential forfeiture under malus and clawback rights;
c. Requiring the executive Director and key management personnel to hold a minimum number of shares under the share ownership guidelines; and
d. Applying discretion, whenever necessary, to ensure that remuneration outcomes align with the long-term interests and performance of the Group and discourage excessive risk-taking.

The ERCC undertakes periodic reviews of the compensation system to identify potential compensation-related risks and consider policies and processes to manage risk exposures identified.

The ERCC is of the view that the level and structure of remuneration align with the long-term interests and risk management policies of the Group.

During FY2022, there were no termination, retirement and post-employment benefits granted to Directors, Group President & CEO and Key Management Executives other than in accordance with the standard contractual agreement.

There were no employees who were immediate family members of a Director or the Group President & CEO and whose remuneration exceeded S$100,000 during the FY2022.

Non-Executive Director Remuneration

Non-executive Directors (NEDs) have remuneration packages consisting of Directors' fees and attendance fees, which are approved in arrears by shareholders for services rendered in the previous year. The Directors' Remuneration Framework comprises a basic retainer, attendance and additional fees for serving on Board Committees.

For services rendered in FY2022, eligible NEDs will receive 70% of the total Directors' fees in cash and 30% of the total Directors' fees in the form of restricted shares which are governed by the terms of RSP2020, subject to shareholders' approval at its AGM in April 2023.

As the restricted shares are granted in lieu of Directors' remuneration in cash, the shares will be granted outright as fully paid shares with no performance conditions attached and no vesting periods imposed. To encourage the alignment of interests of the NEDs with the interests of shareholders, the share grant has a moratorium on selling. Each eligible NED is required to hold shares in the Group worth the lower of: (a) the total number of shares in the Group granted to such NED as payment of the shares' component of the NEDs' fees; or (b) the number of shares of equivalent value to the prevailing annual basic retainer fee for a Director of the Group. An NED can sell all his/her shares in the Group a year after the end of his/her Board tenure.

The Directors' fees for each financial year are currently paid in arrears after approval by the shareholders in the forthcoming AGM. From financial year 2023 onwards, approvals of the shareholders will be sought in the AGM of the same year for the payment of Directors' fees on a half-yearly basis in arrears. The amount of Directors' fees is computed based on the anticipated number of Board or Board Commitee meetings, assuming attendance by all Directors at such meetings, and in accordance with the Directors' fee structure. The amount of Directors' remuneration also caters for additional fees (if any), which may be payable due to additional Board or Board Committee meetings (including ad-hoc meetings) or the appointment of additional Board or Board Committee members. If for unforeseen reasons, payments are required to be made to the Directors in excess of the amount proposed, the Company will seek approval from shareholders at the subsequent AGM before any such payments are made. This change to the payment schedule better aligns with the period that the NEDs render their services.

CORPORATE GOVERNANCE REPORT

The computation of NEDs' remuneration is based on the following rates.

	From Private Sector ($) FY2022
Chairman Fee (all-in)	750,000
Board Basic Retainer Fee	
Deputy Chairman	150,000
Director	75,000
Additional/Committee Fees	
Audit Committee:	
- Chairman	52,000
- Member	29,000
ERCC, SFC, RD&T and RSC:	
- Chairman	35,000
- Member	18,000
Other Committees (including NC):	
- Chairman	29,000
- Member	14,000
Attendance Fees	
Per Board Meeting	5,000
Per Board Committee Meeting	2,500

The Chairman's fee is a fixed fee covering Board basic retainer, Board Committee and meeting attendance fees. The fee is paid in a combination of cash (70%) and shares (30%). The shares granted, as part of the fee, are fully-paid with no performance conditions attached and no vesting period imposed. However, the shares will have to be held for at least two years from the date of grant, and the two-year moratorium will apply even in the event of retirement.

A basic retainer fee for Deputy Chairman role was introduced in FY2022 following the appointment made in April 2022.

Fees for Directors who hold public sector appointments follow the Directorship & Consultancy Appointments Council's (DCAC) guidelines as set out below.

	Public Sector NED fees ($) FY2022
Chairman	45,000
Deputy Chairman/Chairman Executive Committee/ Chairman Audit Committee	33,750
Member Executive Committee/Member Audit Committee/Chairman of Other Board Committee(s)	22,500
Director	11,250

NEDs who hold public sector appointments will not be eligible for the shares component of the NEDs' remuneration. 100% of their remuneration in cash is payable to DCAC, where applicable.

The NEDs' remuneration payable, in respect of FY2022 is proposed to be $2,406,662 (FY2021: $2,025,158[1]). Details of the Directors' remuneration are provided in the Summary Remuneration Table for Directors on page 95. The Company will be seeking shareholders' approval for the NEDs' remuneration of up to $2,500,000 for FY2023 at the upcoming AGM to be held in April 2023.

[1] The Board volunteered to reduce Board fees by 10% from 1 May 2020 to 30 June 2021.

SUMMARY REMUNERATION TABLE FOR DIRECTORS FOR THE YEAR ENDED 31 DECEMBER 2022 (GROUP):

Payable by the Company

					Directors' Total Fees*5		
Executive Director	**Salary*1 $**	**Variable cash-based Incentives*2 $**	**Benefits*3 $**	**Share-Based Incentives*4 $**	**Cash-based $**	**Share-based $**	**Total**
Vincent Chong Sy Feng	1,080,873	2,287,970	130,575	1,870,050	-	-	5,369,468
Non-Executive Directors							
Kwa Chong Seng	-	-	-	-	750,000	-	750,000
Teo Ming Kian[(a)]	-	-	-	-	177,029	75,869	252,898
Kevin Kwok Khien[(b)]	-	-	-	-	135,148	57,921	193,069
Joseph Leong Weng Keong[(c) & (d)]	-	-	-	-	2,774	-	2,774
Lim Ah Doo	-	-	-	-	118,650	50,850	169,500
Lim Chin Hu	-	-	-	-	156,100	66,900	223,000
Lim Sim Seng	-	-	-	-	127,750	54,750	182,500
Ng Bee Bee (May)	-	-	-	-	86,800	37,200	124,000
LG Ong Su Kiat Melvyn[(d)]	-	-	-	-	11,250	-	11,250
Quek See Tiat[(e)]	-	-	-	-	121,220	51,951	173,171
Song Su-Min	-	-	-	-	123,900	53,100	177,000
Tan Peng Yam[(f)]	-	-	-	-	103,250	44,250	147,500
COL Cai Dexian (Alternate to LG Ong Su Kiat Melvyn)	-	-	-	-	-	-	-
Total for Non-Executive Directors					**1,913,871**	**492,791**	**2,406,662**
Payable by Subsidiary							
Non-Executive Director							
Lim Chin Hu	-	-	-	-	20,000	-	20,000
Total for Non-Executive Director					**20,000**	**-**	**20,000**

*1 Salary includes base salary and employer CPF for the financial year ended 31 December 2022.
*2 Variable cash-based Incentives include Performance Target Bonus & EVA-based incentive declared.
*3 Benefits provided for employees are comparable with local market practices. These include medical, dental, insurances, transport, etc.
*4 Share-based Incentives consist of PSP and RSP shares granted for financial year ended 31 December 2022.
*5 The NEDs' cash fees and share grants will only be paid/granted upon approval by the shareholders at the forthcoming AGM. NED who steps down before the delivery of share grants will receive all of his/her fees in cash.
(a) Pro-rated. Appointed as Deputy Chairman on 21 April 2022.
(b) Pro-rated. Appointed as Chairman of AC on 21 April 2022.
(c) Pro-rated. Ceased as Director on 1 April 2022.
(d) Fees for public sector NED are payable to a government agency, the DCAC.
(e) Pro-rated. Ceased as Chairman and member of AC on 21 April 2022.
(f) Director's fee is paid based on private sector NED remuneration fee structure.

CORPORATE GOVERNANCE REPORT

SUMMARY REMUNERATION TABLE FOR KEY MANAGEMENT EXECUTIVES FOR THE YEAR ENDED 31 DECEMBER 2022 (GROUP)[1]:

Remuneration	Salary[2] %	Variable cash-based Incentives[3] %	Benefits[4] %	Share-Based Incentives[5] %	Total
Between $2,750,000 and $3,000,000					
Foo Chee Keng Cedric	23	44	3	30	100
Between $2,500,000 and $2,750,000					
Ravinder Singh s/o Harchand Singh	25	42	3	30	100
Tan Lee Chew	23	44	3	30	100
Total for Key Management Executives					**$8,482,683**

1 The ERCC is of the view that the relevant Key Management Executives shall comprise members of the EXCO.
2 Salary includes base salary and employer CPF for the financial year ended 31 December 2022.
3 Variable cash-based Incentives include Performance Target Bonus & EVA-based incentive declared.
4 Benefits provided for employees are comparable with local market practices. These include medical, dental, insurances, transport, etc.
5 Share-based Incentives consist of PSP and RSP shares granted for financial year ended 31 December 2022.

ACCOUNTABILITY AND AUDIT

Risk Management and Internal Controls (Principle 9)

The Board is responsible for the governance of risk and ensures that Management maintains a sound risk management and internal control system to safeguard the interests of the Company and its shareholders.

The Board received a written assurance from the Group President & CEO and the Group CFO that the financial records have been properly maintained and the financial statements give a true and fair view of the Company's operations and finances.

The Risk and Sustainability Committee (RSC) is established to ensure Management has adequate oversight over the awareness and handling of safety, risks and sustainability matters.

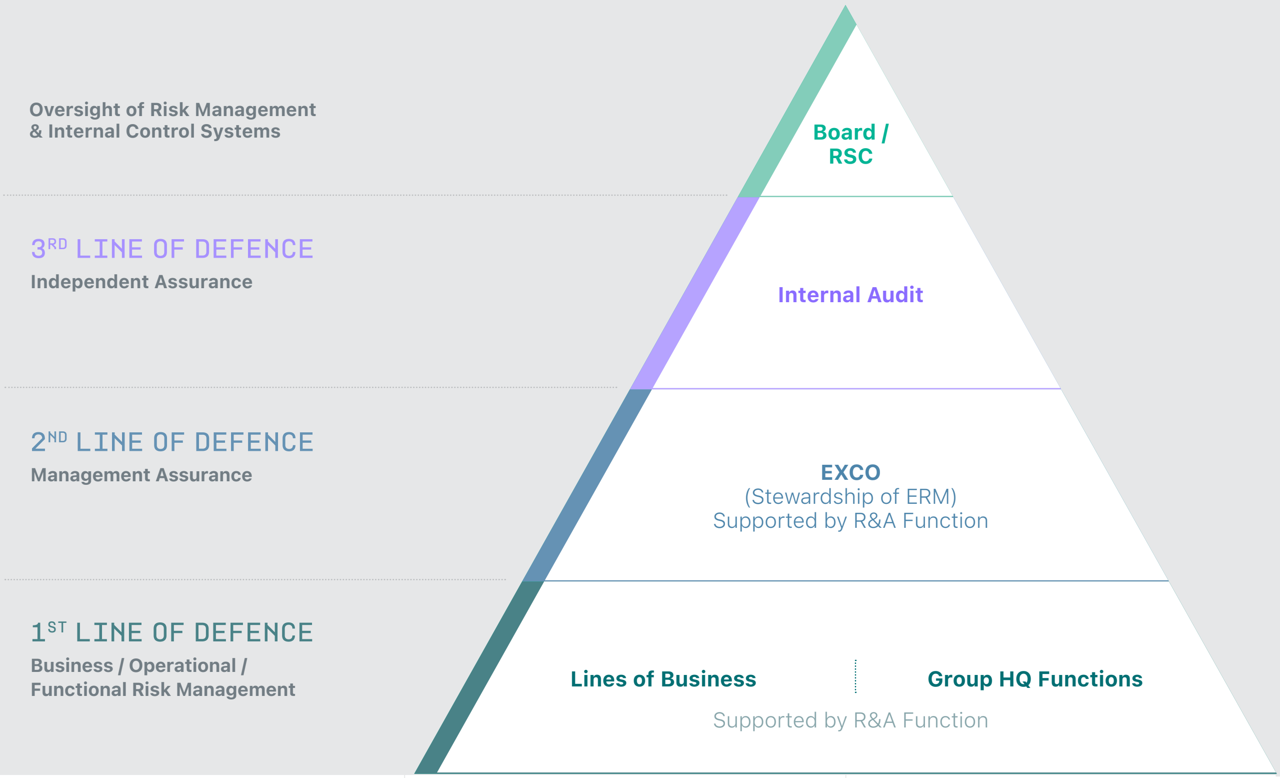
Risk and Sustainability Committee

Quek See Tiat (Chairman)
Vincent Chong Sy Feng
Kevin Kwok Khien
Song Su-Min
LG Ong Su Kiat Melvyn

For the Board to discharge its duties objectively over risks and internal controls, Management of ST Engineering meets with the Board and Board Committees frequently during the year.

RSC met
5 times
in 2022

RISK GOVERNANCE AND MANAGEMENT



Under its terms of reference, the RSC performs the following duties and responsibilities:

a) Sustainability Oversight

The RSC oversees the Group's sustainability matters, including those related to climate change. It provides direction on sustainability strategies (short, medium and long term) and monitors progress on sustainability plans and commitments.

Information on sustainability is reported to the RSC via the Group Strategy and Sustainability Office.

Details on RSC's governance and oversight of sustainability are in our Sustainability Report.

b) Risk Governance

The RSC assists the Board in its risk governance responsibility, overseeing the responsibilities delegated to Management to ensure that there is a sound system of controls in place for identifying and managing risks to safeguard stakeholders' interests and the Company's assets and reputation.

ST Engineering adopts the 'three lines of defence' model of risk governance and management to define the relationships and roles of different functions and operations across the Group in managing risk:

- The first line of defence refers to various Lines of Business' operational teams that identify risks and implement controls.
- The second line of defence is led by the EXCO and supported by the Risk and Assurance (R&A) function to establish governance and control mechanisms.
- The third line of defence is represented by Internal Audit (IA), which provides independent assurance to Management and the Board as to whether the systems of risk management and internal controls are adequate and effective.

ENTERPRISE RISK MANAGEMENT FRAMEWORK

ERM INFRASTRUCTURE

Vision and Goals

Oversight Structure

Roles and Responsibilities

Common Language

Policies and Manuals

Tolerances and Limits

Technology and Tools

ERM PROCESS

ERM REPORTS

Risk and Incident Registers

Risk Reports

BUILDING A STRONG ERM CULTURE

STRENGTHENING ERM CAPABILITIES

Change Management

Continuous Improvement

Communication / Information Sharing

Awareness / Training

Enterprise Risk Management (ERM) Framework

The Group has put in place an ERM framework to identify, assess, monitor, and manage key business risks in the short, medium, and long term. The ERM framework sets out a common and consistent understanding of risks and risk tolerance limits across the Group, allowing the Board and Management to cascade down the Company's risk management philosophy and overall risk appetite as they establish business strategies and objectives.

As part of providing leadership in the implementation of the Group-wide Enterprise Risk Management (ERM) framework, Group R&A maintains an ERM Manual which provides guidelines on risk identification, assessment, and reporting procedures.

To facilitate knowledge sharing across various Business Areas and continuous improvement of key ERM processes, material risk events and corresponding controls are also captured and updated in a centralised risk repository. This repository supports analysis, risk monitoring and response, and facilitates risk assessments and dashboard reporting.

a) Risk Appetite Framework

The Risk Appetite Framework defines the risk boundaries in line with our corporate strategy for compliance within the Group. Under this framework, the Board has approved six Group Risk Appetite Statements with respect to our key risks, and in line with the Group's material ESG factors. They serve as a key conduit for aligning the Group's risk profile with the Group's corporate strategy to achieve its business objectives.

Enterprise-wide risk appetite statements are approved by the Board of Directors based on strategic principles, then translated into risk tolerances to guide tactical risk-taking at the operational level. Risk tolerance sets the boundaries of acceptable variation in performance in line with the risk appetite for each underlying key risk.

Strategic
We are committed to pursuing sustainable and inclusive growth to enhance our competitive advantage whilst upholding our core values.

ESG
We subscribe to ESG best practices to benefit all stakeholders.

Financial
- We aim to maintain a resilient balance sheet.
- We have a defined governance framework to evaluate and approve all investment and business transactions.

Regulatory Compliance
- We comply with all applicable laws and regulations in the countries where we operate in.
- We adopt a zero tolerance policy towards fraud, bribery and corruption.

Operational
- We are committed to "Safety Before Profits".
- We aim to achieve zero accidents at the workplace.

IT and Cyber
We are committed to protecting our data and systems including those entrusted to us by adopting best practices in cybersecurity.

RISK APPETITE
Fostering Growth & Resilience

During 2022, the Group's risk appetite and risk tolerance principles have been communicated to all employees through EXCO video messages and infographics, with the aim of aligning all managers and executives with a consistent set of operating parameters and directing them to appropriate reporting channels and resources when in doubt.

For instance, our Group's commitment to "Safety Before Profits" sets the tone for a holistic management of total workplace safety and health issues and underscores a focus to provide safe and healthy working conditions for the prevention of work-related injury and ill health for all our employees and visitors. This is supported by the Operational Excellence Specialist Team on Workplace Safety & Health (OEST - WSH) which oversees and coordinates efforts group-wide to ensure the effective implementation of our WSH Management System.

The RSC provides oversight to the Group by reviewing the Risk Appetite Framework and risk tolerance limits. These limits are subject to periodic reviews to take into consideration significant changes in the business environment, ensuring that they continue to support the Group in achieving its strategic objectives.

CORPORATE GOVERNANCE REPORT

KEY BUSINESS RISKS OF ST ENGINEERING

For a detailed write-up of the **Group's key risks and mitigation strategies**, please visit our corporate website.

For information on how we manage some of the key risks across the Group from an ESG perspective, please refer to the Sustainability Report 2022 to learn about the various material factors and their respective management approaches.

b) Risk Review Process

Under the ERM framework, an overall risk taxonomy for various types of risks is established and regularly refreshed to incorporate new and emerging risks. Annually, each business unit will update its risk register based on the risk taxonomy and control self-assessment results, ensuring appropriate risk mitigation (comprising preventive, detective, and responsive controls) and monitoring procedures are implemented as part of the overall risk management plan.

Responsibility for implementing newly identified controls and reviewing their effectiveness lies with identified Control Owners and Risk Owners respectively.

A risk heatmap featuring the top business and functional risks is also generated and maintained by each of the business units, which R&A will aggregate into a Group-wide risk heatmap to determine the Group key risks and overall risk profile.

Quarterly, Cluster Presidents and Presidents of the Business Areas review the key risks with the RSC. At the meetings, the risk movements and corresponding risk mitigations are highlighted for discussion, including:

- emerging trends and issues in each Business Area;
- new risks or changes to existing risk profile;
- new risk incidents;
- major risk exposures; and
- risk mitigations taken on previously identified risks.

The RSC continues to monitor the implementation of risk management policies and procedures and receives updates on the risk registers maintained by the respective businesses.

Other key activities during the year include regulatory compliance reviews, as well as assessment of business disruption risks and their corresponding business continuity plans.

c) Control Self-Assessment Process

The Control Self-Assessment (CSA) process has been enhanced in 2022 with the implementation of an end-to-end digitalised workflow, allowing collaborative assessment on the implementation of key controls that address key risks. This would augment the basis of assurance from Management through the use of management dashboards to provide timely risk reporting.

d) Risk Communication and Awareness

As part of the annual risk and compliance training programme, key risk and compliance topics covering ST Engineering Code of Business Conduct and Ethics, Anti-bribery and Corruption, Personal Data Protection and Trade Compliance are shared with staff through e-learning. The RSC is updated regularly on the status of these trainings.

System of Internal Control and Risk Management

The Board receives, at regular intervals, updates from the Board Committees on the key business risks, the material controls to manage these risks, and the internal audit reports on the operational effectiveness of the material controls. Accordingly, the Board, through the Board Committees and supported by the Group's R&A and Internal Audit functions, is satisfied that internal control issues are identified on a timely basis and remedial actions are taken promptly to minimise lapses.

The Board has received assurance from the Group President & CEO and Group CFO on the adequacy and effectiveness of the Company's internal controls and risk management system. Based on the internal controls and risk management process established and maintained by the Group, work performed by the internal and external auditors, and reviews performed by Management and various Board Committees, the Board is satisfied that the Group's framework of internal controls (including financial, operational, compliance and information technology controls) as well as the risk management systems are adequate and effective as at 31 December 2022.

The Audit Committee concurs with the Board on the adequacy and effectiveness of the internal controls and risk management systems established and maintained by the Group as at 31 December 2022. In this regard, the Board also notes that no framework of internal controls can provide absolute assurance against the occurrence of material errors, poor judgment in decision making, human error, fraud or other irregularities.

Audit Committee (Principle 10)

Audit Committee

Kevin Kwok Khien (Chairman)
Lim Ah Doo
Song Su-Min

The Audit Committee (AC) comprises all independent Directors with majority, including the AC Chairman, having relevant accounting or related financial management experience. The AC does not comprise any former partner or Director of ST Engineering's existing audit firm within two years preceding their appointment to the AC and none of them have any financial interest in the audit firm.

Under its terms of reference, the AC performs the following duties and responsibilities:

- reviews the significant financial reporting issues and judgements so as to ensure the integrity of the financial statements and all announcements relating to financial performance;
- reviews the adequacy and effectiveness of internal controls and risk management systems;
- reviews the assurance from the Group President & CEO and the Group CFO on the financial records and financial statements;
- makes recommendation to the Board on the appointment, removal, remuneration and the terms of engagement of the external auditors;

CORPORATE GOVERNANCE REPORT

- reviews the adequacy, effectiveness, independence, scope and results of both the external and internal audit functions;
- reviews with the internal auditors on the scope and results of the internal audits conducted, including monitoring Management's response to ensure adequate follow up;
- reviews and approves the internal and external audit plans;
- reviews the whistleblowing policy and arrangements and all significant whistleblowing cases;
- approves the composition and terms of reference of the Whistle-blowing Committee. The AC Chairman chairs the Whistle-blowing Committee and is supported by the Group CFO, Group General Counsel, Group Chief Human Resource Officer, Group Head, R&A and Group Head, Internal Audit (Group Head, IA); and
- reviews all material interested person transactions.

The AC approves the ST Engineering Internal Audit Charter and assesses at least annually, whether the internal audit function is adequately resourced and with the relevant skillsets and qualifications to carry out its duties. The AC reviews the decisions relating to the hiring, removal, performance evaluation and remuneration of the Group Head, IA.

The Group Head, IA reports functionally to the AC and administratively to the Group President & CEO.

The Group has an in-house internal audit function – ST Engineering's Group Internal Audit (IA) which comprises a team of professionals and the Group Head, IA with relevant experience in corporate governance, internal controls, IT security and other relevant disciplines.

The role of the IA is to provide independent and objective assurance to the AC on the adequacy and effectiveness of the Group's governance, risk management and system of internal controls. IA also undertakes investigations as directed by the Whistle-blowing Committee and has unfettered access to all documents, records, assets and personnel, including access to the AC. IA also performed the internal review on the Sustainability Report for 2022 and any recommendations arising from the review were taken into consideration during its development.

As a corporate member of the Singapore Chapter of the Institute of Internal Auditors (IIA), IA adopts the International Standards for the Professional Practice of Internal Auditing (the IIA Standards) laid down in the International Professional Practices Framework issued by the IIA. A quality assurance and improvement programme on the internal audit function is in place which evaluates its conformance with the IIA Standards and assesses the efficiency and effectiveness of the internal audit activities and any improvements.

AC met

5 times

in 2022

Training plans and programmes are developed and reviewed to equip staff with the relevant qualifications and technical knowledge so that skill sets remain relevant and current.

ST Engineering adopts a risk-based approach in developing its annual internal audit plan, based on the prioritisation of the audit universe, including inputs from key stakeholders. The internal audit plan is reviewed annually to stay relevant to the Group's businesses, risks, operations, programmes, systems and controls.

The AC is satisfied that IA is independent, effective and adequately resourced and has appropriate standing within the Group.

The AC considered and approved the 2022 Audit Plans for the external and internal audits. In addition, the AC reviewed the adequacy of internal control procedures including cybersecurity issues, interested person transactions and the issues raised in all IA reports.

External Auditors
The appointment of external auditors is subject to approval at each AGM. In making its recommendations to shareholders on the appointment and reappointment of external auditors, the Board relies on the review and recommendations of the AC. The AC reviews the adequacy, effectiveness, independence, scope and results of the external audit and makes recommendations to the Board on the appointment, removal, remuneration and the terms of engagement of the external auditors. In compliance with the SGX-ST Listing Manual, an audit engagement partner may only be in charge of an audit for up to five consecutive years. PricewaterhouseCoopers LLP, first appointed in 2020, has met this requirement, and the current audit engagement partner also took over ST Engineering's audit in 2020.

Fees paid to the external auditors for audit and non-audit services of the Group for FY2022 totalled $5.9m, of which $0.55m or 9% were for non-audit services. The AC was satisfied that the non-audit services provided by the external auditors did not compromise their independence.

The Company has complied with Rules 712 and 715 of the SGX-ST Listing Manual in relation to the engagement of its auditors.

During the year, the AC held five meetings, including a joint meeting with the RSC to review significant risks of the Company and related key controls.

The AC also met with the external auditors, and with the internal auditors, in each case without the presence of Management.

The AC reviewed the financial statements of the Group before the announcement of the Group's half-yearly and full-year results. Amongst the matters discussed with Management and the external auditors, the following significant matters having impact on the financial statements were reviewed by the AC in relation to their materiality and appropriateness in approach, methodology and assessment:

Significant matters	How the AC reviewed these matters
Impairment assessment of non-financial assets – goodwill	The AC reviewed the reasonableness of cash flow forecasts, the long-term growth rates and discount rates used in the valuation models in goodwill impairment assessments, as well as how the impact of COVID-19 has been considered in the cash flow forecasts. The AC also reviewed the stress testing of the valuation and its sensitivity to changes in key assumptions used in the valuation model.
Revenue recognition based on stage of completion	The AC reviewed the various controls that were designed and applied by the Group in the recognition of revenue and profit from contracts with customers to ensure that the estimates used in determining the amount of revenue and costs recognised for the performance obligations were appropriate.
Purchase price allocation relating to the acquisition of TransCore	The AC reviewed the reasonableness of the key assumptions and estimates used in the determination of the fair values of the identifiable assets and liabilities of TransCore acquired by the Group.

The AC concluded that the accounting treatment and estimates used by the Group were appropriate for the above significant matters. All the key audit matters (KAMs) that were raised by the external auditors for the financial year ended 31 December 2022 have been addressed by the AC and discussed in the above commentary. The KAMs in the audit report for the financial year ended 31 December 2022 can be found on pages 126 to 128 of this Annual Report.

The AC was kept updated on relevant changes in accounting standards and their implications on the financial statements.

Whistleblowing Policy
The AC has reviewed the ST Engineering Whistleblowing Policy and is satisfied with the procedures through which employees and other stakeholders may, in confidence, raise concerns about possible improprieties in business conduct, financial report or other matters without the fear of reprisals. No form of retaliation to the informant (internal or external) is tolerated for any report made in good faith.

CORPORATE GOVERNANCE REPORT

ST Engineering is committed to conducting business with integrity and adopts a zero-tolerance attitude towards any malpractice, impropriety, statutory non-compliance and/or any wrongdoing by Board members, employees and any other parties with a business relationship with the Group. The Whistle-blowing Committee, with the assistance of the Group Head, IA, reviews and deliberates over the contents of the incident raised and determines the subsequent measures to adopt, including making enquiries and pursuing investigations (internal or external). The AC reviews the adequacy of every investigation instituted with their corresponding outcomes. Under these procedures, arrangements are in place for independent investigation of reported concerns and for appropriate follow-up actions to be taken.

Harassment or victimisation of the whistleblower is not tolerated. Reasonable and appropriate actions, subject to applicable laws, are taken to protect all whistleblowers who raise a concern in good faith. Appropriate disciplinary action may be taken against employees who retaliate against the whistleblower.

The Group's whistleblowing policy facilitates the in-confidence disclosures of possible impropriety or non-compliance. All reports, which may be made anonymously, are treated with strict confidentiality. Non-anonymous whistleblowers (with contactable details) are informed when investigations are concluded.

All stakeholders, including employees, customers, suppliers and the general public, can report incidents through various reporting channels that are independently managed.

Whistleblowing Procedure
Employees and other stakeholders may raise their concerns anonymously or otherwise and/or write to seek advice on the ST Engineering's anti-bribery programme through the various whistleblowing communication channels (i.e. dedicated email account, postal address, 22 geographical toll-free telephone numbers, web and mobile reporting applications, hosted by an independent external provider).

Concerns involving any member of the Board or the Senior Management or the Group Head, IA may be reported directly to the Chairman of the Board, the AC Chairman and the Group President & CEO via dedicated email at AC@stengg.com. The reporting channels are published on the Group's website, intranet, and offices for accessibility and awareness. The Whistleblowing Policy and Procedures are reviewed by the AC from time to time to ensure that they remain relevant.

Interested Person Transactions
The Group has established policies and procedures for reviewing and approving interested person transactions (IPTs) in accordance with the general mandate from shareholders to ensure that such transactions are conducted fairly on an arm's length basis and will not be prejudicial to the interest of the Company and/or its minority shareholders.

The Group maintains a register of interested persons to facilitate the identification of IPTs.

IPTs are reviewed by IA to verify accuracy and completeness of disclosure, and reported to the AC on a quarterly basis.

Where an IPT requires shareholders' approval, the interested person will abstain from voting and the decision will be made by other shareholders.

The general mandate from shareholders is put up for approval at each AGM and stipulates the review procedures to ensure IPTs are undertaken on arm's length basis and on normal commercial terms consistent with the Group's usual business practices and policies, which are generally no more favourable to the interested persons than those extended to unrelated third parties.

Details of IPTs entered into by the Group for financial year 2022 are set out on page 271 of this annual report.

SHAREHOLDER RIGHTS AND ENGAGEMENT

Shareholder Rights and Conduct of General Meetings (Principle 11)

The Company treats all shareholders fairly and equitably in order to enable them to exercise shareholders' rights and have the opportunity to communicate their views on matters affecting the company. The Company gives shareholders a balanced and understandable assessment of its performance, position and prospects.

Shareholders Meeting

ST Engineering's 25th AGM was conducted in accordance with the alternative arrangements for general meetings prescribed by a ministerial order issued under the COVID-19 (Temporary Measures) Act 2020 whereby shareholders attended via live audio-visual webcast or live audio-only stream.

The Annual Report, Notice of AGM and Proxy Form for the 25th AGM were made available via SGXNet and our corporate website. To facilitate shareholder engagement, the Company implemented real-time remote electronic voting ("live" voting) and real-time electronic communications ("live" Q&A) at the meeting to allow shareholders to submit questions in advance of, and "live" at the meeting and vote at the meeting "live" by the shareholders themselves or their duly appointed proxy(ies) or by appointing the Chairman of the meeting as proxy to vote on their behalf at the meeting. Shareholders were encouraged to submit their questions ahead of the meeting and were given ample time after publication of the Notice of AGM to consider the matters to be tabled at the meeting.

The Company addressed the substantial and relevant questions received from shareholders by publishing the answers via SGXNet and our corporate website 48 hours before the deadline to submit the proxy form to allow shareholders to decide on their votes. To cater to shareholders who did not submit their questions in advance or who had additional questions, we allowed time for "live" Q&A with the Board during the meeting. The Chairman and President & CEO addressed all questions asked by shareholders at the meeting.

Our Group President & CEO started the 25th AGM by delivering a presentation on the Group's aspiration, corporate purpose and growth strategy. He provided an overview of the Group's 2021 financial performance, 2021 key initiatives achieved in the COVID-19 pandemic environment and highlights on the business segments of Commercial Aerospace, Urban Solutions & Satcom and Defence & Public Security, including notable contract wins and new investments. He also presented on the Group's five-year plan and shared the target growth in annual revenue. The presentation material was also available on both SGXNet and our corporate website.

The Directors' attendance at the 25th AGM is disclosed on page 82 in the Corporate Governance Report of this Annual Report.

For physical meetings pre-pandemic, shareholders had the opportunity to interact with the Directors and the Management before and/or after the general meetings. Shareholders are entitled to attend general meetings and are accorded the opportunity to participate effectively in and vote at general meetings (including through the appointment of up to two proxies, if they are unable to attend in person or in the case of a corporate shareholder, through its appointed representative). The CPF Board and relevant intermediaries (as defined in Section 181 of the Companies Act 1967) may appoint more than two proxies to attend, speak and vote on their behalf. The Company ensures that notice of general meeting is provided in sufficient time before the specific date of the meeting to allow shareholders to properly consider the items of business on the agenda.

Shareholders are informed of the rules governing general meetings. We have implemented electronic poll voting for all the resolutions tabled for approval at the general meetings. An independent scrutineer is appointed to conduct the electronic poll voting procedures and review the proxy verification procedures. The voting procedures are briefed to the shareholders by the independent scrutineer at the beginning of general meetings. All resolutions are put to the vote by electronic poll voting.

Generally, all Directors, including the respective Board Committee Chairmen, are present for the entire duration of general meetings together with Management, external auditors and legal advisors to address shareholders' queries. Queries on matters related to the conduct of audit and the preparation and content of the auditors' report may be addressed by the external auditors. The Chairman of the meeting allows specific Directors, such as Board Committee Chairmen, to answer queries on matters related to their roles. The Chairman also facilitates constructive dialogue between shareholders and the Directors, Management, external auditors and legal advisors (where necessary).

CORPORATE GOVERNANCE REPORT

On voting, each proposal is put to vote as a separate resolution. We do not "bundle" resolutions unless the issues are interdependent and linked so as to form one significant proposal. If there are resolutions which are interdependent and linked, we will explain the reasons and material implications in the notice of the meeting. Detailed information on each resolution is provided in the explanatory notes to the Notice of AGM to enable shareholders to exercise their votes on an informed basis. For resolutions on the election or re-election of Directors, we provide sufficient information on the background of the Directors, their contributions to ST Engineering, and their Board and Board Committee positions they are expected to hold upon election.

All proxy votes are received by the 72 hours' deadline prior to meeting and are verified by the appointed independent scrutineers. The results of all resolutions put to vote, showing the number of votes cast for and against each resolution and the respective percentages, are tallied and shown live on-screen to shareholders immediately after the vote has been cast. The results are also announced via SGXNet immediately after the conclusion of the meeting.

The Company Secretary prepares the minutes of general meetings which are published on our corporate website and where required, on SGXNet, as soon as practicable after such meetings. The minutes record substantial and relevant comments or queries from shareholders relating to the agenda of the meeting, and responses from the Board and Management.

Provision 11.4 of the Code provides for a company's constitution to allow for absentia voting at general meetings of shareholders. Presently, absentia voting (such as by mail, email or fax) is not permitted under the Company's Constitution. The Company does not intend to amend its Constitution to provide for absentia voting until security, integrity and other pertinent issues relating to absentia voting are satisfactorily resolved. Nevertheless, the Company is of the view that notwithstanding its deviation from Provision 11.4 of the Code, shareholders are treated fairly and equitably and have the opportunity to communicate their views on matters affecting the Company. For instance, shareholders may appoint proxies to attend, speak and vote, on their behalf, at general meetings if they are unable to attend.

Dividend Policy

The Board approved a dividend policy in February 2022 to declare dividends every quarter instead of twice a year previously.

The dividends for FY2023 are currently scheduled to be paid in June 2023, September 2023, December 2023 and May 2024. As and when the Board declares an interim dividend for each of the first three quarters of FY2023, ST Engineering will announce the relevant record date and payment date on SGXNet. The final dividend payable in May 2024 is subject to shareholders' approval at the ST Engineering AGM to be held in April 2024, the record date and payment date for which will be announced in conjunction with the release of the Group's full-year financial results for FY2023.

Engagement with Shareholders (Principle 12)

ST Engineering practises regular, fair and effective communication with its shareholders. The Company ensures that all communications of material information, including price-sensitive and trade-sensitive information, are timely, balanced and fair and in compliance with the SGX-ST Listing Manual and the Code.

The Investor Relations (IR) department is an integral conduit between the Company and investment community. The Investor Relations team maintains regular dialogues with shareholders and the investment community through a multi-channel programme to promote effective communication that gives them a balanced and understandable assessment of the Company's performance, position and prospects.

Targeted events such as AGMs, investor conferences, group briefings and one-on-one meetings offer opportunities for Senior Management and Directors to interact first-hand with shareholders and the investment community to understand their views, gather feedback and address concerns.

Material information relating to the Company's financial performance, business and strategic developments are published on SGXNet, and/or on our corporate website www.stengg.com.

A dedicated "Investor Relations" section on our website houses current and past annual reports, half-yearly financial reports and webcasts, quarterly market updates, as well as information on AGM and other information considered to be of interest to shareholders and the investment community. ST Engineering's Annual Report is available on our corporate website within 120 days from the end of the Group's financial year-end. A printed copy of the latest Annual Report can be ordered at no cost upon request via email at ir@stengg.com.

ST Engineering publishes half-year and full-year financial reports comprising detailed financial statements and management commentaries on the financial and business performance of the Group within 45 and 60 days from the end of each respective financial period. Release dates of half-yearly financial reports are disclosed four weeks prior to the announcement date via SGXNet.

Briefings to present the half-year and full-year financial results are held for media and sell-side analysts. Our shareholders can also participate by listening in to the briefing. Links to live webcasts for these briefings are posted on SGXNet and our corporate website. Audio playback is made available on our website on the same day. In addition, we augment our half-yearly briefings with 1Q and 3Q Market Updates briefings for sell-side analysts. The presentation materials are posted on SGXNet and our corporate website before trading starts.

In addition to the investment community, the IR team engages ESG-related research and rating agencies to communicate the Company's sustainability framework, approach and goals. Relevant functions or departments such as Sustainability, Human Resources and Risk & Assurance may also participate in these exchanges.

The Company's Investor Relations Policy, available in the "Investor Relations" section on our website, sets out general communication principles and mechanism of shareholder engagement. Contact details of the IR team are available on the corporate website. We value opportunities to engage with our shareholders and investors, who can contact the IR team directly through email or telephone. The IR team will respond to any queries received through email within three working days.

We welcome the investment community to subscribe to news alerts or follow our social media channels to stay updated on our business developments and happenings.

MANAGING STAKEHOLDERS RELATIONSHIPS

Engagement with Stakeholders (Principle 13)

The Company engages its material stakeholders. Details can be found in the Sustainability Report on page 13 and on our corporate website at www.stengg.com.

DEALINGS IN SECURITIES

The Company has in place a policy which prohibits our Directors and officers of the Company and the Group from dealing in ST Engineering's securities one month before the announcement of half-year and full-year financial results as well as two weeks before the announcement of 1Q and 3Q voluntary Market Updates (the black out period). They are informed of the commencement date for each black out period and are regularly reminded not to deal in ST Engineering's securities at all times if they are privy to any unpublished material price-sensitive or trade-sensitive information. They are also advised to observe the insider trading laws at all times even when engaging in dealings in ST Engineering's securities within the permitted window periods, and not to deal in ST Engineering's securities on short-term consideration.

The Company will also not purchase or acquire its securities during the black-out period and at any time after a price-sensitive or trade-sensitive development has occurred or has been the subject of a decision until the price-sensitive or trade-sensitive information has been publicly announced.

Directors are required to comply with the disclosure obligations under the Securities and Futures Act 2001 to notify the Company of any interests or changes in interests in ST Engineering's securities or of any of its related corporations within two business days after they acquire or dispose such interests or after they become aware of the changes. Upon receipt of the notification of interests and change in interests in ST Engineering's securities from the Director, the Company will notify the SGXNet by the end of the next business day following such notification. In any event, the non-executive Directors who are currently our shareholders hold an insignificant number of shares in ST Engineering.

CORPORATE GOVERNANCE REPORT

CODE OF BUSINESS CONDUCT & ETHICS

ST Engineering's Code of Business Conduct and Ethics (Code) is developed based on key principles guided by the Group's Core Values - Integrity, Value Creation, Courage, Commitment and Compassion. This Code forms the foundation of the Group's commitment to ethical business conduct and regulatory compliance.

Read more about our Code and how it relates to the Group's commitment to ethical business and regulatory compliance in our Sustainability Report

EXPORT CONTROL

ST Engineering's Export Control Policy aims to ensure that all the Group's exports are kept out of the hands of unauthorised users and are not used for unauthorised purposes. The Group complies with all applicable export control regimes (including trade sanctions and embargoes) governing the export of controlled goods, services, software, technology and/or information in the jurisdictions the Group operates in. This commitment extends to transactions undertaken by any party operating on behalf of the Group.

Read more about our approach towards Export Control and how it relates to the Group's commitment to ethical business and regulatory compliance in our Sustainability Report

LOBBYING & POLITICAL CONTRIBUTION

Political contributions, donations or sponsorships must be approved by Management in accordance with the Group's approval limits policy and be made with the highest ethical standards and in compliance with all applicable laws of the jurisdictions where the Group operates in. These must not confer a personal benefit, and must not be given to gain a business advantage or to influence a business outcome or an official action.

Read more about our approach to Lobbying and Political Contribution, and how it relates to the Group's commitment to ethical business and regulatory compliance in our Sustainability Report

ANTI-BRIBERY & CORRUPTION

The Group has zero tolerance for fraud and corruption, reinforced by our policies and compliance procedures related to anti-bribery and corruption. The Group has dedicated policies on topics such as whistleblowing, corruption, conflicts of interests, gifts and hospitality, and the appointment of intermediaries in our businesses.

Read more about our approach to Anti-bribery and Corruption and how it relates to the Group's commitment to ethical business and regulatory compliance in our Sustainability Report

CYBERSECURITY & DATA PROTECTION

ST Engineering understands the need for strong cybersecurity and data protection as digital technology and highly connected economies and businesses bring new vulnerabilities from a proliferation of cyber threats. We adopt a holistic approach in managing cybersecurity and data protection risks. We do this by keeping abreast of the threat landscape and business environment, as well as implementing a multi-layered security framework to ensure that there are relevant preventive, detective, and recovery measures.

Read more about our approach to Cybersecurity and Data Protection in our Sustainability Report

Read our 2022 Sustainability Report

FINANCIAL REPORT

DIRECTORS' STATEMENT

FOR THE YEAR ENDED 31 DECEMBER 2022
(CURRENCY – SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

We are pleased to submit this annual report to the members of the Company together with the audited financial statements of the Group for the financial year ended 31 December 2022 and the statement of financial position of the Company as at 31 December 2022.

In our opinion:

(a) the consolidated financial statements of the Group and the statement of financial position of the Company set out on pages 132 to 268 are drawn up so as to give a true and fair view of the financial position of the Group and of the Company as at 31 December 2022, and financial performance, changes in equity and cash flows of the Group for the year ended on that date in accordance with the provisions of the Singapore Companies Act 1967 and Singapore Financial Reporting Standards (International); and

(b) at the date of this statement, there are reasonable grounds to believe that the Company will be able to pay its debts as and when they fall due.

The Board of Directors has, on the date of this statement, authorised these financial statements for issue.

Directors

The directors of the Company in office at the date of this statement are as follows:

Kwa Chong Seng	(Chairman)
Teo Ming Kian	(Deputy Chairman)
Vincent Chong Sy Feng	
Kevin Kwok Khien	
Lim Ah Doo	
Lim Chin Hu	
Lim Sim Seng	
Ng Bee Bee (May)	
LG Ong Su Kiat Melvyn	
Quek See Tiat	
Song Su-Min	
Tan Peng Yam	
COL Cai Dexian	(Alternate Director to LG Ong Su Kiat Melvyn)

Arrangements to enable directors to acquire shares or debentures

Except for the Singapore Technologies Engineering Performance Share Plan 2010 (PSP2010), the Singapore Technologies Engineering Performance Share Plan 2020 (PSP2020), the Singapore Technologies Engineering Restricted Share Plan 2010 (RSP2010) and the Singapore Technologies Engineering Restricted Share Plan 2020 (RSP2020) (collectively, the ST Engineering Share Plans), neither at the end of nor at any time during the financial year was the Company a party to any arrangement whose objects are, or one of whose object is, to enable the directors of the Company to acquire benefits by means of the acquisition of shares in or debentures of the Company or any other body corporate.

DIRECTORS' STATEMENT

FOR THE YEAR ENDED 31 DECEMBER 2022
(CURRENCY - SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

Directors' interests

Except as disclosed in this statement, no director who held office at the end of the financial year had interests in shares, debentures, warrants, share options or awards of the Company or of related corporations either at the beginning of the financial year or date of appointment if later, or at the end of the financial year.

According to the register kept by the Company for the purposes of Section 164 of the Singapore Companies Act 1967, particulars of interests of Directors who held office at the end of the financial year in shares, debentures, warrants, share options and awards in the Company and its related corporations were as follows:

		Holdings in the name of the director, spouse or infant children	
		1 January 2022 or date of appointment	31 December 2022
The Company			
Ordinary Shares			
Kwa Chong Seng		1,208,500*1	1,261,200*1
Teo Ming Kian		–	6,200
Vincent Chong Sy Feng		2,661,271*1	3,069,256*1
Kevin Kwok Khien		170,000	172,600
Lim Ah Doo		99,900*1	112,300*1
Lim Chin Hu		104,800*1	120,200*1
Lim Sim Seng		76,300*1	89,600*1
Ng Bee Bee (May)		5,000	14,900
Quek See Tiat		91,600	107,800
Song Su-Min		30,100	43,500
Tan Peng Yam		9,011	13,711
Conditional Award of Shares under PSP2010 to be delivered after 2021			
Vincent Chong Sy Feng	(469,385 shares)	0 to 797,954#1	–#2
Conditional Award of Shares under PSP2010 to be delivered after 2022			
Vincent Chong Sy Feng	(545,958 shares)	0 to 928,128#1	0 to 928,128#1
Conditional Award of Shares under PSP2020 to be delivered after 2023			
Vincent Chong Sy Feng	(412,777 shares)	0 to 701,720#1	0 to 701,720#1

DIRECTORS' STATEMENT

FOR THE YEAR ENDED 31 DECEMBER 2022
(CURRENCY - SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

Directors' interests (continued)

	Holdings in the name of the director, spouse or infant children	
	1 January 2022 or date of appointment	**31 December 2022**
The Company		
Conditional Award of Shares under PSP2020 to be delivered after 2024		
Vincent Chong Sy Feng (579,987 shares)	–	0 to 985,977#1
Unvested restricted shares under RSP2010 to be delivered after 2018		
Vincent Chong Sy Feng (180,800 shares)	45,200#3	–
Unvested restricted shares under RSP2010 to be delivered after 2019		
Vincent Chong Sy Feng (219,234 shares)	109,618#3	54,810#3
Unvested restricted shares under RSP2010 to be delivered after 2020		
Vincent Chong Sy Feng (212,708 shares)	159,531#3	106,354#3
Conditional Award of restricted shares under RSP2020 to be delivered after 2021		
Vincent Chong Sy Feng	174,311#4	–
Unvested restricted shares under RSP2020 to be delivered after 2021		
Vincent Chong Sy Feng (174,311 shares)	–	130,734#3
Conditional Award of restricted shares under RSP2020 to be delivered after 2022		
Vincent Chong Sy Feng (218,925 shares)	–	218,925#5

DIRECTORS' STATEMENT

FOR THE YEAR ENDED 31 DECEMBER 2022
(CURRENCY - SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

Directors' interests (continued)

	Holdings in the name of the director, spouse or infant children	
	1 January 2022 or date of appointment	31 December 2022
Related Corporations		
Altrium Private Equity Fund I GP Limited		
Limited Partner Interests in the Altrium PE Fund I F&F L.P. fund for a commitment amount		
Teo Ming Kian	US$300,000	US$300,000
Limited Partner Interests in the Altrium PE Fund II F&F L.P. fund for a commitment amount		
Teo Ming Kian	US$300,000	US$300,000
Astrea IV Pte. Ltd.		
S$242 million Class A-1 4.35% Secured Fixed Rate Bonds		
Teo Ming Kian	S$7,000	S$7,000
US$210 million Class A-2 5.50% Secured Fixed Rate Bonds		
Teo Ming Kian	US$200,000	US$200,000
Astrea V Pte. Ltd.		
Class B 5.75% Secured Fixed Rate Bonds		
Kwa Chong Seng	US$200,000*1	US$200,000*1
S$315 million Class A-1 3.85% Secured Fixed Rate Bonds		
Teo Ming Kian	S$16,000	S$16,000
Astrea VI Pte. Ltd.		
S$382 million Class A-1 3.00% Secured Fixed Rate Bonds		
Kwa Chong Seng	S$25,000*1	S$25,000*1

DIRECTORS' STATEMENT

FOR THE YEAR ENDED 31 DECEMBER 2022
(CURRENCY - SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

Directors' interests (continued)

	Holdings in the name of the director, spouse or infant children	
	1 January 2022 or date of appointment	**31 December 2022**
Related Corporations		
CapitaLand Ascendas REIT Management Limited (formerly known as Ascendas Funds Management (S) Limited)		
Unit holdings in CapitaLand Ascendas REIT (formerly known as Ascendas Real Estate Investment Trust)		
Kevin Kwok Khien	300,000	300,000
Lim Chin Hu	66,755*1	66,755*1
Quek See Tiat	42,000	42,000
Tan Peng Yam	4,000	4,000
CapitaLand Ascott Trust Management Limited (formerly known as Ascott Residence Trust Management Limited)		
Unit holdings in CapitaLand Ascott Reit-BT Stapled Units*, held by CapitaLand Ascott Trust (formerly known as Ascott Residence Trust) *comprises units of CapitaLand Ascott Real Estate Investment Trust (formerly known as Ascott Real Estate Investment Trust) and CapitaLand Ascott Business Trust (formerly known as Ascott Business Trust)		
Quek See Tiat	31,000	31,000
Ascott Residence Trust Perpetual Bond		
Teo Ming Kian	S$250,000	S$250,000
CapitaLand Integrated Commercial Trust Management Limited (formerly known as CapitaLand Mall Trust Management Limited)		
Unit holdings in CapitaLand Integrated Commercial Trust		
Kwa Chong Seng	4,518	28,518
Teo Ming Kian	40,954	40,954
Quek See Tiat	70,050	70,050
Tan Peng Yam	51,917	51,917
CapitaLand Investment Limited		
Ordinary Shares		
Kwa Chong Seng	29,214	49,214
Teo Ming Kian	7,000	7,000
Kevin Kwok Khien	80,000	80,000
Quek See Tiat	13,000	13,000
Tan Peng Yam	10,000	10,000

DIRECTORS' STATEMENT

FOR THE YEAR ENDED 31 DECEMBER 2022
(CURRENCY – SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

Directors' interests (continued)

	Holdings in the name of the director, spouse or infant children	
	1 January 2022 or date of appointment	**31 December 2022**
Related Corporations		
Fullerton Fund Management Company Ltd		
Fullerton SGD Income Fund – Class A		
Lim Chin Hu	S$453,613*1	S$453,613*1
Quek See Tiat	S$2,751,350	S$2,751,350
Mapletree Commercial Trust Management Ltd.		
Unit holdings in Mapletree Commercial Trust		
Lim Chin Hu	35,500*1	135,500*1
Tan Peng Yam	2,000	2,000
Mapletree Industrial Trust Management Ltd.		
Unit holdings in Mapletree Industrial Trust		
Lim Chin Hu	43,921*1	43,921*1
Mapletree Logistics Trust Management Ltd.		
Unit holdings in Mapletree Logistics Trust		
Lim Ah Doo	215,200*1	215,200*1
Lim Chin Hu	98,298*1	98,298*1
Tan Peng Yam	1,000	1,000
Mapletree Logistics Trust 3.725% Perpetual Bond		
Teo Ming Kian	–	S$250,000
Mapletree North Asia Commercial Trust Management Ltd.		
Unit holdings in Mapletree North Asia Commercial Trust		
Kevin Kwok Khien	775,156	–
Lim Chin Hu	–	115,700*1
Mapletree Real Estate Advisors Pte. Ltd.		
Unit holdings in Mapletree Global Student Accommodation Private Trust (MGSA) – Class A units		
Kevin Kwok Khien	2,000	2,000

DIRECTORS' STATEMENT

FOR THE YEAR ENDED 31 DECEMBER 2022
(CURRENCY - SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

Directors' interests (continued)

	Holdings in the name of the director, spouse or infant children	
	1 January 2022 or date of appointment	**31 December 2022**
Related Corporations		
Unit holdings in MGSA – Class B units		
Kevin Kwok Khien	2,000	2,000
Unit holdings in Mapletree US & EU Logistics Private Trust (MUSEL) (US)		
Kevin Kwok Khien	300	300
Unit holdings in MUSEL (EU)		
Kevin Kwok Khien	300	300
Unit holdings in Mapletree US Income Commercial Trust (MUSIC)		
Kevin Kwok Khien	US$414,000	US$414,000
Lim Chin Hu	US$250,000[*1]	US$250,000[*1]
Mapletree Treasury Services Limited		
S$625 million 4.5% Subordinated Perpetual Securities issued in 2017 (previously described as S$625M 4.5% Perpetual Securities issued in 2017)		
Teo Ming Kian	S$500,000	–
S$600 million 3.7% Perpetual Securities under US$5 billion (S$6.8 billion) Euro Medium-Term Note Programme		
Lim Chin Hu	S$250,000[*1]	S$250,000[*1]
Olam International Limited[*2]		
Ordinary Shares		
Kwa Chong Seng	702,670[*1]	–
Teo Ming Kian	10,000	–
Lim Ah Doo	305,600[*1]	–
S$500 million 6% Fixed Rate Notes		
Teo Ming Kian	S$250,000	–

DIRECTORS' STATEMENT

FOR THE YEAR ENDED 31 DECEMBER 2022
(CURRENCY – SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

Directors' interests (continued)

	Holdings in the name of the director, spouse or infant children	
	1 January 2022 or date of appointment	**31 December 2022**
Related Corporations		
Olam Group Limited*3		
Ordinary Shares		
Kwa Chong Seng	–	702,670*1
Teo Ming Kian	–	12,000
Lim Ah Doo	–	423,800*1
Sembcorp Marine Ltd		
Ordinary Shares		
Teo Ming Kian	178,000	178,000
Kevin Kwok Khien	196,440	196,440
Quek See Tiat	75,000	75,000
Tan Peng Yam	110,000	110,000
Singapore Airlines Limited		
Ordinary Shares		
Teo Ming Kian	24,000	24,000
Lim Chin Hu	–	6,000*1
Song Su-Min	20,000	–
S$700 million 3.035% Notes		
Teo Ming Kian	S$250,000	S$250,000
S$3.496 billion Mandatory Convertible Zero-Coupon Bonds		
Teo Ming Kian	S$27,000	–
MCBZ 2021		
Teo Ming Kian	52,000	52,000
Singapore Technologies Telemedia Pte Ltd 4.2%, Perpetual Bond		
Teo Ming Kian	–	S$250,000

DIRECTORS' STATEMENT

FOR THE YEAR ENDED 31 DECEMBER 2022
(CURRENCY - SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

Directors' interests (continued)

	Holdings in the name of the director, spouse or infant children	
	1 January 2022 or date of appointment	**31 December 2022**
Related Corporations		
Singapore Telecommunications Limited		
Ordinary Shares		
Teo Ming Kian	380	380
Kevin Kwok Khien	331,000	131,000
Lim Chin Hu	38,000*1	38,000*1
Quek See Tiat	680	680
Song Su-Min	190	190
Tan Peng Yam	40,380	40,380
StarHub Ltd		
Ordinary Shares		
Quek See Tiat	5,000	5,000
Tan Peng Yam	10,000	10,000
Temasek Financial (IV) Private Limited		
T2023 SGD Temasek Bond S$500 million 2.70% coupon		
Quek See Tiat	S$7,000	S$7,000
Tan Peng Yam	S$14,000	S$14,000
The LifeSciences Innovation Fund Pte. Ltd.		
Preference Shares		
Teo Ming Kian	1,000	1,000
Vertex Master Fund II (GP) Pte. Ltd.		
Limited Partner Interests in VMII Affiliates Fund LP for a commitment amount		
Teo Ming Kian	US$200,000	US$200,000
Vertex Venture Holdings Ltd		
S$250,000 denomination VVH Ltd 7-years 3.3% Bonds		
Teo Ming Kian	S$250,000	S$250,000

DIRECTORS' STATEMENT

FOR THE YEAR ENDED 31 DECEMBER 2022
(CURRENCY - SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

Directors' interests (continued)

*1 Includes interest held in trust by a trustee company / nominee bank on behalf of the director.

*2 Delisted from Singapore Exchange Securities Trading Limited (SGX-ST) Mainboard on 16 March 2022.

*3 Listed on SGX-ST Mainboard on 16 March 2022.

#1 A minimum threshold performance over a 3-year period is required for any performance shares to be released and the actual number of performance shares to be released is capped at 170% of the conditional award.

#2 For this period, Vincent Chong Sy Feng was awarded 211,223 shares upon partial achievement of targets set. The balance of the conditional award covering the period from 2019 to 2021 has thus lapsed.

#3 Balance of unvested restricted shares to be released according to the stipulated vesting periods.

#4 This conditional award is subject to a performance target set over a one-year performance period from 1 January 2021 to 31 December 2021. If the performance target is attained, the restricted shares comprised in this conditional award will be released according to the stipulated vesting periods. The restricted shares will vest annually over four years, subject to the recipient's continued employment with the Group and maintaining a satisfactory performance rating for the financial year preceding each tranche of vesting.

#5 This conditional award is subject to a performance target set over a one-year performance period from 1 January 2022 to 31 December 2022. If the performance target is attained, the restricted shares comprised in this conditional award will be released according to the stipulated vesting periods. The restricted shares will vest annually over four years, subject to the recipient's continued employment with the Group and maintaining a satisfactory performance rating for the financial year preceding each tranche of vesting.

There was no change in any of above-mentioned Directors' interest in the Company between the end of the financial year and 21 January 2023.

Share Plans

The Executive Resource and Compensation Committee (ERCC) is responsible for administering the ST Engineering Share Plans.

The ERCC members are Kwa Chong Seng (Chairman), Lim Sim Seng, Lim Chin Hu and Teo Ming Kian.

As of 31 December 2022, pursuant to the release of awards granted under the ST Engineering Share Plans, no participants have received 5% or more of the total number of shares available under the ST Engineering Share Plans.

In relation to the ST Engineering Share Plans:

- no share awards have been granted to controlling shareholders of the Company or their associates;
- the persons to whom the share awards were granted have no right by virtue of these awards to participate in any share issue of any other company;
- the disclosure requirements in Rule 852(1)(c) of the SGX-ST Listing Manual relating to the grant of options to directors and employees of the parent company and its subsidiaries is not applicable; and
- the disclosure requirements in Rule 852(1)(d) of the SGX-ST Listing Manual relating to the grant of options at a discount is not applicable.

DIRECTORS' STATEMENT

FOR THE YEAR ENDED 31 DECEMBER 2022
(CURRENCY - SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

Share Plans (continued)

Except as otherwise disclosed in this Directors' Statement, there were no share options or share awards granted by the Company to any person to take up unissued shares of the Company.

(a) ***PSP2010 / PSP2020 ("PSP")***

The PSP is established with the objective of motivating Senior Management Executives to strive for sustained long-term growth and performance of the Group. Awards of performance shares are granted conditional on performance targets set based on the corporate objectives of the Group.

Performance share awards are generally granted on an annual basis and are conditional on targets set over a performance period, which is currently prescribed at 3 years.

The performance shares will only be released to the recipient at the end of the applicable performance period. The actual number of performance shares released will depend on the achievement of set targets over the performance period. A minimum threshold performance is required for any performance shares to be released and the actual number of performance shares to be released is capped at 170% of the conditional award.

The performance measures used in performance share grants are Absolute Total Shareholder Return (TSR) taking reference to the Group's Cost of Equity and Earnings Per Share (EPS) Growth against pre-determined EPS Growth targets over the relevant performance period. The release of the shares is additionally conditional upon satisfactory individual performance.

Details of the awards granted under the PSP are as follows:

Participant	Conditional awards granted during the financial year under review	Awards released during the financial year under review*	Aggregate conditional awards granted since commencement to end of financial year under review	Aggregate awards released since commencement to end of financial year under review	Aggregate conditional awards not released as at end of financial year under review
PSP2010					
Director of the Company					
Vincent Chong Sy Feng	–	211,223	0 to 3,227,862	992,410	0 to 928,128
Group Executives (including Vincent Chong Sy Feng)	–	690,408	0 to 29,215,195	9,723,952	0 to 3,522,507

* All PSP2010 awards released to participants during the financial year under review were satisfied by way of the transfer of treasury shares to participants.

DIRECTORS' STATEMENT

FOR THE YEAR ENDED 31 DECEMBER 2022
(CURRENCY - SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

Share Plans (continued)

(a) ***PSP2010 / PSP2020 ("PSP")*** (continued)

Participant	Conditional awards granted during the financial year under review	Awards released during the financial year under review	Aggregate conditional awards granted since commencement to end of financial year under review	Aggregate awards released since commencement to end of financial year under review	Aggregate conditional awards not released as at end of financial year under review
PSP2020					
Director of the Company					
Vincent Chong Sy Feng	0 to 985,977	–	0 to 1,687,697	–	0 to 1,687,697
Group Executives (including Vincent Chong Sy Feng)	0 to 4,191,603	–	0 to 7,259,974	–	0 to 6,795,160

(b) ***RSP2010 / RSP2020 ("RSP")***

The RSP is established with the objective of retaining and motivating managers and above to strive for sustained long-term growth of the Group. The plans also aim to foster a share ownership culture among employees within the Group and to better align employees' incentives with shareholders' interests. The RSP also allows for restricted share awards to be granted to non-executive Directors ("NED Awards") as part of their remuneration in respect of their office as such in lieu of cash. Such awards are meant to align the interests of the Directors with those of shareholders.

Restricted share awards are generally granted on an annual basis. Save for NED Awards, restricted share awards are generally conditional on the Group meeting a target set for a one-year performance period. The performance measure used in such restricted share grants is Return on Capital Employed (ROCE). Under such awards, a minimum threshold performance is required for any shares to be released after the end of the applicable performance period. The shares will vest equally over a four-year period, subject to continued employment with the Group and maintaining a satisfactory performance rating for the financial year preceding each tranche of vesting.

Since 2011, NED Awards consisting of fully paid shares have been granted to non-executive Directors (other than those who hold public sector appointments and who will not be eligible for the shares component of the non-executive Directors' remuneration) with no performance and vesting conditions but with a requirement for the Directors to hold the shares for certain moratorium periods. These shares will form up to 30% of their total Directors' remuneration with the remaining 70% payable in cash.

DIRECTORS' STATEMENT

FOR THE YEAR ENDED 31 DECEMBER 2022
(CURRENCY - SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

Share Plans (continued)

(b) ***RSP2010 / RSP2020 ("RSP")*** (continued)

Details of the awards granted under the RSP are as follows:

Participant	Awards granted during the financial year under review	Awards released during the financial year under review*	Aggregate awards granted since commencement to end of financial year under review	Aggregate awards released since commencement to end of financial year under review	Aggregate awards not released as at end of financial year under review
RSP2010					
Directors of the Company					
Kwa Chong Seng	–	–	284,700	284,700	–
Vincent Chong Sy Feng	–	153,185	0 to 2,237,693	2,003,269	161,164
Lim Ah Doo	–	–	42,400	42,400	–
Lim Chin Hu	–	–	4,400	4,400	–
Lim Sim Seng	–	–	48,400	48,400	–
Quek See Tiat	–	–	57,900	57,900	–
Song Su-Min	–	–	2,000	2,000	–
Non-Executive Directors of the Company and its subsidiaries	–	–	1,304,600	1,304,600	–
Group Executives (including Vincent Chong Sy Feng)	–	3,382,871	0 to 77,606,426	45,048,616	3,301,773

DIRECTORS' STATEMENT

FOR THE YEAR ENDED 31 DECEMBER 2022
(CURRENCY – SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

Share Plans (continued)

(b) ***RSP2010 / RSP2020 ("RSP")*** (continued)

Participant	Awards granted during the financial year under review	Awards released during the financial year under review*	Aggregate awards granted since commencement to end of financial year under review	Aggregate awards released since commencement to end of financial year under review	Aggregate awards not released as at end of financial year under review
RSP2020					
Directors of the Company					
Kwa Chong Seng	52,700	52,700	176,500	176,500	–
Vincent Chong Sy Feng	218,925	43,577	393,236	43,577	349,659
Kevin Kwok Khien	2,600	2,600	2,600	2,600	–
Lim Ah Doo	12,400	12,400	39,900	39,900	–
Lim Chin Hu	15,400	15,400	45,800	45,800	–
Lim Sim Seng	13,300	13,300	41,200	41,200	–
Ng Bee Bee (May)	9,900	9,900	14,900	14,900	–
Quek See Tiat	16,200	16,200	49,900	49,900	–
Song Su-Min	13,400	13,400	41,500	41,500	–
Tan Peng Yam	4,700	4,700	4,700	4,700	–
Teo Ming Kian	6,200	6,200	6,200	6,200	–
Group Executives (including Vincent Chong Sy Feng)	7,062,987	1,993,769	13,981,350	2,136,549	10,909,155

* All RSP2010 and RSP2020 awards released to participants during the financial year under review were satisfied by way of the transfer of treasury shares to participants.

DIRECTORS' STATEMENT

FOR THE YEAR ENDED 31 DECEMBER 2022
(CURRENCY - SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

Audit Committee

The Audit Committee comprises three independent Directors, one of whom is also the Chairman of the Committee. The members of the Audit Committee at the date of this report are as follows:

Kevin Kwok Khien (Chairman)
Lim Ah Doo
Song Su-Min

The Audit Committee carried out its functions in accordance with Section 201B(5) of the Singapore Companies Act 1967, the SGX-ST Listing Manual and the Code of Corporate Governance.

The Audit Committee met during the year to review the scope of the internal audit function and the scope of work of the external auditors, and the results arising therefrom, including their evaluation of the system of internal controls. The Audit Committee also reviewed the assistance given by the Company's officers to the auditors. The consolidated financial statements of the Group and the financial statements of the Company were reviewed by the Audit Committee prior to their submission to the Directors of the Company for adoption.

In addition, the Audit Committee has reviewed the requirements for approval and disclosure of interested person transactions, reviewed the procedures set up by the Group and the Company to identify, report and where necessary, seek approval for interested person transactions and, with the assistance of the internal auditors, reviewed interested person transactions.

The Audit Committee has full access to management and is given the resources required for it to discharge its functions. It has full authority and the discretion to invite any director or executive officer to attend its meetings. The Audit Committee also recommends the appointment of the external auditors and reviews the level of audit and non-audit fees.

The Audit Committee has recommended to the Board of Directors that PricewaterhouseCoopers LLP, be nominated for re-appointment as the external auditors at the forthcoming Annual General Meeting of the Company.

The Company has complied with Rules 712 and 715 of the SGX-ST Listing Manual in relation to the engagement of its external auditors.

Auditors

The independent auditor, PricewaterhouseCoopers LLP, have expressed its willingness to accept re-appointment.

On behalf of the Board of Directors

Kwa Chong Seng
Director

Vincent Chong Sy Feng
Director

Singapore
23 February 2023

INDEPENDENT AUDITOR'S REPORT

TO THE MEMBERS OF
SINGAPORE TECHNOLOGIES ENGINEERING LTD

Report On The Audit Of The Financial Statements

Our Opinion

In our opinion, the accompanying consolidated financial statements of Singapore Technologies Engineering Ltd ("the Company") and its subsidiaries ("the Group") and the statement of financial position of the Company are properly drawn up in accordance with the provisions of the Companies Act 1967 ("the Act") and Singapore Financial Reporting Standards (International) ("SFRS(I)s") so as to give a true and fair view of the consolidated financial position of the Group and the financial position of the Company as at 31 December 2022 and of the consolidated financial performance, consolidated changes in equity and consolidated cash flows of the Group for the year ended on that date.

What we have audited

The financial statements of the Group and the Company comprise:

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

Basis for Opinion

We conducted our audit in accordance with Singapore Standards on Auditing ("SSAs"). 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 believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Independence

We are independent of the Group in accordance with the Accounting and Corporate Regulatory Authority Code of Professional Conduct and Ethics for Public Accountants and Accounting Entities ("ACRA Code") together with the ethical requirements that are relevant to our audit of the financial statements in Singapore, and we have fulfilled our other ethical responsibilities in accordance with these requirements and the ACRA Code.

INDEPENDENT AUDITOR'S REPORT

TO THE MEMBERS OF
SINGAPORE TECHNOLOGIES ENGINEERING LTD

Our Audit Approach

As part of designing our audit, we determined materiality and assessed the risks of material misstatement in the accompanying financial statements. In particular, we considered where management made subjective judgements; for example, in respect of significant accounting estimates that involved making assumptions and considering future events that are inherently uncertain. As in all of our audits, we also addressed the risk of management override of internal controls, including among other matters consideration of whether there was evidence of bias that represented a risk of material misstatement due to fraud.

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 for the year ended 31 December 2022. 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.

<table>
<tr><th>Key Audit Matter</th><th>How our audit addressed the Key Audit Matter</th></tr>
<tr><td colspan="2">Impairment assessment of non-financial assets – goodwill</td></tr>
<tr><td>
Refer to Note C3 to the financial statements.
As at 31 December 2022, the carrying value of the Group's goodwill amounted to $3,091,354,000.
Goodwill is allocated to the Group's cash generating units ("CGU") - Aerostructure & Systems, Aerospace MRO, Smart Utilities & Infrastructure, Mobility (Rail & Road), Satcom, Specialty Vehicles, Robotics & Autonomous Systems, Mission Software & Services, Training & Simulation Systems, Advanced Networks & Sensors and Defence Aerospace. There is a risk of impairment of certain CGUs in the United States which are operating in a challenging business environment.
In accordance with SFRS(I) 1-36, management is required to perform an impairment assessment of goodwill annually by comparing the recoverable amount of the CGU with its carrying amount to determine whether there is any impairment loss.
For the purpose of impairment testing, the recoverable amount of the CGU is determined based on the value-in-use calculations, using cash flow projections.
In the current year, impairment charge of $5,000,000 was recorded to reduce the carrying amount of the CGU in the United States which is operating in a challenging business environment to the estimated recoverable amount.
We focused on this area because of the uncertainty arising from the ongoing and evolving COVID-19 pandemic and significant judgements required in estimating the revenue growth rate, gross profit margins, discount rate and terminal growth rate applied in computing the recoverable amount of the CGU.
</td><td>
We have assessed the appropriateness of management's identification of CGU and critically assessed the key assumptions used in the goodwill impairment assessment.
Our audit procedures included the following:

evaluated management's key assumptions relating to revenue growth rates, gross profit margins, discount rates and terminal growth rates and understood how management has considered the impact of the COVID-19 pandemic and market uncertainty in their estimates.
reviewed the basis and methodology used to derive the recoverable amount of the CGU.
assessed the appropriateness of management assumptions by comparing to past historical performance and considering the current developments arising from the COVID-19 pandemic.
performed sensitivity analysis on management's assumptions relating to revenue growth rates, gross profit margins, discount rates and terminal growth rates.
involved our valuation experts to evaluate the appropriateness of management's assumptions, relating to terminal growth rates and discount rates, by developing an independent expectation using economic and industry forecasts and rates of comparable companies with consideration for specific jurisdiction factors.
considered the adequacy of the disclosures in the financial statements.

Based on the audit procedures performed above, we found management's judgement and assumptions in relation to the determination of the recoverable amount to be appropriate, and the disclosure in this respect to be adequate.
</td></tr>
</table>

INDEPENDENT AUDITOR'S REPORT

TO THE MEMBERS OF
SINGAPORE TECHNOLOGIES ENGINEERING LTD

Our Audit Approach (continued)

Key Audit Matter	How our audit addressed the Key Audit Matter
Revenue recognition based on stage of completion	
Refer to Note B2 to the financial statements. During the year ended 31 December 2022, the Group recognised revenue of $9,035,103,000 relating to sale of goods, rendering of services and contract revenue. Some of these revenue are recognised based on the stage of completion of performance obligations of each individual contract, which are measured by reference to either assessment or surveys of work performed (output method) or the cost incurred relative to total estimated costs (input method). We focused on this area because of the significant management judgement required in: • determining each performance obligation within a contract; • forecasting the costs to be incurred; • forecasting the overall margins of these performance obligations; and • assessing the stage of completion of each performance obligation.	Our audit procedures included the following: • understood the end-to-end processes and validated key controls relating to revenue and receivables cycle. • assessed the relevant internal control relating to customer contract acceptance and terms, change orders, monitoring of project development, cost incurred and estimating cost to complete. • assessed the terms of the customer contracts and the appropriateness of the customer recognition policies. • assessed the contractual terms and evaluated the work status of the customer contracts and to ascertain the appropriateness of revenue recognised based on the stage of completion of each performance obligation. • selected sample of contracts and assessed management's assumptions for determining stage of completion including estimated profit and cost to complete through interviews with management and verification to the supporting documents. • performed analysis and retrospective reviews of completed contracts to assess the appropriateness of management's assumptions applied. Based on the audit procedures performed above, we found the basis of the identification of performance obligations and the revenue recognised based on the stage of completion of each performance obligation to be appropriate.

INDEPENDENT AUDITOR'S REPORT

TO THE MEMBERS OF
SINGAPORE TECHNOLOGIES ENGINEERING LTD

Our Audit Approach (continued)

Key Audit Matter	How our audit addressed the Key Audit Matter
Purchase price allocation ("PPA") relating to acquisition of TransCore	
During the year, the Group completed its business acquisition of TransCore Partners, LLC and TLP Holdings, LLC (collectively "TransCore") in the United States, requiring the purchase price to be allocated to the fair value of the identifiable assets (including intangible assets) acquired and liabilities assumed. Management had engaged an external professional firm to perform a purchase price allocation exercise. The total identifiable intangible assets acquired included customer relationships and commercial and intellectual property rights of $886,281,000 and $144,781,000 respectively. Goodwill recognised on acquisition amounted to $2,321,424,000. Significant judgement is applied in assessing the fair values of assets and liabilities acquired, as this directly impacts the amount of goodwill recognised on acquisition.	Our audit procedures included the following: • evaluated the independence, competency and objectivity of the external professional valuer engaged by management. • held discussions with management and the external professional firm to understand the purchase price allocation exercise. • reviewed the PPA exercise performed by management and assessed the appropriateness of the valuation methodology and key assumptions used to determine the fair valuation of the identifiable assets and liabilities assumed on acquisition date. • with the assistance of our internal valuation specialists, assessed the appropriateness of the valuation methodology and key assumptions used to determine the fair valuation of the identifiable assets and liabilities assumed on acquisition date. Based on the audit procedures performed above, we found estimates used in management's assessment of the fair value of the assets and liabilities acquired and the resultant goodwill recognised from the acquisition to be reasonable.

Other Information

Management is responsible for the other information. The other information comprises the Corporate Overview, Performance Review, Sustainability, Corporate Governance, Directors' Statement, SGX Listing Rules Requirement and Corporate Information (but does not include the financial statements and our auditor's report thereon), which we obtained prior to the date of this auditor's report, and the other sections of the annual report ("the Other Sections"), which are expected to be made available to us after that date.

Our opinion on the financial statements does not cover the other information and we do not and will not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information identified above and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated.

If, based on the work we have performed on the other information that we obtained prior to the date of this auditor's report, 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.

When we read the Other Sections, if we conclude that there is a material misstatement therein, we are required to communicate the matter to those charged with governance and take appropriate actions in accordance with SSAs.

INDEPENDENT AUDITOR'S REPORT

TO THE MEMBERS OF
SINGAPORE TECHNOLOGIES ENGINEERING LTD

Responsibilities Of Management And Directors For The Financial Statements

Management is responsible for the preparation of financial statements that give a true and fair view in accordance with the provisions of the Act and SFRS(I)s, and for devising and maintaining a system of internal accounting controls sufficient to provide a reasonable assurance that assets are safeguarded against loss from unauthorised use or disposition; and transactions are properly authorised and that they are recorded as necessary to permit the preparation of true and fair financial statements and to maintain accountability of assets.

In preparing the financial statements, management is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

The directors' responsibilities include overseeing the Group's financial reporting process.

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 SSAs 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.

As part of an audit in accordance with SSAs, we exercise professional judgement and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.

- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.

- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.

- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

INDEPENDENT AUDITOR'S REPORT

TO THE MEMBERS OF
SINGAPORE TECHNOLOGIES ENGINEERING LTD

Auditor's Responsibilities For The Audit Of The Financial Statements (continued)

We communicate with the directors regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide the directors with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with the directors, we determine those matters that were of most significance in the audit of the financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

Report On Other Legal And Regulatory Requirements

In our opinion, the accounting and other records required by the Act to be kept by the Company and by those subsidiary corporations incorporated in Singapore of which we are the auditors have been properly kept in accordance with the provisions of the Act.

The engagement partner on the audit resulting in this independent auditor's report is Lam Hock Choon.

PricewaterhouseCoopers LLP

PricewaterhouseCoopers LLP
Public Accountants and Chartered Accountants

Singapore
23 February 2023

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NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

CONSOLIDATED INCOME STATEMENT

FOR THE YEAR ENDED 31 DECEMBER 2022
(CURRENCY - SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

Group	Note	2022 $'000	2021 $'000
Revenue	B2	**9,035,103**	7,692,865
Cost of sales		**(7,336,446)**	(6,157,797)
Gross profit		**1,698,657**	1,535,068
Distribution and selling expenses		**(194,775)**	(182,760)
Administrative expenses		**(727,382)**	(607,974)
Other operating expenses		**(168,636)**	(133,841)
Other income, net		**56,670**	35,420
Profit from operations	B3	**664,534**	645,913
Non-operating income, net	B4	**37,288**	11,742
Share of results of associates and joint ventures, net of tax		**33,270**	15,991
Earnings before interest and tax		**735,092**	673,646
Finance income		**11,203**	11,686
Finance costs		**(148,829)**	(47,725)
Finance costs, net	E2	**(137,626)**	(36,039)
Profit before taxation		**597,466**	637,607
Taxation	B6	**(54,131)**	(70,636)
Profit after taxation		**543,335**	566,971
Attributable to:			
Shareholders of the Company		**535,012**	570,540
Non-controlling interests	F3	**8,323**	(3,569)
		543,335	566,971
Earnings per share (cents)	B5		
Basic		**17.18**	18.30
Diluted		**17.06**	18.20

The accompanying notes are an integral part of the financial statements.

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

FOR THE YEAR ENDED 31 DECEMBER 2022
(CURRENCY - SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

Group	Note	2022 $'000	2021 $'000
Profit after taxation		**543,335**	566,971
Other comprehensive income			
Items that will not be reclassified subsequently to profit or loss:			
Defined benefit plan remeasurements		**94,222**	49,887
Net fair value changes on equity investment at FVOCI		**(2,957)**	–
		91,265	49,887
Items that are or may be reclassified subsequently to profit or loss:			
Net fair value changes of cash flow hedges reclassified to income statement		**27,468**	(2,415)
Effective portion of changes in fair value of cash flow hedges		**94,161**	(25,358)
Share of net fair value changes on cash flow hedges of joint ventures		**2,321**	2,145
Foreign currency translation differences		**(74,620)**	6,507
Share of foreign currency translation differences of associates and joint ventures		**(15,438)**	9,123
Reserves released on disposal of subsidiaries		**8,149**	(5,643)
		42,041	(15,641)
Other comprehensive income for the year, net of tax		**133,306**	34,246
Total comprehensive income for the year, net of tax		**676,641**	601,217
Total comprehensive income attributable to:			
Shareholders of the Company		**666,695**	615,183
Non-controlling interests	F3	**9,946**	(13,966)
		676,641	601,217

The accompanying notes are an integral part of the financial statements.

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

AS AT 31 DECEMBER 2022
(CURRENCY - SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

Group	Note	2022 $'000	2021 $'000
ASSETS			
Non-current assets			
Property, plant and equipment	C1	2,076,348	1,793,811
Right-of-use assets	C2	581,792	558,559
Associates and joint ventures	F4	468,175	482,897
Investments	E3	76,704	36,129
Intangible assets	C3	5,291,345	1,992,738
Long-term trade receivables		11,163	1,534
Deferred tax assets	B6	198,237	207,548
Amounts due from related parties	C4	35,000	11,609
Advances and other receivables	C7	81,045	69,863
Derivative financial instruments	C16	17,064	4,217
Post-employment benefits	D3	–	257
		8,836,873	5,159,162
Current assets			
Inventories	C5	1,684,231	1,261,156
Contract assets	C13	2,099,676	1,726,505
Trade receivables	C6	1,152,328	1,066,756
Amounts due from related parties	C4	135,089	113,843
Advances and other receivables	C7	420,722	345,141
Derivative financial instruments	C16	33,295	27,172
Bank balances and other liquid funds	C8	601,771	815,924
		6,127,112	5,356,497
Total assets		14,963,985	10,515,659
EQUITY AND LIABILITIES			
Current liabilities			
Contract liabilities	C13	939,990	919,524
Deposits from customers		34,886	17,078
Trade payables and accruals	C9	2,826,498	2,612,515
Amounts due to related parties	C10	41,887	27,781
Provisions	C11	298,624	331,837
Provision for taxation		174,748	161,208
Borrowings	E4	3,627,969	559,886
Deferred income	C12	13,589	7,665
Post-employment benefits	D3	8,413	7,640
Derivative financial instruments	C16	38,606	34,508
		8,005,210	4,679,642
Net current (liabilities) / assets		(1,878,098)	676,855

The accompanying notes are an integral part of the financial statements.

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

AS AT 31 DECEMBER 2022
(CURRENCY - SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

Group	Note	2022 $'000	2021 $'000
Non-current liabilities			
Contract liabilities	C13	**877,937**	832,754
Trade payables and accruals	C9	**72,712**	63,482
Provisions	C11	**38,522**	39,596
Deferred tax liabilities	B6	**167,481**	174,661
Borrowings	E4	**2,906,568**	1,555,334
Deferred income	C12	**17,588**	73,882
Post-employment benefits	D3	**206,296**	409,473
Derivative financial instruments	C16	**18,817**	18,620
		4,305,921	3,167,802
Total liabilities		**12,311,131**	7,847,444
Net assets		**2,652,854**	2,668,215
Share capital and reserves			
Share capital	E6	**895,926**	895,926
Treasury shares	E7	**(36,377)**	(33,475)
Capital reserves	E8	**100,068**	103,940
Other reserves	E9	**(34,437)**	(101,937)
Retained earnings		**1,472,816**	1,548,308
Equity attributable to owners of the Company		**2,397,996**	2,412,762
Non-controlling interests	F3	**254,858**	255,453
		2,652,854	2,668,215
Total equity and liabilities		**14,963,985**	10,515,659

The accompanying notes are an integral part of the financial statements.

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

FOR THE YEAR ENDED 31 DECEMBER 2022
(CURRENCY - SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

Group	Note	Share capital $'000	Treasury shares $'000
At 1 January 2022		895,926	(33,475)
Total comprehensive income for the year			
Profit after taxation		–	–
Other comprehensive income			
Defined benefit plan remeasurements		–	–
Net fair value changes on equity investment at FVOCI		–	–
Net fair value changes of cash flow hedges reclassified to income statement		–	–
Effective portion of changes in fair value of cash flow hedges		–	–
Share of net fair value changes on cash flow hedges of joint ventures		–	–
Foreign currency translation differences		–	–
Share of foreign currency translation differences of associates and joint ventures		–	–
Reserves released on disposal of subsidiaries		–	–
Other comprehensive income for the year, net of tax		–	–
Total comprehensive income for the year, net of tax		–	–
Hedging gains and losses and cost of hedging transferred to the cost of inventory		–	–
Transactions with owners of the Company, recognised directly in equity			
Contributions by and distributions to owners of the Company			
Capital contribution by non-controlling interests		–	–
Cost of share-based payment		–	–
Purchase of treasury shares		–	(26,430)
Treasury shares reissued pursuant to share plans		–	23,528
Dividends paid		–	–
Dividends paid to non-controlling interests		–	–
Total contributions by and distributions to owners of the Company		–	(2,902)
Changes in ownership interests in subsidiaries			
Disposal of subsidiaries		–	–
Total transactions with owners of the Company		–	(2,902)
Transfer from retained earnings to statutory reserve		–	–
Balance at 31 December 2022		895,926	(36,377)

The accompanying notes are an integral part of the financial statements.

Capital reserves $'000	Other reserves $'000	Retained earnings $'000	Total $'000	Non-controlling interests $'000	Total equity $'000
103,940	(101,937)	1,548,308	2,412,762	255,453	2,668,215
–	–	535,012	535,012	8,323	543,335
–	–	75,096	75,096	19,126	94,222
–	(2,957)	–	(2,957)	–	(2,957)
–	12,008	–	12,008	15,460	27,468
–	110,463	–	110,463	(16,302)	94,161
–	2,321	–	2,321	–	2,321
–	(57,959)	–	(57,959)	(16,661)	(74,620)
–	(15,438)	–	(15,438)	–	(15,438)
–	8,149	–	8,149	–	8,149
–	56,587	75,096	131,683	1,623	133,306
–	56,587	610,108	666,695	9,946	676,641
–	3,983	–	3,983	(30)	3,953
–	–	–	–	50	50
–	24,809	–	24,809	84	24,893
–	–	–	(26,430)	–	(26,430)
(3,872)	(19,546)	–	110	(110)	–
–	–	(685,625)	(685,625)	–	(685,625)
–	–	–	–	(9,225)	(9,225)
(3,872)	5,263	(685,625)	(687,136)	(9,201)	(696,337)
–	1,692	–	1,692	(1,310)	382
(3,872)	6,955	(685,625)	(685,444)	(10,511)	(695,955)
–	(25)	25	–	–	–
100,068	(34,437)	1,472,816	2,397,996	254,858	2,652,854

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

FOR THE YEAR ENDED 31 DECEMBER 2022
(CURRENCY - SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

Group	Note	Share capital $'000	Treasury shares $'000
At 1 January 2021		895,926	(23,743)
Total comprehensive income for the year			
Profit after taxation		–	–
Other comprehensive income			
Defined benefit plan remeasurements		–	–
Net fair value changes of cash flow hedges reclassified to income statement		–	–
Effective portion of changes in fair value of cash flow hedges		–	–
Share of net fair value changes on cash flow hedges of joint ventures		–	–
Foreign currency translation differences		–	–
Share of foreign currency translation differences of associates and joint ventures		–	–
Reserves released on disposal of a subsidiary		–	–
Other comprehensive income for the year, net of tax		–	–
Total comprehensive income for the year, net of tax		–	–
Hedging gains and losses and cost of hedging transferred to the cost of inventory		–	–
Transactions with owners of the Company, recognised directly in equity			
Contributions by and distributions to owners of the Company			
Cost of share-based payment		–	–
Purchase of treasury shares	E7	–	(32,894)
Treasury shares reissued pursuant to share plans		–	23,162
Dividends paid	E10	–	–
Dividends paid to non-controlling interests		–	–
Total contributions by and distributions to owners of the Company		–	(9,732)
Changes in ownership interests in subsidiaries			
Acquisition of non-controlling interests in a subsidiary without a change in control		–	–
Acquisition of subsidiaries with non-controlling interests		–	–
Total transactions with owners of the Company		–	(9,732)
Transfer from retained earnings to statutory reserve		–	–
Balance at 31 December 2021		895,926	(33,475)

The accompanying notes are an integral part of the financial statements.

Capital reserves $'000	Other reserves $'000	Retained earnings $'000	Total $'000	Non-controlling interests $'000	Total equity $'000
107,034	(89,017)	1,402,414	2,292,614	282,175	2,574,789
–	–	570,540	570,540	(3,569)	566,971
–	–	43,369	43,369	6,518	49,887
–	(1,579)	–	(1,579)	(836)	(2,415)
–	(12,848)	–	(12,848)	(12,510)	(25,358)
–	2,145	–	2,145	–	2,145
–	10,076	–	10,076	(3,569)	6,507
–	9,123	–	9,123	–	9,123
–	(5,643)	–	(5,643)	–	(5,643)
–	1,274	43,369	44,643	(10,397)	34,246
–	1,274	613,909	615,183	(13,966)	601,217
–	(2,389)	–	(2,389)	20	(2,369)
–	21,600	–	21,600	120	21,720
–	–	–	(32,894)	–	(32,894)
(3,094)	(19,978)	–	90	(90)	–
–	–	(467,891)	(467,891)	–	(467,891)
–	–	–	–	(16,554)	(16,554)
(3,094)	1,622	(467,891)	(479,095)	(16,524)	(495,619)
–	(13,551)	–	(13,551)	(1,934)	(15,485)
–	–	–	–	5,682	5,682
(3,094)	(11,929)	(467,891)	(492,646)	(12,776)	(505,422)
–	124	(124)	–	–	–
103,940	(101,937)	1,548,308	2,412,762	255,453	2,668,215

CONSOLIDATED STATEMENT OF CASH FLOWS

FOR THE YEAR ENDED 31 DECEMBER 2022
(CURRENCY - SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

Cash and cash equivalents comprise cash balances and fixed deposits. Cash equivalents are short-term and highly liquid investments that are readily convertible to known amounts of cash and that are subject to insignificant risk of changes in value.

Group	2022 $'000	2021 $'000
Cash flows from operating activities		
Profit before taxation	**597,466**	637,607
Adjustments:		
Share of results of associates and joint ventures, net of tax	**(33,270)**	(15,991)
Share-based payment expense	**24,893**	21,720
Depreciation charge	**337,602**	314,197
Property, plant and equipment written off	**3,844**	2,249
Amortisation of other intangible assets	**179,270**	83,893
Amortisation of deferred income	**(6)**	–
Impairment of property, plant and equipment	**42,378**	19,490
Impairment of goodwill and other intangible assets	**5,000**	6,769
Gain on disposal of property, plant and equipment	**(10,911)**	(2,527)
Gain on disposal of subsidiaries	**(37,288)**	(11,742)
Loss on disposal of rights-of-use assets	**–**	275
Gain on disposal of associate	**(3,668)**	–
Changes in fair value of associates	**(1,471)**	(11,154)
Changes in fair value of investments	**(13,868)**	–
Changes in fair value of financial instruments and hedged items	**(1,932)**	(685)
Interest expense	**137,309**	45,048
Interest income	**(9,271)**	(3,936)
Unrealised currency translation gains	**(330)**	(1,217)
Operating profit before working capital changes	**1,215,747**	1,083,996
Changes in:		
Inventories	**(354,852)**	9,455
Contract assets	**(249,371)**	(162,986)
Trade receivables	**(58,447)**	(13,511)
Amounts due from related parties	**25,671**	(22,212)
Advances and other receivables	**(97,895)**	(32,556)
Contract liabilities	**139,808**	(38,594)
Deposits from customers	**17,754**	5,434
Trade payables	**198,293**	221,215
Amounts due to related parties	**1,900**	(7,640)
Other payables, accruals and provisions	**(67,872)**	220,247
Deferred income	**3,438**	(40,183)
Cash generated from operations	**774,174**	1,222,665
Interest received	**6,942**	4,048
Income tax paid	**(108,021)**	(112,441)
Net cash from operating activities	**673,095**	1,114,272

The accompanying notes are an integral part of the financial statements.

CONSOLIDATED STATEMENT OF CASH FLOWS

FOR THE YEAR ENDED 31 DECEMBER 2022
(CURRENCY - SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

Group	Note	2022 $'000	2021 $'000
Cash flows from investing activities			
Proceeds from disposal of property, plant and equipment		**20,308**	16,266
Proceeds from disposal of associate and joint venture		**8,832**	361
Proceeds from disposal of investments		**–**	1,836
Purchase of property, plant and equipment		**(762,927)**	(312,039)
Purchase of investments		**(16,124)**	(14,322)
Additions to other intangible assets		**(203,204)**	(116,735)
Dividends from associates and joint ventures		**40,475**	24,348
Investments in associates and joint ventures		**(25,051)**	(9,884)
Return of capital by joint venture		**–**	3,752
Repayment of loans by associate		**196**	–
Loan to associates and joint ventures		**(58,298)**	(44,577)
Acquisition of controlling interests in subsidiaries, net of cash acquired		**(3,630,087)**	7,333
Disposal of subsidiaries, net of cash disposed		**54,392**	30,010
Net cash used in investing activities		**(4,571,488)**	(413,651)
Cash flows from financing activities			
Proceeds from bank loans		**1,098,690**	132,027
Proceeds from medium term note issuance		**1,385,000**	–
Proceeds from issuance of commercial papers		**4,206,138**	756,896
Proceeds from other loans		**–**	10,933
Proceeds from settlement of derivatives		**124,425**	–
Proceeds from finance lease receivables		**233**	882
Repayment of bank loans		**(386,204)**	(35,103)
Repayment of commercial papers		**(1,852,969)**	(810,960)
Repayment of other loans		**–**	(30,933)
Repayment of lease liabilities		**(83,894)**	(73,456)
Purchase of treasury shares		**(26,430)**	(32,894)
Capital contribution from non-controlling interests of a subsidiary		**50**	–
Acquisition of non-controlling interests in a subsidiary		**–**	(15,485)
Dividends paid to shareholders of the Company		**(685,625)**	(467,891)
Dividends paid to non-controlling interests		**(9,225)**	(16,554)
Interest paid		**(72,382)**	(33,644)
Deposits (pledged) / discharged		**(22)**	1,145
Net cash from / (used in) financing activities		**3,697,785**	(615,037)
Net change in cash and cash equivalents		**(200,608)**	85,584
Cash and cash equivalents at beginning of the year		**815,924**	729,479
Effect of exchange rate changes on balances held in foreign currency		**(13,567)**	861
Cash and cash equivalents at end of the year	C8	**601,749**	815,924

The accompanying notes are an integral part of the financial statements.

NOTES TO THE FINANCIAL STATEMENTS

31 DECEMBER 2022
(CURRENCY - SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

A. ABOUT THIS REPORT

General

The Company is a public limited company domiciled and incorporated in Singapore. The address of the Company's registered office and principal place of business is 1 Ang Mo Kio Electronics Park Road #07-01 ST Engineering Hub, Singapore 567710.

The principal activity of the Company is that of an investment holding company.

The Company's immediate and ultimate holding company is Temasek Holdings (Private) Limited, a company incorporated in Singapore.

The consolidated financial statements of Singapore Technologies Engineering Ltd and its subsidiaries (collectively referred to as the Group) as at 31 December 2022 and for the year then ended were authorised and approved by the Board of Directors for issuance on 23 February 2023.

Basis of preparation

The financial statements are prepared in accordance with Singapore Financial Reporting Standards (International) (SFRS(I)).

The financial statements have been prepared on the historical cost convention, except as otherwise described in the accounting policies below.

Accounting policies, estimates and critical accounting judgements applied to the preparation of the financial statements are disclosed together with the related accounting balance or financial statement matters discussed.

Information is only being included in the financial report to the extent it has been considered material and relevant to the understanding of the financial statements. A disclosure is considered material and relevant if:

- dollar amount is significant in value
- dollar amount is significant by nature
- financial results cannot be understood without specific disclosure
- critical to allow user to understand significant changes in group businesses

The financial statements are presented in Singapore dollars (SGD) which is the Company's functional currency. All values are rounded to the nearest thousand ($'000) unless otherwise indicated.

Significant accounting policies

The accounting policies have been applied consistently by the Group entities to all periods presented in these financial statements unless otherwise indicated.

Foreign currency

The major functional currencies of the Group entities are the Singapore dollar (SGD), the United States dollar (USD) and the Euro (EUR).

Transactions, assets and liabilities denominated in foreign currencies are translated into SGD at reporting date using the following applicable exchange rates:

Foreign currency amount	Applicable exchange rate
Transactions	Date of transaction
Monetary assets and liabilities	Reporting date
Non-monetary assets and liabilities carried at fair value	Date fair value is determined
Non-monetary assets and liabilities carried at cost	Date of transaction

Foreign exchange gains and losses resulting from translation of monetary assets and liabilities are recognised in the income statement, except for qualifying cash flow hedges, which are recognised in other comprehensive income (OCI).

On consolidation, the assets, liabilities, income and expenses of foreign operations are translated into SGD using the following applicable exchange rates:

Foreign currency amount	Applicable exchange rate
Income and expenses	Average exchange rate
Assets and liabilities	Reporting date
Equity	Historical date

Foreign exchange differences resulting from translation of foreign operations are initially recognised in the foreign currency translation reserve and subsequently transferred to profit or loss on disposal of the foreign operation.

NOTES TO THE FINANCIAL STATEMENTS

31 DECEMBER 2022
(CURRENCY - SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

B. BUSINESS PERFORMANCE

The highlights of the Group's financial performance during the financial year are:

- Revenue of $9.0 billion, up 17%
- Earnings before interest and tax of $735.1 million, up 9%
- Profit before taxation of $597.5 million, lower by 6%
- Profit attributable to shareholders of $535.0 million, lower by 6%
- Earnings per share of 17.18 cents per share, lower by 6%

B1 Segment information

The Commercial cluster drives the Group's international growth through areas in Commercial Aerospace, and Urban Solutions & Satcom domains, to be known as Global Business Areas (or GBAs), which are also reportable business segments.

The Defence & Public Security cluster integrates capabilities organised as a single cluster which is a reportable business segment, comprising Defence Business Areas (or DBAs), namely Digital Systems and Cyber, Land Systems, Marine and Defence Aerospace.

Management reviews the segments' operating results regularly in order to allocate resources to the segments and to assess the segments' performance.

The principal activities of the operating segments are outlined below:

Segments	Principal activities
Commercial Aerospace	Airframe, engines and components maintenance, repair and overhaul, original equipment manufacturer for nacelles, composite floorboard and passenger-to-freighter conversions and aviation asset management.
Urban Solutions & Satcom	Smart mobility, smart utilities & infrastructure, urban environment solutions and satcom.
Defence & Public Security	Defence, public safety and security, critical information infrastructure solutions and others, including Group HQ functions.

Segment performance is evaluated based on operating profit or loss which in certain respects, as explained in the table below, is measured differently from operating profit or loss in the consolidated financial statements.

NOTES TO THE FINANCIAL STATEMENTS

31 DECEMBER 2022
(CURRENCY – SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

B1 Segment information (continued)

Inter-segment pricing is based on terms negotiated between the parties which are intended to reflect competitive terms.

2022	Commercial Aerospace $'000	Urban Solutions & Satcom $'000	Defence & Public Security $'000	Elimination $'000	Group $'000
Revenue					
External sales	2,991,209	1,772,238	4,271,656	–	9,035,103
Inter-segment sales	61,550	48,566	47,889	(158,005)	–
	3,052,759	1,820,804	4,319,545	(158,005)	9,035,103
Reportable segment profit from operations	271,690	27,941	364,903	–	664,534
Non-operating income, net	327	5,117	31,844	–	37,288
Share of results of associates and joint ventures, net of tax	28,869	(3,847)	8,248	–	33,270
Earnings before interest and tax	300,886	29,211	404,995	–	735,092
Finance income					11,203
Finance costs					(148,829)
Profit before taxation					597,466
Taxation					(54,131)
Non-controlling interests					(8,323)
Profit attributable to shareholders					535,012
Other assets	4,870,823	6,173,792	4,539,902	(1,888,715)	13,695,802
Associates and joint ventures	318,469	46,919	102,787	–	468,175
Segment assets	5,189,292	6,220,711	4,642,689	(1,888,715)	14,163,977
Deferred tax assets					198,237
Bank balances and other liquid funds					601,771
Total Assets					14,963,985
Segment liabilities	1,842,187	1,029,410	4,205,294	(1,642,526)	5,434,365
Provision for taxation					174,748
Deferred tax liabilities					167,481
Borrowings					6,534,537
Total Liabilities					12,311,131
Capital expenditure	831,607	98,056	163,358	(36,929)	1,056,092
Depreciation and amortisation	195,698	179,298	140,997	879	516,872
Impairment losses	4,513	–	42,865	–	47,378

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B1 Segment information (continued)

2021	Commercial Aerospace $'000	Urban Solutions & Satcom $'000	Defence & Public Security $'000	Elimination $'000	Group $'000
Revenue					
External sales	2,464,827	1,190,536	4,037,502	–	7,692,865
Inter-segment sales	60,126	63,266	41,381	(164,773)	–
	2,524,953	1,253,802	4,078,883	(164,773)	7,692,865
Reportable segment profit from operations	162,307	34,695	448,911	–	645,913
Non-operating income, net	(582)	–	12,324	–	11,742
Share of results of associates and joint ventures, net of tax	20,143	(8,914)	4,762	–	15,991
Earnings before interest and tax	181,868	25,781	465,997	–	673,646
Finance income					11,686
Finance costs					(47,725)
Profit before taxation					637,607
Taxation					(70,636)
Non-controlling interests					3,569
Profit attributable to shareholders					570,540
Other assets	3,746,315	2,342,589	5,792,972	(2,872,586)	9,009,290
Associates and joint ventures	303,443	53,388	126,066	–	482,897
Segment assets	4,049,758	2,395,977	5,919,038	(2,872,586)	9,492,187
Deferred tax assets					207,548
Bank balances and other liquid funds					815,924
Total Assets					10,515,659
Segment liabilities	1,634,740	943,732	4,616,915	(1,799,032)	5,396,355
Provision for taxation					161,208
Deferred tax liabilities					174,661
Borrowings					2,115,220
Total Liabilities					7,847,444
Capital expenditure	310,438	102,278	173,704	(62,798)	523,622
Depreciation and amortisation	176,665	80,680	143,016	(2,271)	398,090
Impairment losses	21,259	–	5,000	–	26,259

B1 Segment information (continued)

Analysis by country of incorporation

Revenue is based on the country of incorporation regardless of where the goods are produced or services rendered. Non-current assets, excluding derivative financial instruments, post-employment benefits and deferred tax assets, are based on the location of those assets.

	Revenue		Non-current assets	
	2022 $'000	2021 $'000	2022 $'000	2021 $'000
Asia	**5,219,845**	4,839,875	**1,979,057**	1,963,235
U.S.	**2,852,309**	2,126,761	**4,788,762**	1,620,948
Europe	**899,513**	684,778	**1,758,155**	1,263,520
Others	**63,436**	41,451	**95,598**	99,437
	9,035,103	7,692,865	**8,621,572**	4,947,140

For the year ended 31 December 2022:

- Within Europe, revenue of approximately $614,447,000 (2021: $451,649,000) was from subsidiaries located in Germany.
- Within Asia, most of the revenue was from subsidiaries located in Singapore.
- The remaining revenue from subsidiaries in Asia, Europe and Others was individually insignificant.

As at 31 December 2022:

- Within Europe, non-current assets of approximately $618,701,000 (2021: $704,005,000) and $724,477,000 (2021: $149,005,000) were from subsidiaries located in Germany and Ireland respectively.
- Within Asia, most of the non-current assets were from subsidiaries located in Singapore.
- The remaining non-current assets located in Asia, Europe and Others were individually insignificant.

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B2 Revenue

Disaggregation of revenue

In the following table, revenue is disaggregated by major products/services lines and timing of revenue recognition. The table also includes a reconciliation of the disaggregated revenue with the Group's reportable segments.

	Commercial Aerospace		Urban Solutions & Satcom	
	2022 $'000	2021 $'000	2022 $'000	2021 $'000
Major products/services lines				
Sale of goods	**1,292,277**	1,120,982	**569,464**	510,964
Service income	**130,101**	144,435	**580,014**	185,917
Contract revenue	**1,630,381**	1,259,536	**671,326**	556,921
	3,052,759	2,524,953	**1,820,804**	1,253,802
Timing of revenue recognition				
Transferred at a point in time	**1,680,176**	1,429,910	**835,367**	771,518
Transferred over time	**1,372,583**	1,095,043	**985,437**	482,284
	3,052,759	2,524,953	**1,820,804**	1,253,802

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	Defence & Public Security		Elimination		Group	
	2022 $'000	2021 $'000	2022 $'000	2021 $'000	2022 $'000	2021 $'000
	1,187,011	1,110,350	**(41,342)**	(52,778)	**3,007,410**	2,689,518
	1,604,584	1,422,140	**(39,425)**	(35,434)	**2,275,274**	1,717,058
	1,527,950	1,546,393	**(77,238)**	(76,561)	**3,752,419**	3,286,289
	4,319,545	4,078,883	**(158,005)**	(164,773)	**9,035,103**	7,692,865
	1,699,289	1,570,940	**(92,170)**	(107,126)	**4,122,662**	3,665,242
	2,620,256	2,507,943	**(65,835)**	(57,647)	**4,912,441**	4,027,623
	4,319,545	4,078,883	**(158,005)**	(164,773)	**9,035,103**	7,692,865

Group	2022 $'000	2021 $'000
Primary geographical markets		
Asia	**4,514,285**	4,468,755
U.S.	**2,229,652**	1,532,475
Europe	**1,642,526**	1,215,704
Others	**648,640**	475,931
	9,035,103	7,692,865

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B2 Revenue (continued)

Revenue from contracts with customers

Revenue is measured based on the consideration specified in contracts with customers. The Group recognises revenue when it transfers control over a good or service to the customer.

The following provides information about the nature and timing of the satisfaction of performance obligations in contracts with customers, including significant payment terms, and the related revenue recognition policies.

(a) Revenue from sale of goods

Revenue is recognised when goods are delivered to the customer and the criteria for acceptance have been satisfied. Where applicable, a portion of the contract consideration is received in advance from the customers and the remaining consideration is received after delivery.

(b) Revenue from services rendered

Revenue from services rendered are recognised as performance obligations are satisfied. Payments are due from customers based on the agreed billing milestones stipulated in the contracts or based on the amounts certified by the customers.

Where performance obligations are satisfied over time as work progresses, revenue is recognised progressively based on the percentage of completion method. The stage of completion is assessed by reference to assessment of work performed (output method) or the cost incurred relative to total estimated costs (input method) depending on which method commensurates with the pattern of transfer of control to the customer. The related costs are recognised in profit or loss when they are incurred, unless they relate to future performance obligations.

If the value of services rendered for the contract exceeds payments received from the customer, a contract asset is recognised and presented separately on the statement of financial position. The contract asset is transferred to receivables when the entitlement to payment becomes unconditional. If the amounts invoiced to the customer exceeds the value of services rendered, a contract liability is recognised and separately presented on the statement of financial position.

(c) Revenue from long-term contracts

The Group builds specialised assets customised to customers' order for which the Group does not have an alternative use. These contracts can span several years.

(i) Contracts with enforceable right to payment

The Group has determined that for contracts where the Group has an enforceable right to payment, the customer controls all of the work-in-progress. This is because under those contracts, the assets are at the customer's specification and the Group is entitled to reimbursement of costs incurred to date, including a reasonable margin when the contract is terminated by the customer. Progress billings to the customer are based on a payment schedule in the contract that is dependent on the achievement of specified milestones.

Revenue is recognised over time. The stage of completion is typically assessed by reference to either surveys of work performed (output method) or the cost incurred relative to total estimated costs (input method) depending on which method commensurates with the pattern of transfer of control to the customer.

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B2 Revenue (continued)

Revenue from contracts with customers (continued)

(c) Revenue from long-term contracts (continued)

(ii) Contracts without enforceable right to payment

For contracts where the Group does not have an enforceable right to payment, customers do not take control of the specialised asset until they are completed. At the inception of the contract, the customers usually make an advance payment that is not refundable if the contract is cancelled. The advance payment is presented as a contract liability. The rest of the consideration is only billed upon acceptance by the customer.

Revenue is recognised at a point in time when the assets are completed and have been accepted by customers.

When the period between the satisfaction of a performance obligation and payment by the customer exceeds a year, the Group adjusts the transaction price with its customer and recognises a financing component. In adjusting for the financing component, the Group uses a discount rate that would be reflected separately as a financing income from contract inception.

For contracts with variable consideration (i.e. liquidated damages, bonus and penalty adjustments), revenue is recognised to the extent that it is highly probable that a reversal of previously recognised revenue will not occur. Therefore, the amount of revenue recognised is adjusted for possibility of delays to the projects and ability to meet key performance indicators stipulated in the contract. The Group reviews the progress of the projects at each reporting date and updates the transaction price accordingly.

The Group accounts for modifications to the scope or price of a contract as separate contracts if the modification adds distinct goods or services at their stand-alone selling prices. For contract modifications that add distinct goods or services but not at their stand-alone selling prices, the Group combines the remaining consideration in the original contract with the consideration promised in the modification to create a new transaction price that is then allocated to all remaining performance obligations to be satisfied. For contract modifications that do not add distinct goods or services, the Group accounts for the modification as a continuation of the original contract and recognises a cumulative adjustment to revenue at the date of modification.

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B2 Revenue (continued)

Key estimates and judgement: Revenue recognition

Judgement is applied in determining:

- *whether performance obligations are distinct.*

  Requires an assessment of whether the customer can benefit from the good or service either on its own or together with other resources that are readily available to the customer and if the promise is separately identifiable from other promises in the contract.

- *the transaction price for contracts with variable consideration (e.g. bonus, liquidated damages, penalties, etc).*

  Requires an evaluation of potential risk and factors which may affect completion or delivery of the contract, in accordance with contract obligations.

- *estimated cost to complete.*

  For revenue recognised over time, the percentage of completion is assessed by reference to the contract costs incurred till date in proportion to the total estimated costs for each contract. In making the estimates, management relies on the expertise of its project team and past experience of completed projects. The estimated total costs are reviewed regularly and adjusted where necessary, with the corresponding effect of the change being recognised prospectively from the date of change.

B3 Profit from operations

Profit from operations are arrived at after charging the following items (excluding those disclosed in the other notes to the financial statements):

Group	2022 $'000	2021 $'000
After charging/(crediting)		
Auditors' remuneration		
- auditors of the Company	**2,721**	2,418
- other auditors #	**2,661**	1,863
Non-audit fees		
- auditors of the Company	**533**	75
- other auditors #	**17**	132
Fees paid to a firm of which a director is a member	**498**	1,119
Research, design and development expenses *	**131,183**	92,826
Allowance for inventory obsolescence	**32,265**	45,861
Short-term lease expense	**15,304**	10,712
Low-value assets lease expense	**1,948**	2,320
Property, plant and equipment written off	**3,844**	2,249
Gain on disposal of associate	**(3,668)**	–
Fair value changes of investment in associates	**(1,471)**	(11,154)

Includes the network of member firms of PricewaterhouseCoopers International Limited (PwCIL)
* Amount before government grants of $5,397,000 (2021: $6,886,000)

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B3 Profit from operations (continued)

Recognition and measurement

Government grants are recognised as a receivable at fair value when there is reasonable assurance that the grant will be received and the Group will comply with all the attached conditions.

Government grants are recognised as income over the periods necessary to match them with the related costs which they are intended to compensate on a systematic basis. Grants relating to expenses is deducted in reporting the related expenses.

Grants relating to depreciable assets are recognised in profit or loss over the estimated useful lives of the relevant assets.

B4 Non-operating income, net

Group	Note	2022 $'000	2021 $'000
Gain on disposal of subsidiaries		**37,288**	13,021
Loss on disposal of a subsidiary		**–**	(1,279)
		37,288	11,742

Recognition and measurement

The assets and liabilities of the subsidiary, including any goodwill are derecognised when a change in the Group's ownership interest in a subsidiary result in a loss of control over the subsidiary. Amounts previously recognised in other comprehensive income in respect of that entity are also reclassified to profit or loss or transferred directly to retained earnings if required by a specific Standard.

B5 Earnings per share

Basic earnings per share

The weighted average number of ordinary shares used in the calculation of earnings per share is arrived at as follows:

Company	2022 $'000	2021 $'000
Number of shares		
Issued ordinary shares at beginning of the year	**3,113,669**	3,115,531
Effect of performance shares and restricted shares released	**4,698**	4,916
Effect of treasury shares held	**(3,467)**	(3,495)
Weighted average number of ordinary shares issued during the year	**3,114,900**	3,116,952

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B5 Earnings per share (continued)

Diluted earnings per share

When calculating diluted earnings per share, the weighted average number of ordinary shares is adjusted for the effect of all dilutive potential ordinary shares. The Group has two categories of dilutive potential ordinary shares from performance share plans and restricted share plans (2021: two categories of dilutive potential ordinary shares from performance share plans and restricted share plans).

The weighted average number of ordinary shares adjusted for the dilutive potential shares is as follows:

Company	2022 $'000	2021 $'000
Number of shares		
Weighted average number of ordinary shares (used in the calculation of basic earnings per share)	**3,114,900**	3,116,952
Adjustment for dilutive potential ordinary shares	**20,280**	18,464
Weighted average number of ordinary shares (diluted) during the year	**3,135,180**	3,135,416

B6 Taxation

(i) Tax expenses

Group	2022 $'000	2021 $'000
Current income tax		
Current year	**165,739**	132,116
Overprovision in respect of prior years	**(1,634)**	(10,663)
	164,105	121,453
Deferred income tax		
Current year	**(101,386)**	(50,927)
(Over)/under provision in respect of prior years	**(9,883)**	1,368
Effect of change in tax rates	**1,295**	(1,258)
	(109,974)	(50,817)
	54,131	70,636

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B6 Taxation (continued)

(i) **Tax expenses** (continued)

A reconciliation between tax expense and the product of accounting profit multiplied by the applicable corporate tax rate for the year ended 31 December is as follows:

Group	2022 $'000	2021 $'000
Profit before taxation	**597,466**	637,607
Taxation at Singapore statutory tax rate of 17% (2021: 17%)	**101,569**	108,393
Adjustments:		
Income not subject to tax	**(30,871)**	(23,816)
Expenses not deductible for tax purposes	**23,309**	13,099
Different tax rates of other countries	**(21,127)**	(8,759)
Overprovision in respect of prior years	**(11,517)**	(9,295)
Effect of change in tax rates	**1,295**	(1,258)
Effect of results of associates and joint ventures presented net of tax	**(5,653)**	(2,718)
Tax incentives	**(1,993)**	(6,553)
Deferred tax assets not recognised	**17,721**	6,516
Deferred tax assets previously not recognised now utilised	**(18,906)**	(4,663)
Others	**304**	(310)
	54,131	70,636

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B6 Taxation (continued)

(ii) Deferred tax assets and liabilities

(a) Recognised deferred tax assets and liabilities

Deferred tax assets and liabilities are attributable to the following:

Group	Assets 2022 $'000	Assets 2021 $'000	Liabilities 2022 $'000	Liabilities 2021 $'000
Property, plant and equipment	**(1,420)**	(1,412)	**165,706**	145,981
Intangible assets	**(7,268)**	(4,967)	**165,943**	146,039
Allowance for doubtful debts	**(2,182)**	(1,640)	**–**	–
Allowance for inventory obsolescence	**(43,670)**	(36,193)	**252**	–
Provisions and accruals	**(131,730)**	(147,134)	**11,488**	8,935
Lease liabilities	**(3,746)**	(3,990)	**3,310**	4,583
Unabsorbed capital allowances and unutilised tax losses	**(196,805)**	(99,358)	**11,904**	1,115
Fair value of derivative financial instruments designated as cash flow hedges	**(16,703)**	(10,946)	**7,518**	2,493
Fair value of defined benefit plans	**(6,275)**	(58,779)	**10,274**	–
Other items	**(19,740)**	(819)	**22,388**	23,205
Deferred tax (assets)/liabilities	**(429,539)**	(365,238)	**398,783**	332,351
Set off of tax	**231,302**	157,690	**(231,302)**	(157,690)
Net deferred tax (assets)/ liabilities	**(198,237)**	(207,548)	**167,481**	174,661

The Group's lease payments are deductible upon payment for tax purposes. In accounting for the deferred tax relating to the lease, the Group considers the asset and liability collectively and accounts for the deferred taxation on a net basis.

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B6 Taxation (continued)

(ii) **Deferred tax assets and liabilities** (continued)

(b) **Unrecognised deferred tax assets**

Deferred tax assets have not been recognised in respect of the following items:

Group	2022 $'000	2021 $'000
Tax losses	**291,234**	410,716
Deductible temporary differences	**2,136**	4,110
Unabsorbed wear and tear allowance and investment allowance	**94,511**	92
	387,881	414,918

The Group has the above unrecognised deferred tax assets which have no expiry date except for the amount of $28,737,000 which will expire from 2023 to 2040. The unrecognised deferred tax assets can be carried forward and used to offset against future taxable income subject to meeting certain statutory requirements by companies with unrecognised tax losses and capital allowances in their respective countries of incorporation.

(c) **Unrecognised temporary differences relating to investments in subsidiaries**

As at 31 December 2022, a deferred tax liability of $185,212,000 (2021: $141,355,000) for temporary difference of $741,796,000 (2021: $506,111,000) related to undistributed earnings of certain subsidiaries was not recognised as the Group has determined that the undistributed profits of its overseas subsidiaries will not be remitted to Singapore in the foreseeable future, but will be retained for organic growth and acquisitions.

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B6 Taxation (continued)

(ii) Deferred tax assets and liabilities (continued)

(d) Movement in deferred tax balances during the year

Group	As at 1 January 2021 $'000	Recognised in profit or loss $'000	Recognised in other comprehensive income $'000	Acquisition/ deconsolidation of subsidiaries $'000	Utilisation of tax losses $'000
Property, plant and equipment	128,062	15,085	–	(29)	–
Intangible assets	205,947	(65,942)	–	(851)	–
Allowance for doubtful debts	(1,702)	94	–	9	–
Allowance for inventory obsolescence	(27,751)	(8,503)	–	506	–
Provisions and accruals	(170,478)	33,885	–	17	–
Lease liabilities	1,112	(585)	–	–	–
Unabsorbed capital allowances and unutilised tax losses	(95,622)	(6,128)	–	(695)	4,626
Fair value of derivative financial instruments designated as cash flow hedges	4,438	121	(12,367)	–	–
Fair value of defined benefit plans	(49,390)	(18,633)	7,512	–	–
Other items	22,517	(211)	–	–	–
	17,133	(50,817)	(4,855)	(1,043)	4,626

Exchange difference $'000	As at 31 December 2021 $'000	Recognised in profit or loss $'000	Recognised in other comprehensive income $'000	Acquisition/ deconsolidation of subsidiaries $'000	Utilisation of tax losses $'000	Reclassification $'000	Exchange difference $'000	As at 31 December 2022 $'000
1,451	144,569	20,475	–	130	(50)	–	(838)	164,286
1,918	141,072	18,439	–	–	–	–	(836)	158,675
(41)	(1,640)	(558)	–	–	–	1	15	(2,182)
(445)	(36,193)	(7,519)	–	–	–	–	294	(43,418)
(1,623)	(138,199)	(40,179)	–	56,433	4,050	(2,950)	602	(120,243)
66	593	(1,084)	–	19	–	–	37	(435)
(424)	(98,243)	(100,193)	–	(56,272)	65,201	(2)	4,609	(184,900)
(645)	(8,453)	(2)	(1,054)	–	–	–	324	(9,185)
1,732	(58,779)	4,727	37,642	–	–	17,153	1,799	2,542
80	22,386	(4,080)	–	–	5	(14,202)	(5)	4,104
2,069	(32,887)	(109,974)	36,588	310	69,206	–	6,001	(30,756)

B6 Taxation (continued)

Recognition and measurement

Current tax

Current tax is measured at the amount expected to be recovered from or paid to the tax authorities, using tax rates and tax laws that are enacted or substantively enacted by the reporting date.

Deferred tax

Deferred tax is accounted for in respect of temporary differences arising from differences between the carrying amount of assets and liabilities and the corresponding tax base.

Deferred tax liabilities are recognised for all taxable temporary differences. Deferred tax assets are recognised for all deductible temporary differences, carry-forward of unused tax assets and unused tax losses, to the extent that it is probable that sufficient future taxable profits will be available to utilise them.

However, deferred tax assets and liabilities are not recognised for:

- temporary differences on the initial recognition of assets or liabilities in a transaction that is not a business combination which affects neither accounting nor taxable profit or loss; and
- taxable temporary differences arising on the initial recognition of goodwill.

Deferred tax assets and deferred tax liabilities are offset, if a legally enforceable right exists and they relate to taxes levied by the same tax authority on the same taxable entity.

Current tax and deferred tax are recognised in profit or loss except to the extent that it relates to a business combination, or items recognised directly in equity or in other comprehensive income.

Estimates and judgement: Income taxes

The Group is subject to income taxes in Singapore and jurisdictions where it has foreign operations. Judgement is required in determining the worldwide provision for income taxes and in assessing whether deferred tax balances are recognised on the statement of financial position. Changes in circumstances will alter expectations, which may impact the amount of provision for income taxes and deferred tax balances recognised.

Estimates and judgement: Recovery of deferred tax assets

Deferred tax assets are recognised for tax losses and deductible temporary differences to the extent that it is probable that sufficient future taxable profits will be available to utilise them. Judgement and estimates are required to determine the amount of deferred tax assets that can be recognised, based upon the likely timing and the level of future taxable profits.

C. OPERATING ASSETS AND LIABILITIES

This section provides information relating to the operating assets and liabilities of the Group.

The Group maintains a strong financial position and credit rating to support the Group's strategy to maximise returns to the shareholders through efficient use of capital, taking into consideration the Group's expenditures, growth and investment requirements.

C1	Property, plant and equipment	**C9**	Trade payables and accruals
C2	Right-of-use assets	**C10**	Amounts due to related parties
C3	Intangible assets	**C11**	Provisions
C4	Amounts due from related parties	**C12**	Deferred income
C5	Inventories	**C13**	Contract balances
C6	Trade receivables	**C14**	Financial risk management objectives and policies
C7	Advances and other receivables	**C15**	Classification and fair value of financial instruments
C8	Bank balances and other liquid funds	**C16**	Derivative financial instruments

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C1 Property, plant and equipment

Group	Freehold land, buildings and improvements $'000	Wharves, floating docks and boats $'000
Cost		
At 1 January 2022	1,517,979	145,776
Additions	26,015	54
Disposals/write-off	(9,399)	(18)
Acquisition of subsidiaries	999	–
Disposal of subsidiaries	(137,653)	(56,335)
Reclassifications	4,243	15,217
Translation difference	(16,135)	(235)
At 31 December 2022	1,386,049	104,459
Accumulated depreciation and impairment		
At 1 January 2022	846,496	123,627
Depreciation charge/impairment losses	76,126	10,771
Disposals/write-off	(8,677)	(1)
Disposal of subsidiaries	(70,572)	(31,796)
Reclassifications	150	–
Translation difference	(4,899)	(384)
At 31 December 2022	838,624	102,217
Net book value		
At 31 December 2022	547,425	2,242

* Others comprise transportation equipment, vehicles and satellites

During the year, the Group performed an impairment assessment and recognised an impairment loss of $42,378,000 on certain property, plant and equipment. The recoverable amounts of these property, plant and equipment were determined based on the fair market value of the property, plant and equipment, net of selling costs.

	Plant and machinery $'000	Production tools and equipment $'000	Furniture, fittings, office equipment and others * $'000	Aircraft and aircraft engines $'000	Construction-in-progress $'000	Total $'000
	1,242,658	430,184	468,791	423,146	108,491	4,337,025
	91,819	33,281	55,293	491,691	64,774	762,927
	(33,941)	(19,590)	(20,436)	–	(3,717)	(87,101)
	–	3,442	8,695	–	20	13,156
	(99,543)	(994)	(10,896)	–	(36,140)	(341,561)
	(100,518)	85,335	21,056	(26,138)	(50,095)	(50,900)
	(10,644)	(6,527)	(2,807)	(1,670)	(806)	(38,824)
	1,089,831	525,131	519,696	887,029	82,527	4,594,722
	782,241	310,446	349,706	130,698	–	2,543,214
	82,284	33,611	48,099	36,153	8,378	295,422
	(26,099)	(19,120)	(19,963)	–	–	(73,860)
	(84,923)	(781)	(8,730)	–	(8,162)	(204,964)
	(81,190)	68,909	(44)	(9,502)	–	(21,677)
	(6,322)	(4,111)	(2,838)	(991)	(216)	(19,761)
	665,991	388,954	366,230	156,358	–	2,518,374
	423,840	136,177	153,466	730,671	82,527	2,076,348

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31 DECEMBER 2022
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C1 Property, plant and equipment (continued)

Group	Freehold land, buildings and improvements $'000	Wharves, floating docks and boats $'000
Cost		
At 1 January 2021	1,485,202	143,688
Additions	29,048	1,215
Disposals/write-off	(3,751)	–
Acquisition of subsidiaries	41	–
Disposal of subsidiaries	(117)	–
Reclassifications	6,412	–
Translation difference	1,144	873
At 31 December 2021	1,517,979	145,776
Accumulated depreciation and impairment		
At 1 January 2021	784,755	120,146
Depreciation charge/impairment losses	62,277	3,036
Disposals/write-off	(3,122)	–
Disposal of subsidiaries	(117)	–
Reclassifications	(179)	–
Translation difference	2,882	445
At 31 December 2021	846,496	123,627
Net book value		
At 31 December 2021	671,483	22,149

* Others comprise transportation equipment, vehicles and satellites

In the prior year, the Group performed an impairment assessment and recognised an impairment loss of $19,490,000 on certain plant and machinery due to a decline in recoverable amount of a subsidiary. The recoverable amounts of these plant and equipment were determined based on the fair market value of the plant and equipment, net of selling costs.

Plant and machinery $'000	Production tools and equipment $'000	Furniture, fittings, office equipment and others * $'000	Aircraft and aircraft engines $'000	Construction-in-progress $'000	Total $'000
1,212,387	424,803	444,602	308,622	72,180	4,091,484
47,351	22,623	43,075	111,557	65,190	320,059
(31,886)	(7,099)	(28,627)	–	(4,720)	(76,083)
17	–	35	21,051	–	21,144
(162)	(339)	(76)	(19,058)	(17)	(19,769)
9,338	(9,407)	7,240	(2,936)	(24,442)	(13,795)
5,613	(397)	2,542	3,910	300	13,985
1,242,658	430,184	468,791	423,146	108,491	4,337,025
684,929	297,400	332,051	115,242	17	2,334,540
110,994	26,153	41,756	16,865	–	261,081
(24,209)	(6,644)	(26,120)	–	–	(60,095)
(162)	(308)	(78)	(149)	(17)	(831)
5,228	(6,675)	(7)	(1,846)	–	(3,479)
5,461	520	2,104	586	–	11,998
782,241	310,446	349,706	130,698	–	2,543,214
460,417	119,738	119,085	292,448	108,491	1,793,811

NOTES TO THE FINANCIAL STATEMENTS

31 DECEMBER 2022
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C1 Property, plant and equipment (continued)

Reclassifications due to changes in the use of assets:

(a) Property, plant and equipment with net book value amounting to $29,165,000 (2021: $17,843,000) were reclassified to inventories;

(b) Property, plant and equipment with net book value amounting to $nil (2021: $5,773,000) were reclassified to finance lease receivables;

(c) Property, plant and equipment with net book value amounting to $90,000 (2021: $nil) were reclassified to intangibles;

(d) Inventories of $32,000 (2021: $13,300,000) were reclassified to property, plant and equipment;

Operating lease

Included in the tables below are property, plant and equipment that the Group leases out, comprising aircraft and aircraft engines, furniture, fittings, office equipment and others*. The Group has classified these leases as operating leases, because they do not transfer substantially all of the risks and rewards incidental to the ownership of the assets. Movements in these assets that are subject to operating leases are presented below.

* Others comprise transportation equipment, vehicles and satellites

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C1 Property, plant and equipment (continued)

Group	Furniture, fittings, office equipment and others* $'000	Aircraft and aircraft engines $'000	Total $'000
Cost			
At 1 January 2022	1,569	277,045	278,614
Additions	51	491,600	491,651
Reclassifications	(46)	(33,629)	(33,675)
Translation difference	(8)	(1,475)	(1,483)
At 31 December 2022	1,566	733,541	735,107
Accumulated depreciation			
At 1 January 2022	835	33,962	34,797
Depreciation charge for the year	211	25,552	25,763
Reclassifications	–	(5,148)	(5,148)
Translation difference	(10)	(779)	(789)
At 31 December 2022	1,036	53,587	54,623
Net book value			
At 31 December 2022	530	679,954	680,484

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31 DECEMBER 2022
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C1 Property, plant and equipment (continued)

Group	Furniture, fittings, office equipment and others* $'000	Aircraft and aircraft engines $'000	Total $'000
Cost			
At 1 January 2021	1,466	133,995	135,461
Additions	–	111,534	111,534
Disposals/write-off	(46)	–	(46)
Acquisition of subsidiaries	–	21,051	21,051
Disposal of subsidiaries	–	(19,079)	(19,079)
Reclassifications	116	26,161	26,277
Translation difference	33	3,383	3,416
At 31 December 2021	1,569	277,045	278,614
Accumulated depreciation			
At 1 January 2021	653	13,087	13,740
Depreciation charge for the year	194	9,404	9,598
Disposals/write-off	(27)	–	(27)
Disposal of subsidiaries	–	(170)	(170)
Reclassifications	–	11,300	11,300
Translation difference	15	341	356
At 31 December 2021	835	33,962	34,797
Net book value			
At 31 December 2021	734	243,083	243,817

* Others comprise transportation equipment, vehicles and satellites.

NOTES TO THE FINANCIAL STATEMENTS

31 DECEMBER 2022
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C1 Property, plant and equipment (continued)

(a) Property, plant and equipment pledged as security

Property, plant and equipment of certain overseas subsidiaries of the Group with a carrying value of $49,252,000 (2021: $56,290,000) are pledged as security for bank loans.

(b) Major properties

Major land and buildings and improvements to premises are:

				Net book value	
Location	**Description**	**Tenure**	**Land area (sq. m.)**	**2022 $'000**	**2021 $'000**
Singapore					
1 Ang Mo Kio Electronics Park Road	Industrial and commercial buildings	30 years from 1.11.2011	20,000	**32,182**	35,320
3 Ang Mo Kio Electronics Park Road	Industrial and commercial buildings	30 years from 1.12.2015	30,000	**34,047**	36,366
100 Jurong East Street 21	Industrial and commercial buildings	30 years from 1.11.2018	11,232	**47,021**	49,096
249 Jalan Boon Lay	Industrial and commercial buildings	27 years from 1.10.2001 to 31.12.2028 renewable to 10.10.2065	208,261	**76,662**	84,713
People's Republic of China					
No 2, Huayu Road, Huli District, Xiamen 361006, Fujian	Factory building	50 years from 20.11.2008	38,618	**37,571**	42,199
Germany					
Grenzstr. 1, Dresden	Hangar and office building	Freehold	91,485	**77,435**	86,530

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C1 Property, plant and equipment (continued)

For this purpose, freehold land, buildings and improvements to premises are considered major properties if the net book value of these assets represent 5% or more of the Group's aggregated net book value in these categories.

Recognition and measurement

Property, plant and equipment are carried at cost less accumulated depreciation and accumulated impairment losses.

Cost comprises expenditure that is:
- directly attributable to the acquisition of the asset;
- subsequent costs incurred to replace parts that are eligible for capitalisation; and/or
- transfers from equity on qualifying cash flow hedges of foreign currency purchases of property, plant and equipment.

Disposals

Gains or losses on disposal of property, plant and equipment are included in profit or loss.

Depreciation

Depreciation of property, plant and equipment is recognised in profit or loss on a straight-line basis over their useful lives, except for freehold land which are not depreciated. The estimated useful lives are as follows:

Item #		Useful life
Buildings and improvements	–	2 to 50 years ^
Wharves, floating docks and boats	–	10 to 20 years
Plant and machinery	–	2 to 20 years
Production tools and equipment	–	2 to 20 years
Furniture, fittings, office equipment and others *	–	2 to 12 years
Aircraft and aircraft engines	–	2 to 30 years

Property, plant and equipment purchased specifically for projects are depreciated over the useful life or the duration of the project, whichever is shorter.

^ Refer to Note C1(b) Major Properties for details of the lease tenure used to approximate the useful lives of the leasehold land, buildings and improvements.

* Others comprise transportation equipment, vehicles and satellites.

Impairment

The carrying amounts of property, plant and equipment are reviewed at each reporting date to determine whether there is any indication of impairment. If any such indications exists, then the asset's recoverable amount is estimated. An impairment loss is recognised if the carrying amount of an asset or its related cash generating unit exceeds its estimated recoverable amount.

Estimates and judgement: Depreciation charge

Management estimates the useful lives based on factors such as changes in the expected level of usage and technological developments. These are reassessed at each reporting date, and adjusted prospectively, where appropriate.

NOTES TO THE FINANCIAL STATEMENTS

31 DECEMBER 2022
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C2 Right-of-use assets

The Group leases many assets including land, vehicles, machinery and IT equipment. Information about leases for which the Group is a lessee is presented below.

Group	Leasehold land $'000	Wharves, floating docks and boats $'000	Plant and machinery $'000	Production tools and equipment $'000	Furniture, fittings, office equipment and others* $'000	Total $'000
At 1 January 2022	**546,796**	**597**	**873**	**327**	**9,966**	**558,559**
Additions	**61,060**	**1,787**	**16,877**	**142**	**10,095**	**89,961**
Acquisition of subsidiaries	**39,213**	**–**	**–**	**–**	**–**	**39,213**
Disposal of subsidiaries	**(3,118)**	**–**	**–**	**–**	**(89)**	**(3,207)**
Modifications of lease	**24,883**	**–**	**–**	**–**	**(96)**	**24,787**
Lease termination	**(37,449)**	**–**	**–**	**(18)**	**(1,116)**	**(38,583)**
Depreciation charge	**(72,898)**	**(647)**	**(2,894)**	**(262)**	**(7,857)**	**(84,558)**
Translation difference	**(4,438)**	**–**	**4**	**(2)**	**56**	**(4,380)**
At 31 December 2022	**554,049**	**1,737**	**14,860**	**187**	**10,959**	**581,792**

* Others comprise transportation equipment, vehicles and satellites.

Group	Leasehold land $'000	Wharves, floating docks and boats $'000	Plant and machinery $'000	Production tools and equipment $'000	Furniture, fittings, office equipment and others* $'000	Total $'000
At 1 January 2021	524,395	1,248	1,300	429	11,437	538,809
Additions	80,342	–	60	218	6,208	86,828
Disposal of subsidiaries	(190)	–	–	–	–	(190)
Modifications of lease	12,614	–	–	–	79	12,693
Lease termination	(6,394)	–	(130)	(35)	(634)	(7,193)
Depreciation charge	(64,155)	(651)	(381)	(288)	(7,131)	(72,606)
Translation difference	184	–	24	3	7	218
At 31 December 2021	546,796	597	873	327	9,966	558,559

* Others comprise transportation equipment, vehicles and satellites.

NOTES TO THE FINANCIAL STATEMENTS

31 DECEMBER 2022
(CURRENCY – SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

C3 Intangible assets

Group	Goodwill $'000	Dealer network and customer relationships $'000	Development expenditure $'000
Cost			
At 1 January 2022	847,655	169,445	718,587
Additions	–	–	53,376
Acquisition of subsidiaries	2,321,424	886,281	–
Disposal of subsidiaries	(75)	–	–
Write-off	–	–	–
Reclassification	–	–	(25)
Translation difference	(21,855)	(15,589)	(39,744)
At 31 December 2022	3,147,149	1,040,137	732,194
Accumulated amortisation and impairment losses			
At 1 January 2022	50,979	55,959	202,048
Amortisation for the year *	–	63,733	52,982
Impairment losses +	5,000	–	–
Disposal of subsidiaries	–	–	–
Write-off	–	–	–
Reclassification	–	–	24
Translation difference	(184)	(3,852)	(4,091)
At 31 December 2022	55,795	115,840	250,963
Net book value			
At 31 December 2022	3,091,354	924,297	481,231

Commercial and intellectual property rights $'000	Brands $'000	Licenses $'000	Technology agreement $'000	Others $'000	Total $'000
619,860	80,397	49,759	34,112	64,067	2,583,882
105	–	1,680	–	148,043	203,204
144,781	–	–	–	–	3,352,486
(335)	–	(2,126)	–	–	(2,536)
–	–	–	–	(180)	(180)
–	–	–	–	–	(25)
(4,690)	(582)	(46)	(195)	(172)	(82,873)
759,721	79,815	49,267	33,917	211,758	6,053,958
163,254	18,837	43,206	22,885	33,976	591,144
48,885	1,207	638	2,645	9,180	179,270
–	–	–	–	–	5,000
–	–	(2,126)	–	–	(2,126)
–	–	–	–	(180)	(180)
–	–	–	–	–	24
(1,678)	(231)	(46)	(199)	(238)	(10,519)
210,461	19,813	41,672	25,331	42,738	762,613
549,260	60,002	7,595	8,586	169,020	5,291,345

NOTES TO THE FINANCIAL STATEMENTS

31 DECEMBER 2022
(CURRENCY – SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

C3 Intangible assets (continued)

Group	Goodwill $'000	Dealer network and customer relationships $'000	Development expenditure $'000
Cost			
At 1 January 2021	842,502	181,689	631,010
Additions	–	–	84,898
Disposal of subsidiaries	(10,431)	(3,013)	(114)
Reclassification	–	–	–
Translation difference	15,584	(9,231)	2,793
At 31 December 2021	847,655	169,445	718,587
Accumulated amortisation and impairment losses			
At 1 January 2021	56,123	53,335	159,698
Amortisation for the year *	–	6,989	38,607
Impairment losses +	5,000	–	1,769
Disposal of subsidiaries	(10,431)	(2,962)	(104)
Reclassification	–	–	–
Translation difference	287	(1,403)	2,078
At 31 December 2021	50,979	55,959	202,048
Net book value			
At 31 December 2021	796,676	113,486	516,539

* Amortisation charge of $179,270,000 (2021: $83,893,000) is recognised in the income statement as part of:
- Other operating expenses of $42,790,000 (2021: $40,624,000); and
- Cost of sales of $136,480,000 (2021: $43,269,000)

\+ During the year, an impairment loss on goodwill of $5,000,000 (2021: $5,000,000) was recognised in other operating expenses in the income statement as the recoverable amount of a CGU (2021: one CGU) in the United States was determined to be lower than the carrying amount. The recoverable amount was determined based on the value-in-use method.

No impairment loss was recognised in cost of sales during the year. In the prior year, the Group assessed that certain development expenditure, licenses and commercial and intellectual property rights associated with servicing of certain type of commercial airplane were impaired as these intangible assets were not expected to be generating future economic benefits and impairment losses of $1,769,000 were recognised in cost of sales in the income statement.

Commercial and intellectual property rights $'000	Brands $'000	Licenses $'000	Technology agreement $'000	Others $'000	Total $'000
595,677	79,335	64,407	33,370	34,412	2,462,402
1,440	–	–	–	30,397	116,735
(164)	(523)	(4,972)	–	(742)	(19,959)
10,193	–	(9,673)	–	–	520
12,714	1,585	(3)	742	–	24,184
619,860	80,397	49,759	34,112	64,067	2,583,882
125,752	17,909	49,253	19,853	34,341	516,264
33,829	1,183	334	2,576	375	83,893
–	–	–	–	–	6,769
(155)	(523)	(4,778)	–	(742)	(19,695)
2,159	–	(1,639)	–	–	520
1,669	268	36	456	2	3,393
163,254	18,837	43,206	22,885	33,976	591,144
456,606	61,560	6,553	11,227	30,091	1,992,738

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31 DECEMBER 2022
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C3 Intangible assets (continued)

Recognition and measurement

(i) Goodwill

Goodwill represents the excess of:

- the fair value of the consideration transferred; plus
- the recognised amount of any non-controlling interests in the acquiree; plus
- if the business combination is achieved in stages, the fair value of the existing equity interest in the acquiree,

over the net recognised amount (generally fair value) of the identifiable assets acquired and liabilities assumed.

When the excess is negative, a bargain purchase gain is recognised immediately in profit or loss.

Goodwill is initially measured at cost. Following initial recognition, goodwill is measured at cost less any accumulated impairment losses.

(ii) Other intangible assets

<table>
<tr><th>Class of intangible assets</th><th>Background</th><th>Valuation method</th><th>Useful lives</th></tr>
<tr><td>Dealer network and customer relationships</td><td>Includes customer relationships and networks acquired</td><td rowspan="5">Initial recognition:

Separately acquired intangible assets are recognised at cost.

Intangible assets arising from business combinations are recognised at fair value at the date of acquisition.

Subsequent measurement:

Intangible assets are carried at cost less any accumulated amortisation and accumulated impairment losses following initial recognition.

Amortisation is calculated on a straight-line basis over the estimated useful lives.</td><td>1 to 25 years</td></tr>
<tr><td>Commercial and intellectual property rights</td><td>Relates to intellectual property</td><td>5 to 15 years</td></tr>
<tr><td>Brands</td><td>Includes brands of road construction equipment</td><td>20 to 70 years</td></tr>
<tr><td>Licenses</td><td>Relates to licenses to
- conduct commercial aviation activities
- purchase and lease Boeing parts
- develop MRO capabilities for specific aircraft types</td><td>3 to 38 years</td></tr>
<tr><td>Technology agreement</td><td>Relates to the intellectual property required to operate the EcoPower Engine Wash business</td><td>13 years</td></tr>
</table>

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31 DECEMBER 2022
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C3 Intangible assets (continued)

Recognition and measurement (continued)

(ii) Other intangible assets (continued)

Class of intangible assets	Background	Valuation method	Useful lives
Development expenditure	Development expenditure on an individual project is recognised as an intangible asset when the Group can demonstrate the technical and commercial feasibility of development. The capitalised costs are directly attributable to activities preparing the asset for its intended use, and capitalised borrowing costs. In any other circumstances, development costs are recognised in profit or loss as incurred.	(i) Initially recognised at cost (ii) Subsequently, carried at cost less any accumulated amortisation and accumulated impairment losses	PTF: 8 to 41 years Others: 1 to 10 years

(iii) Subsequent expenditure

Subsequent expenditure is capitalised only when it increases the future economic benefits embodied in the specific asset to which it relates. All other expenditure, including expenditure on internally generated intangible assets, is recognised in profit or loss as incurred.

Impairment review

The Group tests intangible assets for impairment to ensure they are not carried at above their recoverable amounts annually or more frequently if events or changes in circumstances indicate that the carrying value may be impaired.

These tests are performed by assessing the recoverable amount of each individual asset or, if this is not possible, then the recoverable amount of the cash generating unit (CGU) to which the asset belongs. CGUs are the lowest levels at which assets are grouped and generate separately identifiable cash flows.

The recoverable amount is the higher of an asset or a CGU's fair value less costs to sell and value-in-use. The value-in-use calculations are based on discounted cash flows expected to arise from the asset.

Reversal of impairment

Intangible assets other than goodwill that suffered impairment are reviewed for possible reversal of the impairment at each reporting date.

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C3 Intangible assets (continued)

Key estimates and judgement: Recognition and measurement of intangible assets

Key assumptions used in estimating the recoverable amount, useful life of an intangible asset (reassessed at each reporting date) requires management's judgement.

Aggregate carrying amounts of goodwill allocated to each CGU within the business segments and the key assumptions used in determining the recoverable amount of each CGU are as follows:

Group			Pre-tax discount rate		Terminal growth rate	
	2022 $'000	2021 $'000	2022 %	2021 %	2022 %	2021 %
Commercial Aerospace						
Aerostructure & Systems	**59,682**	61,395	**10.0 – 11.0**	7.0 – 8.8	**1.6 – 3.0**	1.0 – 1.6
Aerospace MRO	**16,910**	16,995	**11.5**	9.1	**4.0**	1.5
Urban Solutions & Satcom						
Smart Utilities & Infrastructure	**74,732**	75,195	**12.1**	10.4	**3.0**	3.0
Mobility (Rail & Road)	**2,305,641**	–	**8.9**	–	**4.0**	–
Satcom	**431,882**	434,355	**11.8**	8.9	**3.0**	3.0
Defence & Public Security						
Specialty Vehicles	**102,602**	108,269	**14.7 – 17.6**	10.7 – 15.5	**2.3**	2.3
Robotics & Autonomous Systems	**35,169**	35,370	**12.0 – 13.5**	10.6 – 11.4	**2.3 – 2.5**	2.5
Mission Software & Services	**12,320**	12,320	**9.0**	7.5	**2.0**	2.0
Training & Simulation Systems	**15,295**	15,382	**18.8**	13.5	**3.0**	3.0
Advanced Networks & Sensors	**36,420**	36,619	**11.4**	9.7	**4.0**	3.0
Defence Aerospace	**701**	776	**NA**	NA	**NA**	NA
	3,091,354	796,676				

C3 Intangible assets (continued)

Recognition and measurement

The recoverable amounts of the CGUs are determined based on value-in-use calculations, using cash flow projections derived from the financial budgets approved by management for the next five to ten years. The key assumptions used in the calculation of recoverable amounts are as follows:

- The discount rates used are pre-tax and reflect specific risks relating to the relevant segments.
- The long-term terminal growth rate has been determined based on either the nominal GDP rates for the country in which the CGU is based or the long-term growth rate estimated by management by reference to forecasts included in industry reports and expected market development.
- The revenue growth rate and gross profit margins are determined based on the past performance and its expectations of market developments.

Sensitivity to changes in assumptions:

(a) Management has identified the following key assumption for which a change as set out below could cause the carrying amount to exceed the recoverable amount.

		Change required for carrying amount to equal the recoverable amount	
Business Segment	**Assumption**	**2022 %**	**2021 %**
Defence & Public Security	Revenue growth rate (average of next 5 years)	**2.4**	2.7

(b) No sensitivity analysis was disclosed for the remaining CGUs as the Group believes that any reasonable possible change in the key assumptions is unlikely to result in any material impairment to the CGUs.

Key estimates and judgement: Impairment of goodwill

Determination of potential impairment requires an estimation of the recoverable amount of the CGUs to which goodwill are allocated. Key assumptions made to the projected cash flows requiring judgement include growth rate estimates and discount rates.

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C4 Amounts due from related parties

Group	2022 $'000	2021 $'000
Trade:		
Associates	**5,540**	7,514
Joint ventures	**19,096**	22,293
Related parties	**23,215**	25,464
	47,851	55,271
Non-trade*:		
Associates	**7,500**	7,318
Joint ventures	**115,617**	62,755
Related parties	**109**	108
	123,226	70,181
Allowance for doubtful debts	**(988)**	–
	170,089	125,452
Receivable:		
Within 1 year	**135,089**	113,843
After 1 year	**35,000**	11,609
	170,089	125,452

Amounts due from related parties denominated in currencies other than the respective entities' functional currencies as at 31 December are $90,888,000 (2021: $62,985,000) denominated in USD.

* Included in non-trade are:

(a) a long term, unsecured, interest free loan of $4,456,000 (2021: $4,256,000) to an associate;

(b) a long term, unsecured, 6% (2021: 6%) per annum interest bearing loan of $2,866,000 (2021: $3,062,000) to an associate, repayable in 2025; and

(c) loans of $112,990,000 (2021: $61,034,000) to joint ventures, bearing interest ranging from 3.15% to 6.38% (2021: 0.71% to 6.38%) per annum, which are the effective interest rates. The loans are unsecured and repayable from 2023 to 2029 (2021: 2022 to 2029).

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C5 Inventories

Group	2022 $'000	2021 $'000
Inventories of equipment and spares	**1,684,231**	1,261,156

In 2022, raw materials, consumables and changes in finished goods and work-in-progress recognised as cost of sales amounted to $3,731,108,000 (2021: $3,040,874,000).

Allowances for inventory obsolescence

As at 31 December 2022, the inventories are stated after allowance for inventory obsolescence of $346,388,000 (2021: $359,381,000).

Recognition and measurement

Inventories are measured at the lower of cost and net realisable value. Cost (comprising direct labour, material costs, direct expenses and an appropriate allocation of production overheads) is calculated on a first-in, first-out basis or weighted average cost basis depending on the nature and pattern of use of the inventories.

Cost may also include transfers from equity on qualifying cash flow hedges of foreign currency purchases of inventories. Allowance is made for deteriorated, damaged, obsolete and slow-moving inventories.

Net realisable value represents the estimated selling price in the ordinary course of business, less estimated costs to sell.

Estimates and judgement: Allowance for inventory obsolescence

The allowance for inventory obsolescence is based on estimates from historical trends and expected utilisation of inventories. The actual amount of inventory write-offs could be higher or lower than the allowance made.

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C6 Trade receivables

Group	2022 $'000	2021 $'000
Gross receivables	**1,198,070**	1,125,418
Allowance for doubtful debts	**(45,742)**	(58,662)
Trade receivables, net	**1,152,328**	1,066,756

Trade receivables denominated in currencies other than the respective entities' functional currencies as at 31 December are as follows:

- $202,097,000 (2021: $213,370,000) denominated in USD
- $27,689,000 (2021: $29,248,000) denominated in EUR

C7 Advances and other receivables

Group	2022 $'000	2021 $'000
Deposits	**25,534**	12,311
Interest receivables	**2,350**	22
Finance lease receivables	**12,148**	14,115
Other recoverables	**94,256**	81,826
Non-trade receivables	**5,471**	44,268
Advance payments to suppliers	**200,405**	167,941
Prepayments	**153,785**	82,919
Housing and car loans and advances to staff	**7,818**	11,602
	501,767	415,004
Receivable:		
Within 1 year	**420,722**	345,141
After 1 year	**81,045**	69,863
	501,767	415,004

The Group entered into finance lease arrangements with customers with terms ranging from 5.3 years to 7.1 years (2021: 1.0 year to 7.1 years) and effective interest rates ranging from 0.97% to 2.29% (2021: 0.56% to 2.74%) per annum.

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C8 Bank balances and other liquid funds

Group	2022 $'000	2021 $'000
Fixed deposits with financial institutions	**30,323**	123,293
Cash and bank balances	**571,448**	692,631
Bank balances and other liquid funds	**601,771**	815,924
Deposits pledged	**(22)**	–
Cash and cash equivalents in the statement of cash flows	**601,749**	815,924

Fixed deposits with financial institutions mature at varying periods within 12 months (2021: 7 months) from the financial year-end. Interest rates range from 0.4% to 4.1% (2021: 0.1% to 1.9%) per annum, which are also the effective interest rates.

Included in cash and cash equivalents are bank deposits amounting to $29,752,000 (2021: $26,010,000) which are not freely remissible for use by the Group because of currency exchange restrictions.

Cash and cash equivalents denominated in currencies other than the respective entities' functional currencies as at 31 December are as follows:

- $111,298,000 (2021: $132,843,000) denominated in USD
- $27,023,000 (2021: $34,251,000) denominated in EUR

C9 Trade payables and accruals

Group	2022 $'000	2021 $'000
Trade payables	**1,035,615**	914,757
Non-trade payables	**135,817**	109,861
Purchase of property, plant and equipment	**19,001**	8,341
Accrued operating expenses *	**1,690,383**	1,638,504
Accrued interest payable	**18,394**	4,534
	2,899,210	2,675,997
Payable:		
Within 1 year	**2,826,498**	2,612,515
After 1 year	**72,712**	63,482
	2,899,210	2,675,997

Trade payables denominated in currencies other than the respective entities' functional currencies as at 31 December are as follows:

- $151,176,000 (2021: $130,687,000) denominated in USD
- $41,736,000 (2021: $44,592,000) denominated in EUR

* Included in the accrued operating expenses is an amount of $303,340,000 (2021: $288,424,000) for the Group's obligations under its employee compensation schemes.

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C10 Amounts due to related parties

Group	2022 $'000	2021 $'000
Trade:		
Associates	**19,489**	18,621
Joint ventures	**821**	754
Related parties	**2,834**	1,242
	23,144	20,617
Non-trade:		
Joint ventures *	**18,422**	7,151
Related parties	**321**	13
	18,743	7,164
	41,887	27,781
Payable:		
Within 1 year	**41,887**	27,781

There were no significant amounts due to related parties denominated in currencies other than the respective entities' functional currencies as at 31 December 2022 and 31 December 2021.

* Included in the amounts due to joint ventures (non-trade) is an amount of $18,250,000 (2021: $7,121,000) placed by joint ventures with a subsidiary of the Group under a cash pooling arrangement, where the effective interest rates ranging from 1.3% to 4.0% per annum (2021: 0%) is charged on the outstanding balance.

C11 Provisions

Movements in provisions are as follows:

Group	Warranties $'000	Onerous contracts $'000	Closure costs $'000	Restoration costs $'000	Total $'000
2022					
At 1 January 2022	**197,227**	**124,537**	**977**	**48,692**	**371,433**
Charged to profit or loss	**36,937**	**142,896**	**–**	**1,265**	**181,098**
Acquisition of subsidiaries	**84**	**–**	**–**	**–**	**84**
Additions	**–**	**–**	**–**	**170**	**170**
Utilised	**(29,386)**	**(62,899)**	**(14)**	**(2,629)**	**(94,928)**
Disposal of subsidiaries	**(12,050)**	**(102,444)**	**–**	**(164)**	**(114,658)**
Translation difference	**(1,965)**	**(4,062)**	**–**	**(26)**	**(6,053)**
At 31 December 2022	**190,847**	**98,028**	**963**	**47,308**	**337,146**

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C11 Provisions (continued)

Group	Warranties $'000	Onerous contracts $'000	Closure costs $'000	Restoration costs $'000	Total $'000
2021					
At 1 January 2021	181,741	118,695	1,033	35,090	336,559
Charged/(write-back) to profit or loss	46,865	85,490	–	(109)	132,246
Additions	–	–	–	14,208	14,208
Utilised	(31,375)	(81,353)	(56)	(530)	(113,314)
Disposal of subsidiaries	(13)	–	–	–	(13)
Translation difference	9	1,705	–	33	1,747
At 31 December 2021	197,227	124,537	977	48,692	371,433

Group	2022 $'000	2021 $'000
Provision:		
Within 1 year	**298,624**	331,837
After 1 year	**38,522**	39,596
	337,146	371,433

Recognition and measurement

Provisions are recognised when the Group has a present obligation (legal or constructive) as a result of past events, it is probable that an outflow of resources will be required to settle the obligation and a reliable estimate of the amount can be made.

(i) Warranties

The warranty provision represents the best estimate of the Group's contractual obligations at the reporting date.

Under the terms of the revenue contracts with key customers, the Group is obligated to make good, by repair or replacement, engineering or manufacturing defects that become apparent within the warranty period from the date of sale. The warranty obligation varies from 0.5 year to 10 years. The Group's experience of the proportion of its products sold that requires repair or replacement differs from year to year as every contract is customised to the specification of the customers.

The estimation of the provision for warranty expenses is based on the Group's past claim experience over the duration of the warranty period and the industry average in relation to warranty exposures and represents the best estimates of the costs expected to incur per dollar of sales.

The warranty provision made as at 31 December 2022 is expected to be incurred over the applicable warranty periods.

(ii) Onerous contracts

Provision for onerous contracts on uncompleted contracts is recognised immediately in profit or loss when it is determinable.

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C11 Provisions (continued)

Recognition and measurement (continued)

(iii) Closure costs

Provision for closure costs is made in respect of the expected costs that the Group will undertake between the cessation of certain operations of the Group to the completion of their liquidation.

(iv) Restoration costs

Provision for restoration costs is made for dismantlement, removal or restoration costs expected to be incurred on expiry of lease agreements.

Estimates and judgement: Provision for warranty

The provision for warranty is based on estimates from known and expected warranty work to be performed after completion. The warranty expense incurred could be higher or lower than the provision made.

Estimates and judgement: Provision for onerous contracts

The Group conducts a critical review of all its long-term contracts regularly. Allowance is made where necessary to account for onerous contracts and judgement is used to estimate the total cost to complete.

C12 Deferred income

Group	2022 $'000	2021 $'000
Government grants	**25,507**	81,209
Deferred rents	**5,670**	338
	31,177	81,547
Recognise:		
Within 1 year	**13,589**	7,665
After 1 year	**17,588**	73,882
	31,177	81,547

Government grants relate mainly to grants received to subsidise the cost of capital assets. In the prior year, the government grant included deferred grant recognised under the Jobs Support Scheme (JSS) and other government support for employee related expenses. The JSS is a temporary scheme introduced in the Singapore Budget 2020 to help enterprises to retain local employees. Under the JSS, employers will receive cash grants in relation to the gross monthly wages of eligible employees.

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C13 Contract balances

The following table provides information about contract assets and contract liabilities from contracts with customers.

Group	2022 $'000	2021 $'000	2020 $'000
Contract assets	**2,099,676**	1,726,505	1,555,781
Contract liabilities	**(1,817,927)**	(1,752,278)	(1,786,235)

The timing of revenue recognition, billings and cash collections results in billed accounts receivable (included in trade receivables), unbilled receivables (contract assets), and customer advances (contract liabilities) on the statement of financial position.

The contract assets primarily relate to the Group's rights to consideration for work completed but not billed at the reporting date. If the value of services rendered exceeds payments received from the customer, a contract asset is recognised and presented separately. Costs to fulfil are recognised in profit and loss when the related revenue is recognised. The contract asset is transferred to receivables when the entitlement to payment becomes unconditional.

Contract assets include costs to fulfil of $776,425,000 (2021: $693,698,000). Costs to fulfil of $1,474,279,000 (2021: $1,340,917,000) were recognised in profit and loss during the year.

The contract liabilities primarily relate to advance consideration received from customers for contract revenue. If the amounts invoiced to the customer exceeds the value of services rendered, a contract liability is recognised and presented separately.

These assets and liabilities are reported on the statement of financial position on a contract by contract basis at each reporting date.

The contract assets balance increased as the Group provided more services and transferred more goods ahead of the agreed payment schedules.

The contract liabilities increased due to more consideration received by the Group ahead of the provision of services and goods.

Revenue recognised in relation to contract liabilities

Group	2022 $'000	2021 $'000
Revenue recognised that was included in the contract liability balance at the beginning of the year	**415,403**	502,033

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C13 Contract balances (continued)

Transaction price allocated to the remaining performance obligations

The aggregate amount of transaction price allocated to the remaining performance obligations as at 31 December 2022 is $22,970,537,000 and the Group expects to recognise $7,155,751,000 as revenue relating to the unsatisfied (or partially unsatisfied) performance obligations in 2023 with the remaining $15,814,786,000 in 2024 and beyond.

As at 31 December 2021, the aggregate amount of transaction price allocated to the remaining performance obligations was $19,330,917,000 and the Group expected to recognise $6,590,168,000 as revenue relating to the unsatisfied (or partially unsatisfied) performance obligations in 2022 with the remaining $12,740,749,000 in 2023 and beyond.

Variable consideration that is constrained and therefore not included in the transaction price is excluded in the amount presented above.

Estimates and judgement: Contract balances

Judgements are used to estimate these total contract costs to complete. In making these estimates, management has relied on past experience of completed projects. The estimated total contract costs are reviewed every reporting period and adjusted where necessary, with the corresponding effect of change being recognised prospectively from the date of change.

C14 Financial risk management objectives and policies

The Group has exposure to the following financial risks arising from its operations and the use of financial instruments:

- Interest rate
- Foreign exchange
- Market
- Liquidity
- Credit

The Group's principal financial instruments, other than foreign exchange contracts and derivatives, comprise bank guarantees, performance bonds and bank loans, finance leases and hire purchase contracts, investments, cash and short-term deposits.

All financial transactions with the banks are governed by banking facilities duly accepted with Board of Directors' resolutions, with banking mandates, which define the permitted financial instruments and facilities limits. All financial transactions require dual signatories. The Group has various other financial assets and liabilities such as trade receivables and trade payables, which arise directly from its operations.

It is the Group's policy not to engage in foreign exchange and/or derivatives speculation. The purpose of engaging in treasury transactions is solely for hedging. The Group's treasury mandates allow only foreign exchange spot, forward or non-deliverable forward, foreign exchange swap, cross currency swap, purchase of foreign exchange call, put or collar option, forward rate agreement, interest rate swap, purchase of interest rate cap, floor or collar option. These instruments are generic in nature with no embedded or leverage features and any deviation from these instruments would require specific approval from the Board of Directors.

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C14 Financial risk management objectives and policies (continued)

The policies for managing each of these risks are broadly summarised below:

Interest rate risk

As at reporting date, the interest rate profile of the interest-bearing financial instruments is:

Group	2022 $'000	2021 $'000
Fixed rate instruments		
Financial assets	**162,783**	205,760
Financial liabilities	**(3,608,264)**	(1,811,411)
	(3,445,481)	(1,605,651)
Variable rate instruments		
Financial liabilities	**(2,944,523)**	(310,930)
	(2,944,523)	(310,930)

The Group has cash balances placed with reputable banks and financial institutions. The Group manages its interest rate risk on its interest income by placing the cash balances in varying maturities and interest rate terms with due consideration to operating cash flow requirements and optimising yield.

The Group's debts include bank loans, Medium Term Notes (MTN), commercial papers and lease liabilities (2021: bank loans, Medium Term Notes (MTN), commercial papers and lease liabilities). The Group seeks to minimise its interest rate risk exposure through tapping different sources of funds to refinance the debt instruments and/or enter into interest rate swaps.

An increase/decrease of 50 basis points in interest rate, with all other variables being held constant, would lead to a reduction/increase of the Group's profit or loss by approximately $14.7 million (2021: $1.6 million).

The Group's policy is to maintain at least 50% of its borrowings at fixed rate, using floating-to-fixed interest rate swaps to achieve this when necessary. During 2022 and 2021, the Group's borrowings at variable rate were mainly denominated in USD.

Except bank loans of $nil (2021: $132.4 million), other variable interest rates borrowings were not referenced to inter-bank offered rates (IBORs) that will be affected by the IBOR reforms.

Included in the variable rate borrowings is a USCP of $2.7 billion (2021: $350.9 million) whose interest rate on each rollover correlates with 3-month LIBOR. To hedge the variability of the cash flows of the USCP, the Group has entered into a 5-year interest rate swap of notional amount of $161.3 million as at 31 December 2022 (2021: $179.1 million) with key terms that match part of the outstanding USCP on which it pays a fixed rate and receives a variable rate.

The Group issued US$700 million of 5-year bonds and US$300 million of 10-year bonds in May 2022 to refinance part of the short term debt that was taken up to fund the acquisition of TransCore Partners, LLC and TLP Holdings, LLC (collectively, "TransCore"). The Group entered into US$1 billion of 10-year treasury locks in 4Q 2021 to lock in the U.S. Treasury forward yield in order to mitigate the volatility in the U.S. Treasury yield on the Group's expected bond issuance. Upon bond issuance, the treasury locks were settled for gains of US$91.4 million. US$59.4 million of the settlement gains were allocated to reduce interest expense on the bonds issued, while the remaining US$32 million of settlement gains are to be amortised against the next bond issuance.

The Group's borrowings and receivables are carried at amortised cost. The borrowings are periodically contractually repriced and to that extent are also exposed to the risk of future changes in market interest rates.

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C14 Financial risk management objectives and policies (continued)

Interest rate risk (continued)

Hedge ineffectiveness for interest rate swaps is assessed using the same principles as for hedges of foreign currency purchases. It may occur due to:

- the credit value/debit value adjustment on the interest rate swaps which is not matched by the loan;
- differences in critical terms between the interest rate swaps and loans; and
- the effects of the forthcoming reforms to LIBOR, because these might take effect at a different time and have a different impact on the hedged item (the floating-rate debt) and the hedging instrument (the interest rate swap used to hedge the debt).

No ineffectiveness has been recognised in relation to the interest rate swaps in finance income or finance costs in profit or loss for 2022 (2021: profit or loss).

Information relating to the Group's interest rate risk exposure is also disclosed in the notes on the Group's borrowings, investments and loans receivable, where applicable.

Foreign exchange risk

The Group is exposed to foreign exchange risk from its global operations and revenues, costs and borrowings denominated in a currency other than the respective entities' functional currencies. The Group's foreign exchange exposures are primarily from USD and EUR, and manages its exposure through forward currency contracts and embedded derivatives.

The Group's centralised Treasury Unit monitors the current and projected foreign currency cash flows within the Group and aims to reduce the exposure of the net position by transacting with the banks where appropriate.

No foreign exchange sensitivity analysis was disclosed as a reasonable change in the exchange rates would not result in any significant impact on the Group's results.

Market risk

The Group has strategic investments in unquoted equity shares. The market value of these investments will fluctuate with market conditions.

No sensitivity analysis was disclosed as a reasonable change in the market value of these investments would not result in any significant impact on the Group's results.

Liquidity risk

To manage liquidity risk, the Group monitors its net operating cash flows and maintains an adequate level of cash and cash equivalents and secured committed funding facilities from financial institutions. In assessing the adequacy of these funding facilities, management reviews its working capital requirements regularly. Notwithstanding the net current liabilities position in the current year, the Group has available financial resources, including committed lines of credit, to meet its obligations as and when they fall due. The Group has very strong credit ratings (Aaa by Moody's and AA+ by Standard & Poor's) which provide it ready access to additional borrowings as necessary.

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C14 Financial risk management objectives and policies (continued)

Liquidity risk (continued)

The table below analyses the maturity profile of the Group's financial liabilities based on the contractual undiscounted cash flows including estimated interest payments and excluding impact of netting arrangements.

Group	Contractual cash flow $'000	Within 1 year $'000	Between 1 and 5 years $'000	More than 5 years $'000
2022				
Bank loans	**(976,908)**	**(586,721)**	**(244,622)**	**(145,565)**
Commercial papers	**(2,702,583)**	**(2,702,583)**	**–**	**–**
Medium term notes	**(2,584,992)**	**(52,394)**	**(2,084,571)**	**(448,027)**
Lease liabilities	**(679,142)**	**(72,789)**	**(223,322)**	**(383,031)**
Trade and other payables	**(2,941,097)**	**(2,868,385)**	**(25,297)**	**(47,415)**
Derivative financial instruments:				
• Gross-settled forward currency contracts				
- payments	**(1,978,722)**	**(1,338,221)**	**(640,501)**	**–**
- receipts	**1,970,734**	**1,327,566**	**643,168**	**–**
• Net-settled interest rate swaps	**5,657**	**5,579**	**(104)**	**182**
Financial guarantees	**(9,480)**	**(3,210)**	**(6,270)**	**–**
2021				
Bank loans	(214,359)	(144,451)	(42,039)	(27,869)
Commercial papers	(351,416)	(351,416)	–	–
Medium term notes	(1,064,274)	(15,206)	(1,049,068)	–
Lease liabilities	(702,271)	(69,088)	(205,184)	(427,999)
Trade and other payables	(2,703,778)	(2,640,296)	(26,248)	(37,234)
Derivative financial instruments:				
• Gross-settled forward currency contracts				
- payments	(1,646,898)	(1,120,991)	(525,907)	–
- receipts	1,637,833	1,127,732	510,101	–
• Net-settled interest rate swaps	(5,835)	(3,732)	(2,103)	–
• Treasury lock	216	216	–	–
Financial guarantees	(12,656)	(1,661)	(10,995)	–

Except for the cash flows arising from the intra-group financial guarantee, it is not expected that the cash flows included in the maturity analysis could occur significantly earlier, or at significantly different amounts.

At the reporting date, the Group does not consider it probable that a claim will be made against the Group under the financial guarantees.

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C14 Financial risk management objectives and policies (continued)

Liquidity risk (continued)

Recognition and measurement

Financial guarantees are financial instruments issued by the Group to joint ventures that require the issuer to make specified payments to reimburse the holder for the loss it incurs because a specified debtor fails to meet payment when due in accordance with the original or modified terms of a debt instrument.

Financial guarantees are recognised initially at fair value and are classified as financial liabilities. Subsequently, they are measured at the higher of the loss allowance determined in accordance with SFRS(I) 9 and the amount initially recognised less, when appropriate, the cumulative amount of income recognised in accordance with the principles of SFRS(I) 15.

ECLs are a probability-weighted estimate of credit losses. ECLs are measured for financial guarantees issued as the expected payments to reimburse the holder less any amounts that the Group expects to recover.

Credit risk

Credit risk is managed through the application of credit approvals, credit limits and monitoring procedures. Where appropriate, the Company or its subsidiaries obtain collaterals from customers or arrange master netting agreements. Cash terms, advance payments, and letters of credit or bank guarantees are required for customers of lower credit standing.

The carrying amounts of financial assets and contract assets represent the Group's maximum exposures to credit risk, before taking into account any collateral held.

Group	2022 $'000	2021 $'000
Investments	**76,704**	36,129
Derivative financial instruments	**50,359**	31,389
Contract assets	**2,099,676**	1,726,505
Trade receivables	**1,163,491**	1,068,290
Amounts due from related parties	**170,089**	125,452
Advances and other receivables	**147,577**	164,144
Bank balances and other liquid funds	**601,771**	815,924
	4,309,667	3,967,833

(Reversal of impairment)/impairment losses on financial assets and contract assets recognised in profit or loss are as follows:

Group	2022 $'000	2021 $'000
Trade receivables	**(5,646)**	9,863
Contract balances arising from contracts with customers	**1,716**	19,965
	(3,930)	29,828

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C14 Financial risk management objectives and policies (continued)

Exposure to credit risk

As at 31 December 2022, 18% (2021: 20%) of trade receivables and contract assets relate to three major customers of the Group.

The table below analyses the trade receivables and contract assets by the Group's main reportable segments:

Group	Carrying amount 2022 $'000	Carrying amount 2021 $'000
Commercial Aerospace	**785,325**	625,110
Urban Solutions & Satcom	**1,118,256**	853,762
Defence & Public Security	**1,359,586**	1,315,923
	3,263,167	2,794,795

A summary of the Group's exposures to credit risk for trade receivables and contract assets is as follows:

	2022		2021		2020	
Group	**Not credit impaired $'000**	**Credit impaired $'000**	**Not credit impaired $'000**	**Credit impaired $'000**	**Not credit impaired $'000**	**Credit impaired $'000**
Receivables measured at lifetime ECL:						
Trade receivables and contract assets	**3,263,167**	**70,751**	2,794,795	82,811	2,605,149	104,648
Loss allowance	**–**	**(70,751)**	–	(82,811)	–	(104,648)
Total	**3,263,167**	**–**	2,794,795	–	2,605,149	–

Expected credit loss assessment

Trade receivables and contract assets

For specific trade receivables and contract assets identified by the Group to be credit impaired, the Group recognised a loss allowance equal to lifetime expected credit loss (ECL). Hence, the recoverability of these balances are assessed separately from the allowance matrix.

For the remaining trade receivables and contract assets, the Group uses an allowance matrix to measure the ECL of trade receivables and contract assets from its customers. Loss rates are calculated using a 'roll rate' method based on the probability of a receivable progressing through successive stages of delinquency to write-off. Roll rates are calculated separately for exposures in different segments based on the common credit risk characteristics.

In calculating the ECL rates, the Group considers historical loss rates for each category of customers and adjusts to reflect current and forward-looking macroeconomic factors affecting the ability of the customers to settle the receivables. Based on this assessment, the Group has concluded that the ECLs from these trade receivables and contract assets are immaterial.

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C14 Financial risk management objectives and policies (continued)

Expected credit loss assessment (continued)

The table below shows the aging and loss allowance analysis of the Group's trade receivables as at 31 December 2022 and 2021:

2022	Not past due $'000	1 – 90 days $'000	91 – 180 days $'000	181 – 360 days $'000	> 360 days $'000	Total $'000
Commercial Aerospace						
Trade receivables and contract assets	745,344	49,653	13,038	751	5,942	814,728
Loss allowance	(18,347)	(2,796)	(1,827)	(491)	(5,942)	(29,403)
Urban Solutions & Satcom						
Trade receivables and contract assets	1,040,526	57,635	15,671	10,597	15,576	1,140,005
Loss allowance	(2,634)	(1,339)	(2,784)	(1,961)	(13,031)	(21,749)
Defence & Public Security						
Trade receivables and contract assets	1,297,368	65,279	6,997	3,093	6,448	1,379,185
Loss allowance	(12,524)	(510)	(129)	(59)	(6,377)	(19,599)

2021	Not past due $'000	1 – 90 days $'000	91 – 180 days $'000	181 – 360 days $'000	> 360 days $'000	Total $'000
Commercial Aerospace						
Trade receivables and contract assets	586,345	49,879	9,341	9,863	16,600	672,028
Loss allowance	(19,377)	(370)	(4,906)	(7,190)	(15,075)	(46,918)
Urban Solutions & Satcom						
Trade receivables and contract assets	810,782	37,700	5,312	7,737	9,406	870,937
Loss allowance	(3,104)	(1,273)	(878)	(2,791)	(9,129)	(17,175)
Defence & Public Security						
Trade receivables and contract assets	1,227,112	76,222	8,659	11,083	11,565	1,334,641
Loss allowance	(11,588)	(122)	(694)	(215)	(6,099)	(18,718)

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C14 Financial risk management objectives and policies (continued)

Expected credit loss assessment (continued)

The movement in the allowance for impairment in respect of trade receivables and contract assets during the year were as follows:

	Lifetime ECL	
Group	**2022 $'000**	**2021 $'000**
At 1 January	**82,811**	104,648
(Reversal of)/impairment loss recognised	**(3,930)**	29,828
Amounts written off	**(5,942)**	(52,777)
Acquisition of subsidiaries	**273**	–
Disposal of subsidiaries	**–**	(13)
Translation difference	**(2,461)**	1,125
At 31 December	**70,751**	82,811

Bank balances and other liquid funds

Bank balances and other liquid funds are placed with financial institutions, which mainly have long-term rating of A3 by Moody's or A- by Standard & Poor's or the equivalent by a reputable credit rating agency. Impairment on bank balances and other liquid funds has been measured on the 12-month expected loss basis and reflects the short maturities of the exposures. The Group considers that its bank balances and other liquid funds to have low credit risk based on the external credit ratings of the counterparties. The amount of the allowance on bank balances and other liquid funds is insignificant.

Other financial assets

Other financial assets comprise amounts due from related parties and other receivables, which are mostly short-term in nature. Impairment on other financial assets has been measured on the 12-month expected loss basis and reflects the short maturities of exposures. The Group considers its other financial assets to have low credit risk and the amount of the allowance on other financial assets is insignificant.

C14 Financial risk management objectives and policies (continued)

Expected credit loss assessment (continued)

Recognition and measurement

The Group recognises loss allowances for ECLs on financial assets measured at amortised cost, contract assets (as defined in SFRS(I) 15), and debt investments at FVOCI, but not for equity investments.

Loss allowances of the Group are measured using either the simplified or general approach.

The Group applies the simplified approach to provide for ECLs for all trade receivables (including lease receivables) and contract assets. The simplified approach requires the loss allowance to be measured at an amount equal to lifetime ECLs.

The Group applies the general approach to provide for ECLs on all other financial instruments. Under the general approach, the loss allowance is measured at an amount equal to 12-month ECLs at initial recognition.

The Group considers a financial asset to be in default when:

- the borrower is unlikely to pay its credit obligations to the Group in full, without recourse by the Group to actions such as realising security (if any is held); or
- the financial asset remains outstanding for more than the reasonable range of past due days, taking into consideration historical payment track record, current macroeconomics situation as well as general industry trend.

<u>Credit-impaired financial assets</u>

At each reporting date, the Group assesses whether financial assets carried at amortised cost and debt investments at FVOCI are credit-impaired. A financial asset is 'credit-impaired' when one or more events that have a detrimental impact on the estimated future cash flows of the financial asset have occurred.

Evidence that a financial asset is credit-impaired includes the following observable data:

- significant financial difficulty of the borrower or issuer;
- a breach of contract such as a default or payment remains outstanding for more than a reasonable range of past due days;
- the restructuring of a loan or advance by the Group on terms that the Group would not consider otherwise;
- it is probable that the borrower will enter bankruptcy or other financial reorganisation; or
- the disappearance of an active market for a security because of financial difficulties.

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C14 Financial risk management objectives and policies (continued)

Expected credit loss assessment (continued)

Recognition and measurement (continued)

Presentation of allowance for ECL in the statement of financial position

Loss allowances for financial assets measured at amortised cost and contract assets are deducted from the gross carrying amount of these assets.

Write-off

The gross carrying amount of a financial asset is written off (either partially or in full) to the extent that there is no realistic prospect of recovery. This is generally the case when the Group determines that the debtor does not have assets or sources of income that could generate sufficient cash flows to repay the amounts subject to the write-off. However, financial assets that are written off could still be subject to enforcement activities in order to comply with the Group's procedures for recovery of amounts due.

Estimates and judgement: Impairment of financial assets and contract assets

Impairment of financial assets and contract assets are estimated based on historical loss experience for assets with similar credit risk characteristics. The estimated ECL is reviewed every reporting period and adjusted where necessary, with the corresponding effect of change being recognised prospectively from the date of change.

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C15 Classification and fair value of financial instruments

Group	Carrying amount		
	Amortised cost $'000	FVTPL $'000	Fair value – hedging instruments $'000
2022			
Financial assets measured at fair value			
Investments	–	42,718	–
Associates	–	15,460	–
Derivative financial instruments	–	16,437	33,922
	–	74,615	33,922
Financial assets at amortised cost			
Trade receivables	1,163,491	–	–
Amounts due from related parties	170,089	–	–
Advances and other receivables	147,577	–	–
Bank balances and other liquid funds	601,771	–	–
	2,082,928	–	–
Financial liabilities measured at fair value			
Derivative financial instruments	–	(12,839)	(44,584)
Financial liabilities at amortised cost			
Trade payables and accruals	–	–	–
Amounts due to related parties	–	–	–
Borrowings	–	–	–
	–	–	–

Carrying amount			Fair value			
FVOCI – equity instruments $'000	Other financial liabilities $'000	Total carrying amount $'000	Level 1 $'000	Level 2 $'000	Level 3 $'000	Total $'000
33,986	–	76,704	26,273	–	50,431	76,704
–	–	15,460	–	–	15,460	15,460
–	–	50,359	–	50,359	–	50,359
33,986	–	142,523	26,273	50,359	65,891	142,523
–	–	1,163,491				
–	–	170,089				
–	–	147,577				
–	–	601,771				
–	–	2,082,928				
–	–	(57,423)	–	(57,423)	–	(57,423)
–	(2,899,210)	(2,899,210)				
–	(41,887)	(41,887)				
–	(6,534,537)	(6,534,537)				
–	(9,475,634)	(9,475,634)				

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C15 Classification and fair value of financial instruments (continued)

Group	Carrying amount – Amortised cost $'000	Carrying amount – FVTPL $'000 (restated)	Carrying amount – Fair value – hedging instruments $'000
2021			
Financial assets measured at fair value			
Investments	–	15,180	–
Associates	–	34,215	–
Derivative financial instruments	–	20,240	11,149
	–	69,635	11,149
Financial assets at amortised cost			
Trade receivables	1,068,290	–	–
Amounts due from related parties	125,452	–	–
Advances and other receivables	164,144	–	–
Bank balances and other liquid funds	815,924	–	–
	2,173,810	–	–
Financial liabilities measured at fair value			
Derivative financial instruments	–	(15,266)	(37,862)
Financial liabilities at amortised cost			
Trade payables and accruals	–	–	–
Amounts due to related parties	–	–	–
Borrowings	–	–	–
	–	–	–

FVOCI – equity instruments $'000	Other financial liabilities $'000	Total carrying amount $'000	Level 1 $'000	Level 2 $'000	Level 3 $'000	Total $'000
		Carrying amount		Fair value		
(restated)						
20,949	–	36,129	–	–	36,129	36,129
–	–	34,215	–	–	34,215	34,215
–	–	31,389	–	31,389	–	31,389
20,949	–	101,733	–	31,389	70,344	101,733
–	–	1,068,290				
–	–	125,452				
–	–	164,144				
–	–	815,924				
–	–	2,173,810				
–	–	(53,128)	–	(53,128)	–	(53,128)
–	(2,675,997)	(2,675,997)				
–	(27,781)	(27,781)				
–	(2,115,220)	(2,115,220)				
–	(4,818,998)	(4,818,998)				

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C15 Classification and fair value of financial instruments (continued)

Movements in Level 1 financial instruments measured at fair value

The following table presents the reconciliation for all financial instruments measured at fair value based on quoted price (Level 1).

Group	2022 $'000	2021 $'000
Equity instruments (quoted), at FVTPL		
At 1 January	**–**	–
Transfer from equity instruments (unquoted), at FVTPL	**9,461**	–
Total unrealised gains recognised in profit or loss, other income, net	**17,313**	–
Translation difference	**(501)**	–
At 31 December	**26,273**	–

Movements in Level 3 financial instruments measured at fair value

The following table presents the reconciliation for all financial instruments measured at fair value based on significant unobservable inputs (Level 3).

Group	2022 $'000	2021 $'000 (restated)
Associates		
At 1 January	**34,215**	20,858
Addition during the year	**750**	2,203
Disposal during the year	**(20,976)**	–
Total unrealised gains recognised in profit or loss, other income, net	**1,471**	11,154
At 31 December	**15,460**	34,215
Equity instruments (unquoted), at FVTPL		
At 1 January	**15,180**	9,255
Transfer to equity instruments (quoted), at FVTPL	**(9,461)**	–
Addition during the year	**12,701**	5,719
Total unrealised (losses)/gains recognised in profit or loss, other income, net	**(1,975)**	206
At 31 December	**16,445**	15,180
Equity instruments (unquoted), at FVOCI		
At 1 January	**20,949**	13,883
Addition during the year	**15,994**	7,066
Changes in fair value of investments	**(2,957)**	–
At 31 December	**33,986**	20,949
	65,891	70,344

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C15 Classification and fair value of financial instruments (continued)

Recognition and measurement

(a) **Non-derivative financial assets and liabilities**

Classification and subsequent measurement

On initial recognition, a financial asset is classified as measured at: amortised cost; FVOCI – debt investment; FVOCI – equity investment; or FVTPL.

Financial assets are not reclassified subsequent to their initial recognition unless the Group changes its business model for managing financial assets, in which case all affected financial assets are reclassified on the first day of the first reporting period following the change in the business model.

Financial assets	Classification	Subsequent measurement
Amortised cost	• The asset is held within a business model whose objective is to hold assets to collect contractual cash flows; and • The contractual terms of the asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.	Measured at amortised cost using the effective interest method. The amortised cost is reduced by impairment losses. Interest income, foreign exchange gains and losses and impairment are recognised in profit or loss. Any gain or loss on derecognition is recognised in profit or loss.
Debt investments at FVOCI	• The asset is held within a business model whose objective is achieved by collecting contractual cash flows and selling financial assets; and • The contractual terms of the asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.	Measured at fair value. Interest income calculated using the effective interest method, foreign exchange gains and losses and impairment are recognised in profit or loss. Other net gains and losses are recognised in OCI. On derecognition, gains and losses accumulated in OCI are reclassified to profit or loss.
Equity investments at FVOCI	On initial recognition of an equity investment that is not held-for-trading, the Group may irrevocably elect to present subsequent changes in the investment's fair value in OCI. This election is made on an investment-by-investment basis.	Measured at fair value. Dividends are recognised as income in profit or loss unless the dividend clearly represents a recovery of part of the cost of the investment. Other net gains and losses are recognised in OCI and are never reclassified to profit or loss.

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C15 Classification and fair value of financial instruments (continued)

Recognition and measurement (continued)

(a) **Non-derivative financial assets and liabilities** (continued)

Classification and subsequent measurement (continued)

Financial assets	Classification	Subsequent measurement
FVTPL*	All other financial assets are classified as measured at FVTPL. Financial assets that are held-for-trading or are managed, and whose performance is evaluated on a fair value basis, are measured at FVTPL. * *On initial recognition, the Group may irrevocably designate a financial asset that otherwise meets the requirements to be measured at amortised cost or at FVOCI, as at FVTPL if doing so eliminates or significantly reduces an accounting mismatch that would otherwise arise.*	Measured at fair value. Net gains and losses, including any interest or dividend income, are recognised in profit or loss.

Business model assessment

The Group makes an assessment of the objective of a business model in which an asset is held at a portfolio level because this best reflects the way the business is managed and information is provided to management. The information considered includes:

- The stated policies and objectives for the portfolio and the operation of those policies in practice;
- How the performance of the portfolio is evaluated and reported to the Group's management;
- The risks that affect the performance of the business model and how those risks are managed;
- How managers of the portfolio are compensated; and
- The frequency, volume and timing of disposals in prior periods, the reasons for such disposals and its expectations about future activity.

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C15 Classification and fair value of financial instruments (continued)

Recognition and measurement (continued)

(a) **Non-derivative financial assets and liabilities** (continued)

Classification and subsequent measurement (continued)

Assessment of whether contractual cash flows are solely payments of principal and interest

For assessment purposes, 'principal' is defined as the fair value of the financial asset on initial recognition. 'Interest' is defined as consideration for the time value of money and for the credit risk associated with the principal amount outstanding during a particular period of time and for other basic lending risks and costs (e.g. liquidity risk and administrative costs), as well as profit margin.

In assessing whether the contractual cash flows are solely payments of principal and interest, the Group considers contingent events, leverage features, modifications of the time value of money and other limiting terms in the contractual terms of the instrument, which change the timing or amount of contractual cash flows such that the cash flows of the instrument would not be reflective of solely payments of principal and interest.

Reclassifications

Financial assets are not reclassified subsequent to their initial recognition, except in the period after the Group changes its business model for managing those financial assets.

Financial liabilities

The Group classifies its financial liabilities, other than financial guarantees and loan commitments, as measured at amortised cost or FVTPL.

Derecognition

Financial assets

The Group derecognises a financial asset when the contractual rights to the cash flows from the financial asset expire, or when it transfers the rights to receive the contractual cash flows in a transaction in which substantially all of the risks and rewards of ownership of the financial asset are transferred or in which the Group neither transfers nor retains substantially all of the risks and rewards of ownership and it does not retain control of the financial asset.

Financial liabilities

The Group derecognises a financial liability when its contractual obligations are discharged or cancelled, or expired.

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C15 Classification and fair value of financial instruments (continued)

Recognition and measurement (continued)

(b) **Fair value**

The Group has an established approach with respect to the measurement of fair values.

Fair value hierarchy

The Group classifies fair value measurement using a fair value hierarchy that reflects the significance of the inputs used in making the measurements. The following table shows the levels of fair value hierarchy and the respective valuation technique used in measuring the fair values, as well as significant unobservable inputs:

	Types of financial instruments	Valuation method
Level 1	**FVOCI** - Equity investments (quoted)	Determined by reference to their quoted bid prices for these investments as at reporting date.
	FVTPL - Equity investments (quoted)	Determined by reference to their quoted bid prices for these investments as at reporting date.
Level 2	**FVOCI** - Equity investments (unquoted)	Determined by reference to the most recent purchase price.
	Derivatives - Forward currency contracts - Interest rate swaps - Embedded derivatives	Determined based on broker quotes. Similar contracts are traded in an active market and the quotes reflect the actual transactions in similar instruments.
	FVTPL - Investment in associates - Equity investments (unquoted)	Determined by reference to the most recent purchase price.
Level 3	**FVOCI** - Equity investment (unquoted)	Determined based on latest funding round.
	FVTPL - Investment in associates - Equity investments (unquoted)	Determined based on valuation performed using adjusted market multiples. Changing one or more of the inputs to reasonable alternative assumptions is not expected to have a material impact on the changes in fair value.

C15 Classification and fair value of financial instruments (continued)

Recognition and measurement (continued)

(b) **Fair value** (continued)

Measurement of fair values

The Group regularly reviews significant unobservable inputs and valuation adjustments. If third party information, such as broker quotes or pricing services, is used to measure fair value, then the Group assesses and documents the evidence obtained from the third parties to support the conclusion that such valuations meet the requirements of SFRS(I)s, including the level in the fair value hierarchy the resulting fair value estimate should be classified.

The Group recognises transfers between levels of the fair value hierarchy as of the end of the reporting period during which the change has occurred. In 2021, there were no transfers between the different levels of fair value hierarchy. In 2022, other than transfers from Level 3 to Level 1, there were no other transfers between the different levels of fair value hierarchy.

The following methods and assumptions are used to estimate the fair value of other classes of financial instruments:

Types of financial instruments	Valuation method
Bank balances, other liquid funds and short-term receivables	Carrying amounts approximate fair values due to the relatively short-term maturity of these instruments.
Short-term borrowings and other current payables	
Long-term receivables	Estimated based on the expected cash flows discounted to present value.
Long-term payables	Estimated based on present value of future principal and interest cash flows, discounted at the market rate of interest at the reporting date.

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C16 Derivative financial instruments

Cash flow hedges

At 31 December 2022, the Group held the following instruments to hedge exposures to changes in foreign currency and interest rates:

Group	Within 1 year	Between 1 to 5 years	More than 5 years
2022			
Foreign currency risk			
Nominal amount of forward exchange contracts (in thousands of SGD)	**889,047**	**486,684**	**–**
- Average EUR : USD forward contract rate	**1.1444**	**1.0954**	**–**
- Average USD : SGD forward contract rate	**1.3820**	**1.3476**	**–**
- Average EUR : SGD forward contract rate	**1.4870**	**1.5779**	**–**
Nominal amount of embedded derivatives (in thousands of SGD)	**55,740**	**78,044**	**–**
- Average EUR : SGD	**1.6426**	**1.6638**	**–**
- Average USD : SGD	**1.3910**	**1.3932**	**–**
- Average GBP : SGD	**1.8240**	**1.8311**	**–**
Interest rate risk			
Nominal amount of interest rate swaps	**–**	**356,785**	**112,065**
- Average fixed interest rate	**–**	**2.9038**	**2.6455**
Nominal amount of treasury lock	**–**	**–**	**–**
- Average fixed interest rate	**–**	**–**	**–**
2021			
Foreign currency risk			
Nominal amount of forward exchange contracts (in thousands of SGD)	664,271	307,274	–
- Average EUR : USD forward contract rate	1.1663	1.1932	–
- Average USD : SGD forward contract rate	1.3626	1.3672	–
- Average EUR : SGD forward contract rate	1.5702	1.5851	–
Nominal amount of embedded derivatives (in thousands of SGD)	167,455	101,890	–
- Average EUR : SGD	1.5987	1.6080	–
- Average USD : SGD	1.3490	1.3923	–
- Average GBP : SGD	1.8394	1.8268	–
Interest rate risk			
Nominal amount of interest rate swaps	–	179,087	–
- Average fixed interest rate	–	2.6722	–
Nominal amount of treasury lock	1,351,600	–	–
- Average fixed interest rate	1.6050	–	–

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C16 Derivative financial instruments (continued)

Cash flow hedges (continued)

The amounts at the reporting date relating to items designated as hedged items are as follows:

Group	Change in value used for calculating hedge ineffectiveness $'000	Cash flow hedge reserve $'000
2022		
Foreign currency risk		
Sales	**(18,343)**	**(4,526)**
Receivables	**–**	**(323)**
Purchases	**(6,181)**	**(3,668)**
Payables	**(155)**	**(314)**
Embedded derivatives	**(12,974)**	**(18,287)**
Interest rate risk		
Variable rate borrowings	**147,522**	**127,413**
2021		
Foreign currency risk		
Sales	(23,398)	(4,155)
Receivables	–	(323)
Purchases	1,252	(1,327)
Payables	(237)	228
Embedded derivatives	(3,677)	(5,313)
Interest rate risk		
Variable rate borrowings	6,860	(14,675)

There are no balances remaining in the cash flow hedge reserve from hedging relationships for which hedge accounting is no longer applied.

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C16 Derivative financial instruments (continued)

Cash flow hedges (continued)

The amounts relating to items designated as hedging instruments and hedge ineffectiveness are as follows:

Group	2022			
	Nominal amount $'000	Assets $'000	Liabilities $'000	Line item in the statement of financial position where the hedging instrument is included
Foreign currency risk				
Forward exchange contracts	1,375,731	24,164	(40,478)	Derivative financial instruments, advances and other receivables and trade payables and accruals
Embedded derivatives	133,784	–	(8,911)	
Interest rate risk				
Interest rate swaps [(a)]	468,850	16,506	(2,951)	Derivative financial instruments
Treasury lock	–	–	–	

During the year 2022					
Changes in the value of the hedging instrument recognised in OCI $'000	Hedge ineffectiveness recognised in profit or loss $'000	Line item in profit or loss that includes hedge ineffectiveness	Amount from hedging reserve transferred to cost of inventory $'000	Amount reclassified from hedging reserve to profit or loss $'000	Line item in profit or loss affected by the reclassification
(24,679)	–	–	3,983	17,442	Revenue / Cost of sales / Operating expenses / Finance costs, net
(12,974)	–	–	–	–	–
147,738	–	–	–	(4)	Finance costs
(216)	–	–	–	2,764	Finance costs

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C16 Derivative financial instruments (continued)

Cash flow hedges (continued)

Group	2021			
	Nominal amount $'000	Assets $'000	Liabilities $'000	Line item in the statement of financial position where the hedging instrument is included
Foreign currency risk				
Forward exchange contracts	971,545	4,951	(17,839)	Derivative financial instruments, advances and other receivables and trade payables and accruals
Embedded derivatives	269,334	–	(5,186)	
Interest rate risk				
Interest rate swaps [(a)]	179,087	–	(5,385)	Derivative financial instruments
Treasury lock	1,351,600	4,774	(4,558)	

(a) The contractual notional amount of interest rate swaps held for hedging which is based on LIBOR is $161,268,000 (2021: $179,087,000).

During the year 2021					
Changes in the value of the hedging instrument recognised in OCI $'000	Hedge ineffectiveness recognised in profit or loss $'000	Line item in profit or loss that includes hedge ineffectiveness	Amount from hedging reserve transferred to cost of inventory $'000	Amount reclassified from hedging reserve to profit or loss $'000	Line item in profit or loss affected by the reclassification
(22,383)	2	Finance costs, net	(2,389)	(4,360)	Revenue / Cost of sales / Operating expenses / Finance costs, net
(3,677)	–	–	–	–	–
6,644	–	–	–	–	–
216	–	–	–	–	–

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C16 Derivative financial instruments (continued)

Cash flow hedges (continued)

The following table provides a reconciliation by risk category of components of equity and analysis of OCI items, net of tax, resulting from cash flow hedge accounting:

Group	Hedging reserve 2022 $'000	Hedging reserve 2021 $'000
Balance at 1 January	**(22,242)**	(7,572)
Change in fair value:		
Foreign currency risk	**(37,653)**	(26,060)
Interest rate risk	**147,522**	6,860
Equity accounted joint ventures	**2,321**	2,145
Amount reclassified to profit or loss:		
Foreign currency risk	**17,442**	(4,360)
Interest rate risk	**(5,434)**	2,781
Amount included in the cost of non-financial items:		
Foreign currency risk – inventory purchases	**3,983**	(2,389)
Tax movements on reserves during the year	**594**	6,353
Balance at 31 December	**106,533**	(22,242)

Derivative financial instruments and hedge accounting

The derivative financial instruments are initially recognised at fair value on the date of which a derivative contract is entered into. Attributable transaction costs are recognised in profit or loss as incurred. Subsequent to initial recognition, derivative financial instruments are remeasured at their fair values.

Any gains or losses arising from changes in the fair value of derivatives that do not qualify for hedge accounting are taken directly to the profit or loss.

Designation of hedges

At inception or upon reassessment of the hedge arrangement, the Group documents the relationship between hedging instrument and hedged item, and the methods that will be used to measure the effectiveness of the hedged relationship, as well as risk management policies and strategies in undertaking various hedged transactions.

The Group also documents its assessment, both at inception and on an ongoing basis, the economic relationship between hedging instruments and hedged item, including whether derivatives designated as hedging instruments are highly effective in offsetting changes in fair values or cash flows of the hedged item.

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C16 Derivative financial instruments (continued)

Derivative financial instruments and hedge accounting (continued)

	Category	Subsequent measurement
(1)	**Cash flow hedges**	When a derivative is designated in a cash flow hedge, the effective portion of changes in the fair value of the derivative is recognised in other comprehensive income limited to the cumulative change in the fair value of the hedged item and presented in the fair value reserve. Any ineffective portion of changes in the fair value of the derivative (i.e. the extent to which changes in the fair value of the hedge instrument do not match the changes in fair value of the hedged item) is recognised immediately in profit or loss. The amount accumulated in equity is retained in other comprehensive income, and depending on the nature of the hedged item, will either be transferred to the profit or loss in the same period that the underlying transaction affects profit or loss or be capitalised in the initial carrying amount of the non-financial item. If the hedging instrument no longer meets the criteria for hedge accounting, expires or is sold, terminated or exercised, hedge accounting is discontinued prospectively. The cumulative gain or loss previously recognised in the fair value reserve remains there until the forecast transaction occurs. If the forecast transaction is no longer expected to occur, then the amount accumulated in equity is reclassified to profit or loss.
(2)	**Fair value hedges**	Changes in the fair value of derivative financial instruments that are designated and qualify as fair value hedges are recorded in profit or loss, together with any changes in the fair value of the hedged asset or liability that are attributable to the hedged risk.
(3)	**Net investment hedges**	The Group designates certain derivatives and non-derivative financial liabilities as hedges of foreign exchange risk on a net investment in a foreign operation. When a derivative instrument or a non-derivative financial liability is designated as the hedging instrument in a hedge of a net investment in a foreign operation, the effective portion of, for a derivative, changes in the fair value of the hedging instrument or, for a non-derivative, foreign exchange gains and losses is recognised in OCI and presented in the translation reserve within equity. Any ineffective portion of the changes in the fair value of the derivative or foreign exchange gains and losses on the non-derivative is recognised immediately in profit or loss. The amount recognised in OCI is reclassified to profit or loss as a reclassification adjustment on disposal of the foreign operation.

Estimates and judgement: Interest rate benchmark reform

Following the global financial crisis, the reform and replacement of benchmark interest rates such as USD LIBOR and other inter-bank offered rates (IBORs) has become a priority for global regulators.

To transition existing contracts and agreements that reference LIBOR to Secured Overnight Financing Rate (SOFR), adjustments for term differences and credit differences might need to be applied to SOFR, to enable the two benchmark rates to be economically equivalent on transition.

The Group's treasury function is managing the Group's LIBOR transition plan. The greatest change will be amendments to the contractual terms of the LIBOR-referenced interest rate swap and the corresponding update of the hedge designation.

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C16 Derivative financial instruments (continued)

Derivative financial instruments and hedge accounting (continued)

Estimates and judgement: Interest rate benchmark reform (continued)

Relief applied

The Group has applied the following Phase 1 reliefs that were introduced by the amendments made to SFRS(I) 9 Financial Instruments:

- When considering the 'highly probable' requirement, the Group has assumed that the variable interest rate on which the Group's hedged debt is based does not change as a result of IBOR reform;
- In assessing whether the hedge is expected to be highly effective on a forward-looking basis the Group has assumed that the variable interest rate on which the cash flows of the hedged debt and the interest rate swap that hedges it are based is not altered by the IBOR reform; and
- The Group has not recycled the cash flow hedge reserve relating to the period after the reforms are expected to take effect.

Assumptions made

In calculating the change in fair value attributable to the hedged risk of floating-rate debt, the Group has made the following assumptions that no changes to the terms of the floating rate debt are anticipated to reflect its current expectations.

Phase 2 of the amendments requires that, for financial instruments measured using amortised cost measurement, changes to the basis for determining the contractual cash flows required by IBOR reform are reflected by adjusting their effective interest rate. No immediate gain or loss is recognised. A similar practical expedient exists for lease liabilities.

These expedients are only applicable to changes that are required by IBOR reform, which is the case if, and only if, the change is necessary as a direct consequence of IBOR reform and the new basis for determining the contractual cash flows is economically equivalent to the previous basis immediately preceding the change.

For lease liabilities where there is a change to the basis for determining the contractual cash flows, as a practical expedient the lease liability is remeasured by discounting the revised lease payments using a discount rate that reflects the change in the interest rate where the change is required by IBOR reform. If lease modifications are made in addition to those required by IBOR reform, the Group applies the relevant SFRS(I) 16 requirements to account for the entire lease modification, including those changes required by IBOR reform.

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D. EMPLOYEE BENEFITS

The Group uses the following programs to reward and recognise employees and key executives, including key management personnel.

- Economic Value Added (EVA)-based Incentive Scheme
- Defined contribution plans
- Post-employment benefits
- Share plans

The Group believes that these programs reinforce the value of ownership and incentivise and drive performance both individually and collectively to maximise returns to the shareholders.

D1	Economic Value Added (EVA)-based Incentive Scheme	**D3**	Post-employment benefits
D2	Personnel expenses	**D4**	Share-based payment arrangements

D1 Economic Value Added (EVA)-based Incentive Scheme

The Group adopts an incentive compensation plan, which is tied to the creation of EVA, as well as attainment of individual and Group performance goals for its key executives. An EVA bank is used to hold incentive compensation credited in any year.

Typically a portion of EVA-based bonus declared in the financial year is paid out in cash each year, with the balance being deferred for payment in the following years.

Estimates and judgement: EVA-based Incentive Scheme (EBIS)

Estimates of the Group's obligations arising from the EBIS at the reporting date may be affected by future events, which cannot be predicted with any certainty. The assumptions and estimates are made based on management's knowledge and experience and may vary from actual experience so that the actual liability may vary considerably from the best estimates. Negative EVA will result in a clawback of EVA bonus accumulated in previous years.

D2 Personnel expenses

Group	2022 $'000	2021 $'000
Wages and salaries*	**2,139,466**	1,670,620
Contributions to defined contribution plans	**192,220**	178,287
Defined benefit plan (income)/expenses	**(44,603)**	34,836
Share-based payments	**24,091**	21,122
Other personnel expenses	**299,700**	231,700
	2,610,874	2,136,565

* $2,200,000 (2021: $204,698,000) of COVID-19 related government grants were recognised during the year, including amount received under the Jobs Support Scheme and various government grants received by the Group's subsidiaries in the countries they operate in. These amounts were deducted in wages and salaries.

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D2 Personnel expenses (continued)

Recognition and measurement

(i) Short-term employee benefits

Short-term employee benefit obligations are measured on an undiscounted basis and are expensed as the related service is provided.

(ii) Defined contribution plans

Defined contribution plans are post-employment benefit plans under which the Group pays fixed contributions into separate entities such as the Central Provident Fund and will have no legal or constructive obligation to pay further amounts. The Group's contributions to the defined contribution plans are recognised in the income statement as expenses in the financial year to which they relate.

D3 Post-employment benefits

Group	2022 $'000	2021 $'000
Net defined benefit asset	–	257
Total post-employment benefit asset	–	257
Net defined benefit liabilities	**206,393**	407,320
Liability for staff benefits	**8,316**	9,793
Total post-employment benefit liabilities	**214,709**	417,113
Non-current	**206,296**	409,473
Current	**8,413**	7,640
	214,709	417,113

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D3 Post-employment benefits (continued)

Movement in net defined benefit liability/(asset)

The following table shows a reconciliation from the opening balances to the closing balances for net defined benefit liability/(asset) and its components.

	Defined benefit obligation		Fair value of plan assets		Net defined benefit liability/(asset)	
Group	**2022 $'000**	**2021 $'000**	**2022 $'000**	**2021 $'000**	**2022 $'000**	**2021 $'000**
Balance at 1 January	**814,980**	822,428	**(407,917)**	(362,023)	**407,063**	460,405
Included in profit or loss						
Current service cost	**19,937**	25,555	**–**	–	**19,937**	25,555
Past service credit	**(72,656)**	–	**–**	–	**(72,656)**	–
Interest cost/(income)	**18,260**	17,014	**(11,517)**	(8,978)	**6,743**	8,036
Administrative expenses	**62**	293	**1,311**	952	**1,373**	1,245
	(34,397)	42,862	**(10,206)**	(8,026)	**(44,603)**	34,836
Included in OCI						
Remeasurement loss/(gain):						
• Actuarial loss/(gain) arising from:						
- demographic assumptions	**–**	1,952	**–**	–	**–**	1,952
- financial assumptions	**(212,833)**	(37,795)	**213**	(68)	**(212,620)**	(37,863)
- experience assumptions	**3,115**	11,925	**163**	(241)	**3,278**	11,684
• Return on plan assets excluding interest income	**–**	–	**76,850**	(33,641)	**76,850**	(33,641)
Effect of movements in exchange rates	**–**	51	**–**	–	**–**	51
	(209,718)	(23,867)	**77,226**	(33,950)	**(132,492)**	(57,817)
Others						
Contributions paid by the employer	**(7,670)**	(16,810)	**(4,347)**	(14,900)	**(12,017)**	(31,710)
Benefits paid	**(19,208)**	(8,772)	**19,167**	16,973	**(41)**	8,201
Translation difference	**(14,977)**	(861)	**3,460**	(5,991)	**(11,517)**	(6,852)
Balance at 31 December	**529,010**	814,980	**(322,617)**	(407,917)	**206,393**	407,063

The expenses are recognised in the following line items in profit or loss:

Group	**2022 $'000**	**2021 $'000**
Cost of sales	**19,609**	24,185
Administrative expenses	**4,491**	3,987
Other operating (income)/expenses	**(73,044)**	77
Finance cost, net	**4,341**	6,587
Defined benefit obligation (income)/expenses	**(44,603)**	34,836

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D3 Post-employment benefits (continued)

Movement in net defined benefit liability/(asset) (continued)

The fair value of plan assets in each category are as follows:

Group	2022 $'000	2021 $'000
Equity securities	**100,675**	133,996
Government bonds	**167,158**	27,266
Corporate bonds	**–**	167,614
Derivatives	**267**	355
Cash/money markets	**–**	4,979
Property occupied by the Group	**37,519**	48,516
Funds managed by a trustee	**2,411**	2,514
Funds with insurance companies	**14,588**	22,677
Fair value of plan assets	**322,618**	407,917

All equity securities and government bonds have quoted prices in active markets. All government bonds have an average rating of A+.

In the case of the funded plans, the Group ensures that the investment positions are managed within an asset-liability matching (ALM) framework that has been developed to achieve long-term investments that are in line with the obligations under the pension schemes. Within this framework, the Group's ALM objective is to match assets to the pension obligations by investing in long-term fixed interest securities with maturities that match the benefit payments as they fall due and in the appropriate currency.

Defined benefit obligation

(a) **Actuarial assumptions**

The following relates to the actuarial assumptions of significant post-employment defined benefit plans for subsidiaries in Germany and United States of America. The remaining defined benefit plans are not material to the Group and additional disclosures are not shown at the reporting date.

The following were the principal actuarial assumptions at the reporting date (expressed as weighted averages):

Group	2022 %	2021 %
Discount rate	**4.2**	2.0
Future salary growth	**3.4**	3.2
Future pension growth	**2.4**	2.0

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D3 Post-employment benefits (continued)

Defined benefit obligation (continued)

(a) **Actuarial assumptions** (continued)

Assumptions regarding future mortality have been based on published statistics and mortality tables. The current longevities underlying the values of the defined benefit obligation at the reporting date were as follows:

Group	2022		2021	
	Germany	U.S.	Germany	U.S.
Longevity at age 65 for current pensioners:				
Males	**20.6**	**20.1**	20.5	20.0
Females	**24.0**	**22.1**	23.9	22.1
Longevity at age 65 for current members aged 45:				
Males	**23.4**	**21.6**	23.2	21.5
Females	**26.3**	**23.6**	26.1	23.5

At 31 December 2022, the weighted average duration of the defined benefit obligation was 20.0 years (2021: 24.4 years) for the subsidiaries in Germany and 10.8 years (2021: 13.9 years) for the subsidiary in United States of America.

(b) **Sensitivity analysis**

Reasonably possible changes at the reporting date to one of the relevant actuarial assumptions, holding other assumptions constant, would have affected the defined benefit obligation by the amounts shown below.

Group	2022		2021	
	Increase $'000	Decrease $'000	Increase $'000	Decrease $'000
Discount rate (0.5% movement)	**(29,516)**	**34,730**	(57,121)	70,520
Future salary growth (0.25% movement)	**105**	**(96)**	1,851	(1,621)
Future pension growth (0.25% movement)	**1,565**	**(1,512)**	2,283	(2,184)
Future mortality (10% movement)	**(9,356)**	**9,689**	(19,921)	24,401

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D3 Post-employment benefits (continued)

(b) Sensitivity analysis (continued)

Recognition and measurement

A defined benefit plan is a post-employment benefit plan other than a defined contribution plan. The Group's net obligation in respect of defined benefit plans is calculated separately for each plan by estimating the amount of future benefit that employees have earned in return for their service in the current and prior periods; that benefit is discounted to determine its present value.

The fair value of any plan assets is deducted. The Group determines the net interest expense/(income) on the net defined benefit liability/(asset) for the period by applying the discount rate used to measure the defined benefit obligation at the beginning of the annual period to the net defined benefit liability/(asset).

D4 Share-based payment arrangements

PSP2010 and PSP2020 (PSP)

The PSP is established with the objective of motivating Senior Management Executives to strive for sustained long-term growth and performance in ST Engineering and its subsidiaries (ST Engineering Group or the Group). Awards of performance shares are granted conditional on performance targets set based on the ST Engineering Group corporate objectives.

The performance measures used in PSP grants are Absolute Total Shareholder Return (TSR) taking reference to the Group's Cost of Equity and Earnings Per Share (EPS) Growth against pre-determined targets. In addition to the PSP performance targets being met, final award for PSP is conditional upon satisfactory performance of the recipient.

RSP2010 and RSP2020 (RSP)

The RSP is established with the objective of motivating managers and above to strive for sustained long-term growth of ST Engineering Group. It also aims to foster a share ownership culture among employees within the ST Engineering Group and to better align employees' incentive scheme with shareholders' interest.

A minimum threshold performance is required for any shares to be released to the recipients at the end of the performance period. The shares will vest equally over a four-year performance period, subject to continued employment with the Group and maintaining a satisfactory performance rating for the financial year preceding each tranche of vesting.

Movement in the number of shares under the PSP and RSP are as follows:

Group	2022		2021	
	PSP	RSP	PSP	RSP
Outstanding awards				
Balance at 1 January	**5,139,347**	**13,324,714**	5,546,244	13,262,039
Granted	**1,621,823**	**7,209,787**	935,496	6,918,603
Lapsed	**(1,546)**	**(800,133)**	(645,280)	(915,380)
Released	**(690,408)**	**(5,523,440)**	(697,113)	(5,940,548)
Balance at 31 December	**6,069,216**	**14,210,928**	5,139,347	13,324,714

These shares were awarded by reissuance of treasury shares.

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D4 Share-based payment arrangements (continued)

Singapore Technologies Engineering Performance Share Plan (PSP) and Singapore Technologies Engineering Restricted Share Plan (RSP)

Group	PSP Year of grant		RSP Year of grant	
	2022	2021	**2022**	2021
Volatility of the Company's shares (%)	**22.28**	22.78	**10.65 – 22.28**	15.14 – 26.67
Risk-free rate (%)	**1.72**	0.72	**1.14 – 1.84**	0.47 – 0.83
Share price ($)	**4.07**	3.86	**4.07**	3.86
Dividend yield	(–Management's forecast in line with dividend policy–)		(–Management's forecast in line with dividend policy–)	

The fair value of the performance and restricted shares is determined on grant date using the Monte Carlo simulation model.

During the current year, the Group met partially the pre-determined target performance level and hence, 690,408 performance shares were awarded in respect of the grant made in 2019 under PSP2010. In the prior year, 697,113 performance shares were awarded in respect of the grant made in 2018 under PSP2010.

Recognition and measurement

The Group operates a number of share-based payment plans. A description of each type of share-based payment arrangement that existed at any time during the period is described in the Directors' Statement.

The grant date fair value of share-based payment awards granted to employees is recognised as an employee expense, with a corresponding increase in equity, over the period that the employees unconditionally become entitled to the awards.

The amount recognised as an expense is adjusted to reflect the number of awards for which the related service and non-market vesting conditions are expected to be met, such that the amount ultimately recognised as an expense is based on the number of awards that meet the related service and non-market performance conditions at the vesting date.

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E. CAPITAL STRUCTURE AND FINANCING

This section provides information relating to the Group's capital structure and how they affect the Group's financial position and performance, and how the risks are managed.

The primary objective of the Group's capital management is to ensure that it maintains a strong credit rating and healthy financial metrics in order to support its business and maximise shareholder value. Capital consists of total shareholders' funds and gross debts.

The Group manages its capital structure and makes adjustment to it, in light of changes in economic and financial market conditions. The Group may adjust the dividend payout to shareholders, buy back or issue new shares to optimise capital structure within the Group.

E1 Capital management

The Group is currently in a net debt position and will continue to be guided by prudent financial policies of which gearing is an important aspect. Neither the Company nor any of its subsidiaries is subject to externally imposed capital requirements.

Group	**2022 $'000**	**2021 $'000**
Gross debt		
Bank loans	**906,705**	206,766
Commercial papers	**2,698,657**	350,869
Medium term notes	**2,340,349**	1,010,704
Lease liabilities	**588,826**	546,881
	6,534,537	2,115,220

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E1 Capital management (continued)

Group	2022 $'000	2021 $'000
Shareholders' funds		
Share capital	**895,926**	895,926
Treasury shares	**(36,377)**	(33,475)
Capital and other reserves	**65,631**	2,003
Retained earnings	**1,472,816**	1,548,308
	2,397,996	2,412,762
Non-controlling interests	**254,858**	255,453
	2,652,854	2,668,215
Gross debt/equity ratio	**2.5**	0.8
Gross debt	**6,534,537**	2,115,220
Less: cash and cash equivalents	**(601,749)**	(815,924)
Net debt*	**5,932,788**	1,299,296

* Net debt refers to gross debt less cash and cash equivalents

E2 Finance costs, net

Group	2022 $'000	2021 $'000
Finance income		
Interest income		
- bank deposits	**4,689**	1,024
- staff loans	**3**	4
- finance lease	**495**	451
- others	**4,084**	2,457
Exchange gain, net	**–**	4,388
Fair value changes of financial instruments		
- gain on forward currency contract designated as hedging instrument	**–**	2,861
- gain on forward currency contract not designated as hedging instrument	**1,932**	501
	11,203	11,686

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E2 Finance costs, net (continued)

Group	2022 $'000	2021 $'000
Finance costs		
Interest expense		
- bank loans and overdrafts	**(20,896)**	(6,584)
- medium term notes and commercial papers	**(94,418)**	(18,669)
- lease liabilities	**(15,854)**	(15,752)
- contracts with customers	**(1,040)**	(1,190)
- others	**(5,101)**	(2,853)
Exchange loss, net	**(11,520)**	–
Fair value changes of financial instruments		
- loss on ineffective portion of forward currency contract designated as hedging instrument in cash flow hedges	**–**	(2)
Fair value changes of hedged items	**–**	(2,675)
	(148,829)	(47,725)
Finance costs, net, recognised in profit or loss	**(137,626)**	(36,039)

Recognition and measurement

Finance income comprises interest income, dividend income, gains on disposal and fair valuation of financial assets and gains on hedging instruments that are recognised in profit or loss. Interest income is recognised as it accrues in profit or loss, using the effective interest method. Dividend income is recognised in profit or loss when the shareholder's right to receive payment is established.

Finance costs comprise interest expense, losses on disposal and fair valuation of financial assets, and losses on hedging instruments that are recognised in profit or loss. Interest expense that are not directly attributable to the acquisition, construction or production of a qualifying asset are recognised in profit or loss using the effective interest method.

Foreign currency gains and losses on financial assets and liabilities are reported on a net basis as either finance income or finance cost.

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E3 Investments

Group	2022 $'000	2021 $'000 (restated)
Equity shares, at FVTPL		
- quoted	**26,273**	–
- unquoted	**16,445**	15,180
Equity shares, at FVOCI		
- unquoted	**33,986**	20,949
Total investments, net of impairment losses	**76,704**	36,129
Represented by:		
Long-term investments	**76,704**	36,129
	76,704	36,129

E4 Borrowings

Group	Note	Non-current $'000	Current $'000	Total $'000
31 December 2022				
Bank loans	(a)	**50,550**	**856,155**	**906,705**
Commercial papers	(b)	**–**	**2,698,657**	**2,698,657**
Medium term notes	(c)	**2,340,349**	**–**	**2,340,349**
Lease liabilities	(d)	**515,669**	**73,157**	**588,826**
		2,906,568	**3,627,969**	**6,534,537**
31 December 2021				
Bank loans	(a)	**64,165**	**142,601**	**206,766**
Commercial papers	(b)	**–**	**350,869**	**350,869**
Medium term notes	(c)	**1,010,704**	**–**	**1,010,704**
Lease liabilities	(d)	**480,465**	**66,416**	**546,881**
		1,555,334	**559,886**	**2,115,220**

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E4 Borrowings (continued)

(a) *Bank loans*

	Currency	Effective interest rate 2022 %	Effective interest rate 2021 %	Maturity 2022	Maturity 2021	Group 2022 $'000	Group 2021 $'000
Bank loans	USD	**1.0 – 5.8**	1.0 – 5.0	**2023**	2022 – 2023	**689,458**	143,422
	EUR	**1.4 – 1.6**	1.4 – 1.6	**2026 – 2030**	2026 – 2029	**52,247**	63,344
	SGD	**3.0**	–	**2023**	–	**165,000**	–
						906,705	206,766
- Unsecured						**869,947**	162,643
- Secured						**36,758**	44,123
At the end of the year						**906,705**	206,766

There are bank loans which are secured by assets as follows:

Secured by		Loan amount ($)
Certain property, plant and equipment of subsidiaries	–	$23,229,000 (2021: $28,738,000)
Subsidiary's land use right	–	$13,529,000 (2021: $15,385,000)

All bank loans are denominated in the respective entities' functional currency.

(b) *Commercial papers*

Group	2022 $'000	2021 $'000
Principal	**2,702,583**	351,416
Unamortised interest	**(3,699)**	(463)
Unamortised costs	**(227)**	(84)
	2,698,657	350,869

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E4 Borrowings (continued)

(c) *Medium term notes*

Group	2022 $'000	2021 $'000
Principal	**2,351,825**	1,013,700
Unamortised discount	**(11,476)**	(2,996)
	2,340,349	1,010,704
Unamortised discount:		
At beginning of the year	**2,996**	3,809
Additions	**10,316**	–
Amortisation for the year	**(1,595)**	(892)
Translation difference	**(241)**	79
At the end of the year	**11,476**	2,996

On 29 April 2020, the Group issued US$750 million 1.50% Notes due in 2025 under its S$5.0 billion Multicurrency Medium Term Note Programme. The bonds bore interest at a fixed rate of 1.50% per annum and interest was payable every six months from the date of issue. The bonds were unconditionally and irrevocably guaranteed by the Company. On 5 May 2022, the Group issued US$700 million of 5-year bonds and US$300 million of 10-year bonds. The bonds bore interest at a fixed rate of 3.38% and 3.75% per annum and interest was payable every six months from the date of issue. The bonds were unconditionally and irrevocably guaranteed by the Company.

(d) *Lease liabilities*

The Group leases various assets including real estate leases, vehicles, machinery and IT equipment. Information about leases for which the Group is a lessee is presented below.

Group	2022 $'000	2021 $'000
Maturity analysis – contractual undiscounted cash flows		
Within 1 year	**72,789**	69,088
Between 1 and 5 years	**223,322**	205,184
After 5 years	**383,031**	427,999
Total undiscounted lease liabilities at 31 December	**679,142**	702,271
Lease liabilities included in the statement of financial position at 31 December	**588,826**	546,881
Repayable:		
Within 1 year	**73,157**	66,416
After 1 year	**515,669**	480,465
	588,826	546,881

The total cash outflow for leases recognised in the statement of cash flows is $99,492,000 (2021: $89,141,000).

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E4 Borrowings (continued)

(d) *Lease liabilities* (continued)

(i) Real estate leases

The Group leases land and buildings for its office space, hangar and production facilities. The leases run for a period of 5 to 30 years. Some leases include an option to renew the lease for an additional period of the same duration after the end of the contract term.

Some leases provide for additional rent payments that are based on changes in local price indices. Some also require the Group to make payments that relate to the property taxes levied on the lessor and insurance payments made by the lessor; these amounts are generally determined annually.

The Group sub-leases some of its properties under operating and finance leases.

Extension options

Some leases of office buildings contain extension options exercisable by the Group up to the day before the end of the non-cancellable contract period. Where practicable, the Group seeks to include extension options in new leases to provide operational flexibility. The extension options held are exercisable only by the Group and not by the lessors. The Group assesses at lease commencement whether it is reasonably certain to exercise the extension options. The Group reassesses whether it is reasonably certain to exercise the options if there is a significant event or significant change in circumstances within its control.

Estimates and judgement: Extension options – Lease terms

Extension option is included in the lease term if the lease is reasonably certain to be extended. In determining the lease term, management considers all facts and circumstances that create an economic incentive to exercise the extension option. The leases for office buildings contain extension periods, for which the related lease payments had not been included in lease liabilities as the Group is not reasonably certain to exercise these extension options. The Group negotiates extension options to optimise operational flexibility in terms of managing the assets used in the Group's operations. The majority of the extension options are exercisable by the Group and not by the lessor.

2022 Group	Lease liabilities recognised (discounted) $'000	Potential future lease payments not included in lease liabilities (discounted) $'000
Office buildings	**54,544**	**101,054**

2021 Group	Lease liabilities recognised (discounted) $'000	Potential future lease payments not included in lease liabilities (discounted) $'000
Office buildings	18,414	23,069

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E4 Borrowings (continued)

(d) ***Lease liabilities*** (continued)

(ii) Other leases

The Group leases vehicles and equipment, with lease terms of 3 to 5 years. In some cases, the Group has options to purchase the assets at the end of the contract term.

The Group monitors the use of these vehicles and equipment, and reassesses the estimated amount payable under the residual value guarantees at the reporting date to remeasure lease liabilities and right-of-use assets.

The Group also leases IT equipment and machinery. These leases are short-term and/or leases of low-value items. The Group has elected not to recognise right-of-use assets and lease liabilities for these leases.

Reconciliation of movements of liabilities and assets to cash flows arising from financing activities

Group	Liabilities			Assets	
	Borrowings $'000	Trade payables and accruals $'000	Amounts due to related parties $'000	Deposits pledged $'000	Total $'000
Balance at 1 January 2022	2,115,220	2,675,997	27,781	–	4,818,998
Changes from financing cash flows					
Proceeds from bank loans	1,098,690	–	–	–	1,098,690
Proceeds from commercial papers	4,206,138	–	–	–	4,206,138
Proceeds from medium term note issuance	1,385,000	–	–	–	1,385,000
Repayment of bank loans	(386,204)	–	–	–	(386,204)
Repayment of commercial papers	(1,852,969)	–	–	–	(1,852,969)
Repayment of lease liabilities	(83,894)	–	–	–	(83,894)
Interest paid	(33,800)	(38,582)	–	–	(72,382)
Deposit pledged	–	–	–	(22)	(22)
Total changes from financing cash flows	4,332,961	(38,582)	–	(22)	4,294,357
Changes arising from obtaining or losing control of subsidiaries	47,051	23,068	–	–	70,119
The effect of changes in foreign exchange rates	(60,977)	(15,714)	–	–	(76,691)
Change in fair value	(15,338)	–	–	–	(15,338)
Liability-related other changes					
Working capital changes	(49,573)	206,159	14,106	–	170,692
New leases	76,166	–	–	–	76,166
Interest expense	89,027	48,282	–	–	137,309
Total liability-related other changes	115,620	254,441	14,106	–	384,167
Balance at 31 December 2022	6,534,537	2,899,210	41,887	(22)	9,475,612

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E4 Borrowings (continued)

Reconciliation of movements of liabilities and assets to cash flows arising from financing activities (continued)

Group	Liabilities			Assets	
	Borrowings $'000	Trade payables and accruals $'000	Amounts due to related parties $'000	Deposits pledged $'000	Total $'000
Balance at 1 January 2021	2,046,895	2,237,361	23,833	(1,145)	4,306,944
Changes from financing cash flows					
Proceeds from bank loans	132,027	–	–	–	132,027
Proceeds from commercial papers	756,896	–	–	–	756,896
Proceeds from other loans	10,933	–	–	–	10,933
Repayment of bank loans	(35,103)	–	–	–	(35,103)
Repayment of commercial papers	(810,960)	–	–	–	(810,960)
Repayment of other loans	(30,933)	–	–	–	(30,933)
Repayment of lease liabilities	(73,456)	–	–	–	(73,456)
Interest paid	(16,212)	(17,432)	–	–	(33,644)
Deposit discharged	–	–	–	1,145	1,145
Total changes from financing cash flows	(66,808)	(17,432)	–	1,145	(83,095)
Changes arising from obtaining or losing control of subsidiaries	–	369	–	–	369
The effect of changes in foreign exchange rates	25,419	14,254	–	–	39,673
Change in fair value	(9,425)	–	–	–	(9,425)
Liability-related other changes					
Working capital changes	(728)	423,936	3,948	–	427,156
New leases	92,328	–	–	–	92,328
Interest expense	27,539	17,509	–	–	45,048
Total liability-related other changes	119,139	441,445	3,948	–	564,532
Balance at 31 December 2021	2,115,220	2,675,997	27,781	–	4,818,998

E5 Commitments and contingent liabilities

(i) Capital commitments

Group	2022 $'000	2021 $'000
Capital expenditure contracted but not provided for in the financial statements	**142,094**	95,336

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E5 Commitments and contingent liabilities (continued)

(ii) Leases – As lessee

As at 31 December 2022, the Group had certain non-cancellable future minimum lease payments for short-term leases or leases for low-value assets amounting to $2,025,000 (31 December 2021: $2,178,000).

(iii) Leases – As lessor

The Group has entered into non-cancellable operating leases on its aircraft, aircraft engines and certain property, plant and equipment. The lease terms range from 1 to 10 years (2021: 1 to 12 years).

The following table sets out a maturity analysis of lease payments, showing the undiscounted lease payments to be received after the reporting date.

Group	2022 $'000	2021 $'000
Less than 1 year	**18,163**	8,530
1 to 2 years	**16,768**	7,459
2 to 3 years	**8,824**	4,971
3 to 4 years	**3,722**	4,661
4 to 5 years	**1,886**	3,586
More than 5 years	**1,365**	3,021
Total undiscounted lease payments	**50,728**	32,228

(iv) Contingent liabilities (unsecured)

The Group is a party to various claims that arise in the normal course of the Group's business. The total liabilities on these matters cannot be determined with certainty. However, in the opinion of management, the ultimate liability, to the extent not otherwise provided for, will not materially impact the consolidated financial statements of the Group.

The Company has issued corporate guarantees to banks and other lenders for the borrowings of its subsidiaries. These guarantees are financial guarantees as they require the Company to reimburse the lenders if the related parties fail to make principal or interest payments when due in accordance with the terms of their borrowings.

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E5 Commitments and contingent liabilities (continued)

Recognition and measurement

As a lessee

At the inception of the contract, the Group assesses if the contract contains a lease. A contract contains a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. Reassessment is only required when the terms and conditions of the contract are changed.

The Group recognised a right-of-use asset and lease liability at the date which the underlying asset is available for use. Right-of-use assets are measured at cost which comprises the initial measurement of lease liabilities adjusted for any lease payments made at or before the commencement date and lease incentive received. Any initial direct costs that would not have been incurred if the lease had not been obtained are added to the carrying amount of the right-of-use assets.

These right-of-use assets are subsequently depreciated using the straight-line method from the commencement date to the earlier of the end of the useful life of the right-of-use asset or the end of the lease term.

Right-of-use assets (except for those which meets the definition of an investment property) are presented in Note C2.

The lease liability is initially measured at the present value of the lease payments discounted using the implicit rate in the lease, if the rate can be readily determined. If that rate cannot be readily determined, the Group shall use its incremental borrowing rate.

Lease payments include the following:

- Fixed payment (including in-substance fixed payments), less any lease incentives receivables;
- Variable lease payment that are based on an index or rate, initially measured using the index or rate as at the commencement date;
- Amount expected to be payable under residual value guarantees;
- The exercise price of a purchase option if is reasonably certain to exercise the option; and
- Payment of penalties for terminating the lease, if the lease term reflects the Group exercising that option.

For contracts that contain both lease and non-lease components, the Group allocates the consideration to each lease component on the basis of the relative stand-alone price of the lease and non-lease component. The Group has elected to not separate lease and non-lease component for property leases and account these as one single lease component.

Lease liability is measured at amortised cost using the effective interest method. Lease liability shall be remeasured when:

- There is a change in future lease payments arising from changes in an index or rate;
- There is a change in the Group's assessment of whether it will exercise an extension option; or
- There is modification in the scope or the consideration of the lease that was not part of the original term.

Lease liability is remeasured with a corresponding adjustment to the right-of-use asset or is recorded in profit or loss if the carrying amount of the right-of-use asset has been reduced to zero.

E5 Commitments and contingent liabilities (continued)

Short-term and low value leases

The Group has elected to not recognise right-of-use assets and lease liabilities for short-term leases that have lease terms of 12 months or less and leases of low value, except for sublease arrangements. Lease payments relating to these leases are expensed to profit or loss on a straight-line basis over the lease term.

As a lessor

The Group leases equipment under finance leases and office spaces under operating leases to non-related parties.

Finance leases are leases where the Group has transferred substantially all risks and rewards incidental to ownership of the leased assets to the lessees.

The leased asset is derecognised and the present value of the lease receivable is recognised on the statement of financial position and included in "Trade and other receivables". The difference between the gross receivable and the present value of the lease receivable is recognised as unearned finance income.

Each lease payment received is applied against the gross investment in the finance lease receivable to reduce both the principal and the unearned finance income. The finance income is recognised in profit or loss on a basis that reflects a constant periodic rate of return on the net investment in the finance lease receivable.

Initial direct costs incurred by the Group in negotiating and arranging finance leases are added to finance lease receivables and reduce the amount of income recognised over the lease term.

Operating leases are leases where the Group retains substantially all risks and rewards incidental to ownership. Rental income from operating leases (net of any incentives given to the lessees) is recognised in profit or loss on a straight-line basis over the lease term.

Initial direct costs incurred by the Group in negotiating and arranging operating leases are added to the carrying amount of the leased assets and recognised as an expense in profit or loss over the lease term on the same basis as the lease income.

Contingent rents are recognised as income in profit or loss when earned.

In classifying a sublease, the Group as an intermediate lessor classifies the sublease as a finance or an operating lease with reference to the right-of-use asset arising from the head lease, rather than the underlying asset.

When the sublease is assessed as a finance lease, the Group derecognises the right-of-use asset relating to the head lease that it transfers to the sublessee and recognised the net investment in the sublease within "Trade and other receivables". Any differences between the right-of-use asset derecognised and the net investment in sublease is recognised in profit or loss. Lease liability relating to the head lease is retained in the statement of financial position, which represents the lease payments owed to the head lessor.

When the sublease is assessed as an operating lease, the Group recognises lease income from sublease in profit or loss within "Other income". The right-of-use asset relating to the head lease is not derecognised.

For contract which contains lease and non-lease components, the Group allocates the consideration based on a relative stand-alone selling price basis.

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E6 Share capital

Company	2022 $'000	2021 $'000
Issued and fully paid, with no par value		
At beginning and end of the year 3,122,495,197 ordinary shares	**895,926**	895,926

Included in share capital is a special share issued to the Minister for Finance. The special share enjoys all the rights attached to the ordinary shares. In addition, the special share carries the right to approve any resolution to be passed by the Company, either in general meeting or by its Board of Directors, on certain matters specified in the Company's Constitution. The special share may be converted at any time into an ordinary share.

The holders of ordinary shares are entitled to receive dividends as and when declared by the Company. All ordinary shares carry one vote per share without restriction.

Recognition and measurement

Ordinary shares are classified as equity. Incremental costs directly attributable to the issuance of ordinary shares are recognised as a deduction from equity, net of any tax effects.

E7 Treasury shares

Company	2022 $'000	2021 $'000
At beginning of the year	**(33,475)**	(23,743)
Purchased during the year	**(26,430)**	(32,894)
Reissue of treasury shares pursuant to share plans	**23,528**	23,162
At end of the year	**(36,377)**	(33,475)

Treasury shares relate to ordinary shares of the Company that are held by the Company.

During the year, the Company purchased 7,000,000 (2021: 8,500,000) of its ordinary shares by way of on-market purchases. The shares, held as treasury shares, were included as deduction against shareholders' equity. 6,213,848 (2021: 6,637,661) treasury shares, at a cost of $23,528,000 (2021: $23,162,000), were reissued pursuant to its RSP and PSP.

Recognition and measurement

When ordinary shares are reacquired by the Company, the consideration paid is recognised as a deduction from equity. Reacquired shares are classified as treasury shares. When treasury shares are sold, or re-issued subsequently, the cost of treasury shares is reversed from the treasury shares account and the realised gain or loss on transaction is presented as a change in equity of the Company. No gain or loss is recognised in profit or loss.

Treasury shares have no voting rights and no dividends are allocated to them.

E8 Capital reserves

Included in capital reserves are:

(a) an amount of $115,948,000 (2021: $115,948,000) relating to share premium of the respective pooled enterprises, namely ST Engineering Aerospace Ltd., ST Engineering Electronics Ltd., ST Engineering Land Systems Ltd. and ST Engineering Marine Ltd. classified as capital reserve upon the pooling of interests during the year ended 31 December 1997; and

(b) an amount of $15,880,000 (2021: $12,008,000) relating to realised loss (2021: realised loss) on reissuance of treasury shares under share-based payment arrangements as at 31 December 2022.

Capital reserves are non-distributable.

E9 Other reserves

Group	2022 $'000	2021 $'000
Foreign currency translation reserve	**(205,740)**	(140,483)
Statutory reserve	**1,593**	1,618
Fair value reserve	**103,576**	(22,242)
Share-based payment reserve	**81,183**	75,920
Premium paid on acquisition of non-controlling interests	**(15,049)**	(16,750)
	(34,437)	(101,937)
Fair value reserve movement arising from other comprehensive income comprises:		
Net fair value changes on financial assets:		
- Net fair value changes during the year for FVOCI equity instruments	**(2,957)**	–
Foreign currency translation reserve movement arising from other comprehensive income comprises:		
Foreign currency translation differences arising from:		
- Translation of loans forming part of net investments in foreign entities	**(11,459)**	(6,500)
- Share of translation difference of associates and joint ventures	**(15,438)**	9,123
- Reserves released on disposal of subsidiaries	**8,149**	(5,643)
- Translation of foreign entities	**(46,509)**	16,611
	(65,257)	13,591

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E9 Other reserves (continued)

Other reserves are non-distributable.

Type of reserve	Nature
Foreign currency translation reserve	Comprises foreign exchange differences arising from the translation of the financial statements of foreign entities, effective portion of the hedging instrument which is used to hedge against the Group's net investment in foreign currencies as well as from the translation of foreign currency loans used to hedge or form part of the Group's net investments in foreign entities.
Statutory reserve	Statutory reserve comprises transfers from revenue reserve in accordance with the regulations of the foreign jurisdiction in which the Group's subsidiaries and joint ventures operate, principally in the People's Republic of China where the subsidiaries and joint ventures are required to make appropriation to a Statutory Reserve Fund and Enterprise Expansion Fund. The laws of the countries restrict the distribution and use of these statutory reserves.
Fair value reserve	Fair value reserve comprises the cumulative fair value changes of financial instruments at FVOCI and the effective portion of hedging instruments, until they are disposed or impaired.
Share-based payment reserve	Represents the cumulative value of services received for the issuance of the options and shares under the share plans of the Company issued to employees and non-executive directors.
Premium paid on acquisition of non-controlling interests	Difference between the consideration paid on acquisition of non-controlling interests and the carrying value of the proportionate share of the net assets acquired.

E10 Dividends

Company	2022 $'000	2021 $'000
Final dividend paid in respect of the previous financial year of 10.0 cents (2021: 10.0 cents) per share	**311,806**	311,922
Interim dividend paid in respect of the current financial year of 12.0 cents (2021: 5.0 cents) per share	**373,819**	155,969
	685,625	467,891

The Directors propose a final dividend of 4.0 cents (2021: 10.0 cents) per share amounting to $124.9 million (2021: $312.2 million) in respect of the financial year ended 31 December 2022. These dividends have not been recognised as a liability as at year end as they are subject to the approval by shareholders at the Annual General Meeting of the Company.

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F. GROUP STRUCTURE

This section explains significant aspects of ST Engineering's group structure, including joint arrangements that the Group has interest in, its controlled entities and how changes have affected the Group structure. It also provides information on business acquisitions and disposals made during the financial year as well as information relating to ST Engineering's related parties, the extent of related party transactions and the impact they had on the Group's financial performance and position.

F1	Subsidiaries	**F4**	Associates and joint ventures
F2	Acquisition and disposal of controlling interests in subsidiaries in 2022/2021	**F5**	Related party information
F3	Non-controlling interests in subsidiaries		

F1 Subsidiaries

Details of the significant subsidiaries of the Group are as follows:

	Country of incorporation	Effective equity interest held by the Group 2022 %	2021 %
Elbe Flugzeugwerke GmbH [1]	Germany	**55**	55
MRA Systems, LLC [4]	U.S.	**100**	100
ST Engineering Advanced Networks & Sensors Pte. Ltd.	Singapore	**100**	100
ST Engineering Aerospace Ltd.	Singapore	**100**	100
ST Engineering Aerospace Services Company Pte. Ltd.	Singapore	**80**	80
ST Engineering Defence Aviation Services Pte. Ltd.	Singapore	**100**	100
ST Engineering Electronics Ltd.	Singapore	**100**	100
ST Engineering iDirect (Europe) NV [3]	Belgium	**100**	100
ST Engineering Land Systems Ltd.	Singapore	**100**	100
ST Engineering Marine Ltd.	Singapore	**100**	100
ST Engineering Mission Software & Services Pte. Ltd.	Singapore	**100**	100
ST Engineering Unmanned & Integrated Systems Pte. Ltd.	Singapore	**100**	100
ST Engineering North America, Inc. [4]	U.S.	**100**	100
ST Engineering RHQ Ltd. [2]	United Kingdom	**100**	100
ST Engineering IHQ Pte. Ltd.	Singapore	**100**	100
ST Engineering Treasury Pte. Ltd.	Singapore	**100**	100
STE TransCore Holdings, Inc [4]	U.S.	**100**	–
TransCore Partners, LLC [4]	U.S.	**100**	–

[1] Audited by PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft for consolidation purposes.
[2] Not required to be audited under the law in the country of incorporation.
[3] Audited by PricewaterhouseCoopers Antwerp for consolidation purposes.
[4] Audited by PricewaterhouseCoopers U.S. for consolidation purposes.

All significant subsidiaries that are required to be audited under the law in the country of incorporation are audited by PricewaterhouseCoopers LLP Singapore and network of member firms of PricewaterhouseCoopers International Limited (PwCIL), except as indicated above.

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F2 Acquisition and disposal of controlling interests in subsidiaries in 2022/2021

Acquisition of controlling interest in subsidiary in 2022

(i) Acquisition of controlling interests in TransCore Partners, LLC and TLP Holdings, LLC (TransCore)

On 18 March 2022, the Group acquired 100% of TransCore for a net cash consideration of $3,655,274,000. TransCore's main principal activities is transportation solutions.

TransCore contributed revenue of $620,619,000 and net profit of $61,919,000 to the Group for the period from 18 March 2022 to 31 December 2022.

Had the above business been consolidated from 1 January 2022, the Group's consolidated revenue and net profit for the year ended 31 December 2022 would have been $759,172,000 and $58,577,000 respectively.

Identifiable assets acquired and liabilities assumed

The acquisition had the following effect on the Group's assets and liabilities on acquisition date:

	Fair values recognised on acquisition 2022 $'000
Property, plant and equipment	13,156
Right-of-use assets	39,213
Intangible assets	1,031,062
Long-term trade receivables	15,519
Inventories	46,610
Contract assets	230,206
Trade receivables	76,457
Advances and other receivables	6,750
Bank balances and other liquid funds	25,187
Contract liabilities	(9,497)
Trade payables and accruals	(87,091)
Provisions	(84)
Provision for taxation	(138)
Borrowings	(47,051)
Non-current contract liabilities	(6,449)
Total identifiable net assets	1,333,850
Goodwill arising on consolidation	2,321,424
Total purchase consideration	3,655,274
Cash outflow on acquisition:	
Cash consideration paid	3,655,274
Less: cash acquired	(25,187)
Net cash outflow on acquisition	3,630,087

The Group incurred acquisition-related transaction expenses of $26,853,000, of which $19,059,000 have been included in administrative expenses in the Group's income statement. $7,794,000 have been expensed in administrative expenses in the prior year.

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F2 Acquisition and disposal of controlling interests in subsidiaries in 2022/2021 (continued)

Acquisition of controlling interests in subsidiaries in 2021

(ii) Acquisition of controlling interests in Keystone 1 Limited (Keystone)

On 7 April 2021, the Group acquired 100% of Keystone for a net cash consideration of $11,735,000. Keystone's main principal activities is aircraft leasing. Keystone was subsequently divested on 28 December 2021.

Keystone contributed revenue of $576,000 and net profit of $673,000 to the Group for the period from 7 April 2021 to 28 December 2021.

(iii) Acquisition of controlling interests in ST Engineering Satellite Systems Pte. Ltd. (Satellite Systems)

On 9 August 2021, the Group has reclassified its investments in Satellite Systems from a joint venture to a 51% owned subsidiary following the changes made to the constitution. Satellite Systems provides design and development, system integration, manufacturing and sale of satellite equipment.

Satellite Systems contributed revenue of $8,664,000 and net profit of $717,000 to the Group for the period from 9 August 2021 to 31 December 2021.

Had the above businesses been consolidated from 1 January 2021, the Group's consolidated revenue and net profit for the year ended 31 December 2021 would have been $7,700,723,000 and $573,938,000 respectively.

Identifiable assets acquired and liabilities assumed

The acquisitions had the following effect on the Group's assets and liabilities on acquisition date:

	Fair values recognised on acquisition 2021 $'000
Property, plant and equipment	21,144
Deferred tax assets	84
Contract assets	565
Trade receivables	16
Advances and other receivables	1,323
Bank balances and other liquid funds	19,515
Contract liabilities	(5,182)
Deposits from customers	(138)
Trade payables and accruals	(3,372)
Amounts due to related parties	(8,123)
Provision for taxation	(106)
Non-current contract liabilities	(974)
Deferred tax liabilities	(973)
Total identifiable net assets	23,779
Non-controlling interests	(5,682)
Fair value of pre-existing interest in the acquiree	(5,915)
Total purchase consideration	12,182
Cash inflow on acquisition:	
Cash consideration paid	12,182
Less: cash acquired	(19,515)
Net cash inflow on acquisition	(7,333)

The Group incurred acquisition-related expenses of $64,000 which have been included in administrative expenses.

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F2 Acquisition and disposal of controlling interests in subsidiaries in 2022/2021 (continued)

De-consolidation and disposal of controlling interests in subsidiaries in 2022

In February 2022, the Group divested its 51% equity interest in Visiontech Engineering Pte Ltd (VTE). The Group divested 100% equity interest in Singapore Test Services Private Limited (STS), VT Halter Marine, Inc (Halter Marine) and ST Engineering Halter Marine and Offshore, Inc. (STEHMO) and Viastar Services, LP (Viastar) in July 2022, November 2022 and December 2022 respectively.

During the year, the Group completed the liquidation of ST Aerospace Academy Pte Ltd as part of an effort to streamline its organisation structure. The subsidiary was dormant prior to disposal.

The financial effects arising from the de-consolidation and disposal of subsidiaries are as follows:

	Total $'000
Property, plant and equipment	136,597
Right-of-use assets	3,207
Intangible assets	411
Long-term trade receivables	1,119
Deferred tax assets	33,003
Inventories	833
Contract assets	95,793
Trade receivables	45,229
Amounts due from related parties	11
Advances and other receivables	8,995
Bank balances and other liquid funds	17,990
Contract liabilities	(75,936)
Trade payables and accruals	(63,412)
Provision	(114,658)
Provision for taxation	(439)
Borrowings	(8)
Deferred tax liabilities	(139)
Deferred income	(53,802)
Net assets disposed	34,794
Realisation of reserves	300
Gain on disposal	37,288
Sales consideration	72,382
Less: bank balances and other liquid funds in subsidiaries disposed	(17,990)
Net cash inflow on disposal	54,392

F2 Acquisition and disposal of controlling interests in subsidiaries in 2022/2021 (continued)

De-consolidation and disposal of controlling interests in subsidiaries in 2021

In January 2021, the Group divested its 100% equity interest in VT Volant Aerospace, LLC (Volant) and in December 2021, the Group divested its 100% equity interest in Keystone 1 Limited (Keystone).

During the year, the Group received proceeds from its de-consolidated subsidiaries, Jiangsu Huatong Kinetics Co., Ltd and Jiangsu Huaran Kinetics Co., Ltd (collectively known as "JHK") that were under voluntary liquidation process since December 2016.

The financial effects arising from the de-consolidation and disposal of subsidiaries are as follows:

	Total $'000
Property, plant and equipment	18,938
Right-of-use assets	190
Intangible assets	264
Deferred tax assets	21
Inventories	8,374
Trade receivables	601
Advances and other receivables	2,022
Bank balances and other liquid funds	2,613
Trade payables and accruals	(4,124)
Amounts due to related parties	(346)
Provision for taxation	(76)
Deferred tax liabilities	(1,953)
Net assets disposed	26,524
Realisation of reserves	(5,643)
Gain on disposal	11,742
Sales consideration	32,623
Less: bank balances and other liquid funds in subsidiaries disposed	(2,613)
Net cash inflow on disposal	30,010

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F3 Non-controlling interests in subsidiaries

The following table summarises the information relating to each of the Group's subsidiaries with material non-controlling interests (NCI), based on their respective (consolidated) financial statements prepared in accordance with SFRS(I), modified for fair value adjustments on acquisition and differences from the Group's accounting policies. The summarised financial information is not adjusted for percentage ownership held by NCI.

Name of subsidiary 2022	**ST Engineering Aerospace Services Company Pte. Ltd. $'000**
NCI percentage	**20%**
Principal place of business/Country of incorporation	**Singapore**
Revenue	**374,149**
Profit/(loss) after taxation	**38,250**
Other comprehensive (loss)/income	**1,887**
Total comprehensive income	**40,137**
Attributable to NCI:	
- Profit/(loss)	**7,650**
- Other comprehensive income/(loss)	**377**
- **Total comprehensive income/(loss)**	**8,027**
Non-current assets	**127,728**
Current assets	**253,354**
Non-current liabilities	**(70,937)**
Current liabilities	**(137,132)**
Net assets	**173,013**
Net assets attributable to NCI	**34,603**
Cash flows from operating activities	**57,474**
Cash flows used in investing activities	**(16,443)**
Cash flows used in financing activities *	**(52,531)**
Net changes in cash and cash equivalents	**(11,500)**
* including dividends to NCI	**(8,000)**

	Eco-Services, LLC $'000	ST Aerospace Technologies (Xiamen) Company Ltd $'000	Elbe Flugzeugwerke GmbH $'000	Other individually immaterial subsidiaries $'000	Intra-group elimination $'000	Total $'000
	49.9%	20%	45%			
	U.S.	China	Germany			
	21,993	91,576	657,036			
	(146)	3,056	2,262			
	(241)	(6,497)	30,923			
	(387)	(3,441)	33,185			
	(73)	611	1,018	3,188	(4,071)	8,323
	(120)	(1,299)	13,915	(168)	(11,082)	1,623
	(193)	(688)	14,933	(3,020)	(15,153)	9,946
	11,999	47,529	617,832			
	39,270	111,379	485,877			
	(134)	–	(375,624)			
	(8,275)	(91,194)	(351,802)			
	42,860	67,714	376,283			
	21,387	13,543	169,327	23,565	(7,567)	254,858
	2,640	7,292	60,206			
	(485)	(1,352)	(44,856)			
	–	–	(11,822)			
	2,155	5,940	3,528			
	–	–	–			

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F3 Non-controlling interests in subsidiaries (continued)

Name of subsidiary 2021	**ST Engineering Aerospace Services Company Pte. Ltd. $'000**
NCI percentage	**20%**
Principal place of business/Country of incorporation	**Singapore**
Revenue	320,082
Profit/(loss) after taxation	54,419
Other comprehensive (loss)/income	(1,443)
Total comprehensive income	52,976
Attributable to NCI:	
- Profit/(loss)	10,884
- Other comprehensive (loss)/income	(289)
- **Total comprehensive income/(loss)**	10,595
Non-current assets	232,603
Current assets	242,622
Non-current liabilities	(162,285)
Current liabilities	(139,934)
Net assets	173,006
Net assets attributable to NCI	34,601
Cash flows from operating activities	7,679
Cash flows used in investing activities	(55,520)
Cash flows used in financing activities *	(22,472)
Net (decrease)/increase in cash and cash equivalents	(70,313)
* including dividends to NCI	(8,000)

Eco-Services, LLC $'000	ST Aerospace Technologies (Xiamen) Company Ltd $'000	Elbe Flugzeugwerke GmbH $'000	Other individually immaterial subsidiaries $'000	Intra-group elimination $'000	Total $'000
49.9%	**20%**	**45%**			
U.S.	**China**	**Germany**			
21,271	123,642	455,591			
3,154	794	(33,907)			
893	3,097	(24,557)			
4,047	3,891	(58,464)			
1,574	159	(15,258)	1,287	(2,215)	(3,569)
446	619	(11,056)	(143)	26	(10,397)
2,020	778	(26,314)	1,144	(2,189)	(13,966)
15,515	53,034	663,048			
35,108	79,311	305,431			
(945)	–	(425,626)			
(6,431)	(61,190)	(191,210)			
43,247	71,155	351,643			
21,580	14,231	158,239	23,008	3,794	255,453
10,356	4,307	61,263			
(1,035)	(1,385)	(11,134)			
–	–	(38,225)			
9,321	2,922	11,904			
–	–	–			

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F4 Associates and joint ventures

Group	2022 $'000	2021 $'000
Unquoted shares, at fair value	15,460	34,215
Unquoted shares, at cost	382,617	360,580
Goodwill on acquisition	38	38
Share of net assets acquired	382,655	360,618
Impairment in associates	(8,000)	(8,000)
Share of post-acquisition reserves	78,060	96,064
	452,715	448,682
	468,175	482,897
Represented by:		
Interest in associates	313,236	347,561
Interest in joint ventures	154,939	135,336
	468,175	482,897

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F4 Associates and joint ventures (continued)

Details of significant associates and joint ventures are as follows:

Name	Principal activities	Country of incorporation/ place of business	Effective equity interest held by the Group 2022 %	Effective equity interest held by the Group 2021 %
Associates				
Shanghai Technologies Aerospace Company Limited [1]	Aircraft and component maintenance, repair, overhaul and other related maintenance business	People's Republic of China	**49**	49
ST Aerospace (Guangzhou) Aviation Services Company Limited [1]	Aircraft and component maintenance, repair, overhaul and other related maintenance business	People's Republic of China	**44**	44
Turbine Coating Services Pte. Ltd.	Repair, refurbishment and upgrading of aircraft jet engine turbine blades and vanes	Singapore	**24.5**	24.5
Turbine Overhaul Services Pte. Ltd.	Repair and service of gas and steam turbine components	Singapore	**49**	49
CityCab Pte. Ltd. [1]	Rental of taxis and the provision of charge card facilities	Singapore	**46.5**	46.5
Experia Events Pte. Ltd. [1]	Organising and management of conferences, exhibitions and other related activities, including the biennial Singapore Airshow event	Singapore	**33**	33
Joint ventures				
Total Engine Asset Management Pte. Ltd. [1]	Leasing of engines	Singapore	**50**	50
Keystone Holdings (Global) Pte. Ltd. [1]	Investment holding	Singapore	**50**	50
SPTel Pte. Ltd.	Running, operation, management and supply of telecommunications services	Singapore	**51**	51
Juniper Aviation Investment Pte Ltd	Investment holding	Singapore	**50**	50

[1] Not audited by PricewaterhouseCoopers LLP Singapore.

All significant associates and joint ventures that are required to be audited under the law in the country of incorporation are audited by PricewaterhouseCoopers LLP Singapore and network of member firms of PricewaterhouseCoopers International Limited (PwCIL), except as indicated above.

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F4 Associates and joint ventures (continued)

Associates

The following table summarises the information of each of the Group's material associates, which are equity-accounted, based on their respective financial statements prepared in accordance with SFRS(I), modified for fair value adjustments on acquisitions and differences with the Group's accounting policies. The summarised financial information is not adjusted for percentage ownership held by the Group.

Name of associate 2022	Shanghai Technologies Aerospace Company Limited $'000	ST Aerospace (Guangzhou) Aviation Services Company Limited $'000
Percentage of interest	**49%**	**44%**
Revenue	48,019	122,428
Profit/(loss) after taxation	(6,657)	17,589
Other comprehensive (loss)/income	(10,529)	(11,527)
Total comprehensive (loss)/income	(17,186)	6,062
Attributable to NCI	–	–
Attributable to investee's shareholders	(17,186)	6,062
Non-current assets	74,032	110,143
Current assets	50,431	53,249
Non-current liabilities	(551)	(19,332)
Current liabilities	(18,791)	(18,967)
Net assets	105,121	125,093
Attributable to NCI	–	–
Attributable to investee's shareholders	105,121	125,093
Group's interest in net assets of investee at beginning of the year	59,930	52,374
Group's share of:		
- Profit/(loss) for the year	(3,262)	7,739
- Total other comprehensive income/(loss)	(5,159)	(5,072)
Total comprehensive income/(loss)	(8,421)	2,667
Group's contribution during the year	–	–
Dividends received during the year	–	–
Disposal of associates during the year	–	–
Carrying amount of interest in investee at end of the year	51,509	55,041

Fair value changes of unquoted investments held by the Group's Corporate Venture Capital Unit is recognised in Other income, net in the income statement.

Turbine Coating Services Pte. Ltd. $'000	Turbine Overhaul Services Pte. Ltd. $'000	CityCab Pte. Ltd. $'000	Experia Events Pte. Ltd. $'000	Immaterial associates $'000	Total $'000
24.5%	49%	46.5%	33%		
16,707	216,893	84,460	35,193		
5,563	45,108	12,155	6,697		
90	(1,053)	–	–		
5,653	44,055	12,155	6,697		
–	–	203			
5,653	44,055	11,952	6,697		
20,465	51,884	67,371	41,044		
28,342	239,124	106,907	44,128		
(3,169)	(5,415)	(14,191)	(4,982)		
(82)	(125,180)	(39,895)	(14,382)		
45,556	160,413	120,192	65,808		
–	–	861	–		
45,556	160,413	119,331	65,808		
14,856	73,936	61,309	19,510	65,646	347,561
1,363	22,103	5,559	2,210	(4,020)	31,692
22	(516)	–	–	(11,393)	(22,118)
1,385	21,587	5,559	2,210	(15,413)	9,574
–	–	–	–	750	750
(5,081)	(16,920)	(11,379)	–	(287)	(33,667)
–	–	–	–	(10,982)	(10,982)
11,160	78,603	55,489	21,720	39,714	313,236

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F4 Associates and joint ventures (continued)

Associates (continued)

Name of associate 2021	**Shanghai Technologies Aerospace Company Limited $'000**	**ST Aerospace (Guangzhou) Aviation Services Company Limited $'000**
Percentage of interest	49%	44%
Revenue	47,454	68,760
Profit/(loss) after taxation	(6,120)	7,795
Other comprehensive income	5,392	5,009
Total comprehensive (loss)/income	(728)	12,804
Attributable to NCI	–	–
Attributable to investee's shareholders	(728)	12,804
Non-current assets	83,937	115,641
Current assets	58,500	45,730
Non-current liabilities	(1,337)	(19,321)
Current liabilities	(18,794)	(23,019)
Net assets	122,306	119,031
Attributable to NCI	–	–
Attributable to investee's shareholders	122,306	119,031
Group's interest in net assets of investee at beginning of the year	61,988	46,739
Group's share of:		
- Profit/(loss) for the year	(2,999)	3,430
- Total other comprehensive income	2,642	2,205
Total comprehensive income/(loss)	(357)	5,635
Group's contribution during the year	–	–
Dividends received during the year	(1,701)	–
Carrying amount of interest in investee at end of the year	59,930	52,374

Fair value changes of unquoted investments held by the Group's Corporate Venture Capital Unit is recognised in Other income/(expenses) in the income statement.

Turbine Coating Services Pte. Ltd. $'000	Turbine Overhaul Services Pte. Ltd. $'000	CityCab Pte. Ltd. $'000	Experia Events Pte. Ltd. $'000	Immaterial associates $'000	Total $'000
24.5%	49%	46.5%	33%		
17,956	266,115	69,984	8,203		
5,563	40,081	3,836	(7,976)		
1,310	2,882	–	–		
6,873	42,963	3,836	(7,976)		
–	–	(257)	–		
6,873	42,963	4,093	(7,976)		
21,973	46,011	89,249	44,062		
41,864	213,412	82,330	50,265		
(3,199)	(5,967)	(18,030)	(4,634)		
–	(102,568)	(21,070)	(30,582)		
60,638	150,888	132,479	59,111		
–	–	638	–		
60,638	150,888	131,841	59,111		
14,488	60,777	64,301	22,141	48,571	319,005
1,363	19,640	1,904	(2,631)	14,177	34,884
320	1,413	–	–	425	7,005
1,683	21,053	1,904	(2,631)	14,602	41,889
–	–	–	–	4,883	4,883
(1,315)	(7,894)	(4,896)	–	(2,410)	(18,216)
14,856	73,936	61,309	19,510	65,646	347,561

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F4 Associates and joint ventures (continued)

Joint ventures

The following table summarises the information of each of the Group's material joint ventures, adjusted for any differences with the Group's accounting policies and reconciles the carrying amount of the Group's interest in joint ventures and the share of profit and other comprehensive income of equity-accounted investment (net of tax). The summarised financial information is not adjusted for the percentage ownership held by the Group.

Name of joint venture 2022	**Keystone Holdings (Global) Pte. Ltd. $'000**
Percentage of interest	**50%**
Revenue	19,215
Profit/(loss) after taxation [a]	1,158
Other comprehensive (loss)/income	(340)
Total comprehensive income/(loss)	818
[a] Includes:	
- Depreciation and amortisation of:	11,844
- Interest expense of:	3,166
- Income tax expense of:	353
Non-current assets	169,157
Current assets [b]	24,490
Non-current liabilities [c]	(36,760)
Current liabilities [d]	(86,546)
Net assets excluding goodwill	70,341
[b] Includes cash and cash equivalents of:	22,684
[c] Includes non-current financial liabilities (excluding trade and other payables and provisions) of:	36,760
[d] Includes current financial liabilities (excluding trade and other payables and provisions) of:	85,609
Group's interest in net assets of investee at beginning of the year	35,037
Share of total comprehensive income/(loss)	409
Group's contribution during the year	–
Dividends received during the year	(277)
Carrying amount of interest in investee at end of the year	35,169

Total Engine Asset Management Pte. Ltd. $'000	SPTel Pte. Ltd. $'000	Juniper Aviation Investment Pte Ltd $'000	Immaterial joint ventures $'000	Total $'000
50%	51%	50%		
27,856	55,288	3,828		
8,742	(6,555)	(2,688)		
3,278	–	(1,748)		
12,020	(6,555)	(4,436)		
16,481	11,946	2,120		
11,992	1,392	2,901		
571	–	451		
703,924	112,517	58,796		
25,241	39,999	102,609		
(366,089)	(71,885)	(114,566)		
(237,279)	(34,146)	(3,321)		
125,797	46,485	43,518		
6,440	20,934	7,602		
366,089	71,885	117,918		
228,720	6,292	1,293		
57,235	29,764	5,001	8,299	135,336
6,010	(3,367)	(2,218)	1,276	2,110
5,325	–	18,976	–	24,301
(5,671)	–	–	(860)	(6,808)
62,899	26,397	21,759	8,715	154,939

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F4 Associates and joint ventures (continued)

Joint ventures (continued)

Name of joint venture 2021	**Keystone Holdings (Global) Pte. Ltd. $'000**
Percentage of interest	50%
Revenue	22,982
Profit/(loss) after taxation [a]	7,694
Other comprehensive income	944
Total comprehensive income/(loss)	8,638
[a] Includes:	
- Depreciation and amortisation of:	(13,555)
- Interest expense of:	(3,784)
- Income tax expense of:	869
Non-current assets	181,512
Current assets [b]	32,113
Non-current liabilities [c]	(71,927)
Current liabilities [d]	(71,623)
Net assets excluding goodwill	70,075
[b] Includes cash and cash equivalents of:	29,687
[c] Includes non-current financial liabilities (excluding trade and other payables and provisions) of:	(71,927)
[d] Includes current financial liabilities (excluding trade and other payables and provisions) of:	(71,097)
Group's interest in net assets of investee at beginning of the year	36,376
Share of total comprehensive income/(loss)	4,319
Group's (return of capital)/contribution during the year	(3,752)
Carrying amount of interest in a joint venture reclassified to a subsidiary	–
Disposal of joint venture	–
Dividends received during the year	(1,906)
Carrying amount of interest in investee at end of the year	35,037

Total Engine Asset Management Pte. Ltd. $'000	SPTel Pte. Ltd. $'000	Immaterial joint ventures $'000	Total $'000
50%	51%		
22,865	34,358		
(6,936)	(15,847)		
5,586	–		
(1,350)	(15,847)		
(10,268)	11,536		
(4,980)	945		
3,706	(449)		
361,038	97,492		
22,265	26,305		
(145,348)	(26,855)		
(123,485)	(43,902)		
114,470	53,040		
11,872	8,464		
(145,348)	27,544		
(117,293)	11,580		
60,464	37,876	15,191	149,907
(675)	(8,112)	1,056	(3,412)
–	–	5,001	1,249
–	–	(5,915)	(5,915)
–	–	(361)	(361)
(2,554)	–	(1,672)	(6,132)
57,235	29,764	13,300	135,336

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F4 Associates and joint ventures (continued)

Basis of consolidation

(i) Business combinations

Business combinations are accounted for using the acquisition method in accordance with SFRS(I) 3 *Business Combinations* as at the acquisition date, which is the date on which control is transferred to the Group.

Goodwill that arises upon the acquisition of subsidiaries is included in intangible assets. For the measurement of goodwill at initial recognition, refer to Note C3.

The consideration transferred does not include amounts related to the settlement of pre-existing relationships. Such amounts are generally recognised in profit or loss.

Costs related to the acquisition, other than those associated with the issue of debt or equity securities, that the Group incurs in connection with a business combination are expensed as incurred.

Any contingent consideration payable is recognised at fair value at the acquisition date. If the contingent consideration is classified as equity, it is not remeasured and settlement is accounted for within equity. Otherwise, any subsequent changes to the fair value of the contingent consideration are recognised in profit or loss.

Non-controlling interests (NCI) that are present ownership interests and entitle their holders to a proportionate share of the acquiree's net assets in the event of liquidation are measured either at fair value or at the NCI's proportionate share of the recognised amounts of the acquiree's identifiable net assets, at the acquisition date. The measurement basis taken is elected on a transaction-by-transaction basis. All other NCI are measured at acquisition-date fair value, unless another measurement basis is required by SFRS(I)s.

Changes in the Group's interest in a subsidiary that do not result in a loss of control are accounted for as transactions with owners in their capacity as owners and therefore no adjustment is made to goodwill and no gain or loss is recognised in profit or loss. Adjustments to NCI arising from transactions that do not involve the loss of control are based on a proportionate amount of the net assets of the subsidiary.

(ii) Subsidiaries

Subsidiaries are entities controlled by the Group. The Group controls an entity when it is exposed to or has rights to variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. The financial statements of subsidiaries are included in the consolidated financial statements from the date that control commences until the date that control ceases.

Consistent accounting policies are applied to like transactions and events in similar circumstances. Losses applicable to the non-controlling interests in a subsidiary are allocated to the non-controlling interests even if doing so causes the NCI to have a deficit balance.

In the Company's separate financial statements, investments in subsidiaries are accounted for at cost less accumulated impairment losses.

F4 Associates and joint ventures (continued)

Basis of consolidation (continued)

(iii) Acquisitions of entities under amalgamation

The Company's interests in ST Engineering Aerospace Ltd., ST Engineering Electronics Ltd., ST Engineering Land Systems Ltd., and ST Engineering Marine Ltd. (collectively referred to as the Scheme Companies) resulted from the amalgamation of the Scheme Companies pursuant to a scheme of arrangement under Section 210 of the Singapore Companies Act 1967 in 1997.

As the amalgamation of the Scheme Companies constitutes a uniting of interests, the pooling of interests method has been adopted in the preparation of the consolidated financial statements in connection with the amalgamation.

Under the pooling of interests method, the combined assets, liabilities and reserves of the pooled enterprises are recorded at their existing carrying amounts at the date of amalgamation. The excess or deficiency of amount recorded as share capital issued (plus any additional consideration in the form of cash or other assets) over the amount recorded for the share capital acquired is recorded as capital reserve.

(iv) Loss of control

Upon the loss of control, the Group derecognises the assets and liabilities of the subsidiary, any non-controlling interests and the other components of equity related to the subsidiary. Any surplus or deficit arising on the loss of control is recognised in profit or loss. If the Group retains any interest in the previous subsidiary, then such interest is measured at fair value at the date that control is lost. Subsequently, it is accounted for as an equity-accounted investee or as a financial asset at FVOCI, depending on the level of influence retained.

(v) Investments in associates and joint ventures

Associates are those entities in which the Group has significant influence, but not control or joint control, over the financial and operating policies. Significant influence is presumed to exist when the Group holds between 20% or more of the voting power of another entity. A joint venture is an arrangement in which the Group has joint control, whereby the Group has rights to the net assets of the arrangement, rather than rights to its assets and obligations for its liabilities.

Investments in associates and joint ventures are accounted for by the Group using the equity method (except for those acquired by the Group's Corporate Venture Capital Unit) and are recognised initially at cost, which includes transaction costs.

The consolidated financial statements include the Group's share of the profit or loss and other comprehensive income (OCI) from the date that significant influence or joint control commences until the date that significant influence or joint control ceases.

When the Group's share of losses exceeds its interest in an equity-accounted investee, the carrying amount of the investment, including any long-term interest, is reduced to zero, and the recognition of further losses is discontinued except to the extent that the Group has an obligation to fund the investee's operations or has made payments on behalf of the investee.

For investments in associates acquired by the Group's Corporate Venture Capital Unit, the Group has elected to measure its investments in associates at FVTPL in accordance with SFRS(I) 9 *Financial Instruments*.

NOTES TO THE FINANCIAL STATEMENTS

31 DECEMBER 2022
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F4 Associates and joint ventures (continued)

Basis of consolidation (continued)

(v) Investments in associates and joint ventures (continued)

In the Company's separate financial statements, investments in associates and joint ventures are accounted for at cost, less accumulated impairment losses.

(vi) Transactions eliminated on consolidation

All significant inter-company balances and transactions are eliminated on consolidation.

Recognition and measurement

Goodwill that forms part of the carrying amount of an investment in an associate and/or joint venture is not recognised separately, and therefore is not tested for impairment separately. Instead, the entire amount of the investment in an associate and/or joint venture is tested for impairment as a single asset when there is objective evidence that the investment in an associate and/or joint venture may be impaired.

Estimates and judgements: Judgements made in applying accounting policies

Information about critical judgements in applying accounting policies that have the most significant effect on the amounts recognised in the financial statements relates to assessing whether the Group has control over its investee companies.

During the year, the Group assessed the terms and conditions of the shareholders' agreement of subsidiaries that are not wholly-owned by the Group. The Group made critical judgements over:

(a) its ability to exercise power over its investees;
(b) its exposure or rights to variable returns for its investments with those investees; and
(c) its ability to use its power to affect those returns.

The Group's judgement included considerations of its power exercised at the board of the respective investees and rights and obligations arising from matters reserved for the board as agreed with the other shareholders.

F5 Related party information

Key management personnel compensation

Group	2022 $'000	2021 $'000
Short-term employee benefits	**41,033**	41,861
Contributions to defined contribution plans	**627**	680
Share-based payments	**8,649**	8,780
	50,309	51,321

NOTES TO THE FINANCIAL STATEMENTS

31 DECEMBER 2022
(CURRENCY – SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

F5 Related party information (continued)

In addition to related party information disclosed elsewhere in the financial statements, the Group has significant transactions with the following related parties on terms agreed between the parties:

Group	2022 $'000	2021 $'000
Associates of the Group		
Sales and services rendered	**8,204**	7,888
Purchases and services received	**(2,503)**	(3,384)
Dividend income	**33,667**	18,216
Joint ventures of the Group		
Sales and services rendered	**144,156**	54,999
Purchases and services received	**(4,355)**	(1,595)
Dividend income	**6,808**	6,132
Other related parties*		
Sales and services rendered	**78,313**	76,164
Purchases and services received	**(46,359)**	(9,882)
Rental expense	**(6,719)**	(5,368)

* Other related parties refer to subsidiaries, associates and joint ventures of the immediate holding company.

NOTES TO THE FINANCIAL STATEMENTS

31 DECEMBER 2022
(CURRENCY – SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

G. OTHERS

G1 Events occurring after balance sheet date

The Group's Marine business acquired the site and assets of an existing shipyard in Singapore at 55 Gul Road from Keppel FELS for $95 million for its commercial ship repair business. The assets acquired include three floating docks, existing buildings, workshops, and machinery. The approximately 141,000 sqm Gul yard, with a gross built up floor area of 74,593 sqm, has a remaining lease until August 2030 which can be extended by another 20 years.

G2 Comparatives

The following reclassifications have been made to the prior year comparatives:

	2021 (As previously Reported) $'000	Reclassification $'000	2021 (As restated) $'000
Investments			
Equity shares, at FVTPL			
- unquoted	–	15,180	15,180
Equity shares, at FVOCI			
- unquoted	36,129	(15,180)	20,949

G3 Adoption of new standards and interpretations

On 1 January 2022, the Group has adopted the new or amended SFRS(I)s and Interpretations of SFRS(I)s ("INT SFRS(I)s") that are mandatory for application for the financial year. Changes to the Group's accounting policies have been made as required, in accordance with the transitional provisions in the respective SFRS(I)s and INT SFRS(I)s.

The adoption of these new or amended SFRS(I)s and INT SFRS(I)s did not result in substantial changes to the Group's accounting policies and had no material effect on the amounts reported for the current or prior financial years.

Applicable to 2022 financial statements

- Amendments to SFRS(I) 16 *Leases: Covid-19-Related Rent Concessions beyond 30 June 2021*
- Amendments to SFRS(I) 3 *Business Combinations: Reference to the Conceptual Framework*, SFRS(I) 1-16 *Property, Plant and Equipment: Proceeds before Intended Use*, and SFRS(I) 1-37 *Provisions, Contingent Liabilities and Contingent Assets: Onerous Contracts – Cost of Fulfilling a Contract*

G4 New standards and interpretations not adopted

A number of new standards, interpretations and amendments to standards are effective for annual periods beginning after 1 January 2022 and earlier application is permitted; however, the Group has not early adopted the new or amended standards and interpretations in preparing these financial statements.

The following new SFRS(I)s, interpretations and amendments to SFRS(I)s are not expected to have a significant impact on the Group's financial statements.

Applicable to 2023 financial statements

- Amendments to SFRS(I) 1-1 *Presentation of Financial Statements*: Classification of Liabilities as Current or Non-current
- Amendments to SFRS(I) 1-1 *Presentation of Financial Statements* and *SFRS(I) Practice Statement 2*: Disclosure of Accounting Policies
- Amendments to SFRS(I) 1-8 *Accounting Policies, Changes in Accounting Estimates and Errors*: Definition of Accounting Estimates
- Amendments to SFRS(I) 1-12 *Income Taxes:* Deferred Tax related to Assets and Liabilities arising from a Single Transaction
- Amendments to SFRS(I) 17 *Insurance Contracts*

Mandatory effective date deferred

- *Amendments to* SFRS(I) 10 *Consolidated Financial Statements and* SFRS(I) 1-28 *Investments in Associates and Joint Ventures*: Sale or Contribution of Assets between an Investor and its Associate or Joint Venture.

G5 Impact of COVID-19

The COVID-19 pandemic continues to impact economies and businesses around the world, albeit there was partial business recovery in 2022. The Group has considered the market conditions and outlook including the impact of COVID-19 as at the balance sheet date, in making estimates and judgements on the recoverability of assets and provisions for onerous contracts as at 31 December 2022. As the COVID-19 pandemic is ongoing and evolving as at the date these financial statements were authorised for issuance, future developments in relation to the pandemic and their impact on the operating and financial performance of the Group cannot be ascertained at the present moment.

STATEMENT OF FINANCIAL POSITION OF THE COMPANY

AS AT 31 DECEMBER 2022
(CURRENCY – SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

	Note	2022 $'000	2021 $'000
ASSETS			
Non-current assets			
Property, plant and equipment	2	**12**	145
Right-of-use assets		**203**	317
Subsidiaries	3	**1,537,911**	1,479,070
Associates	4	**–**	–
		1,538,126	1,479,532
Current assets			
Amounts due from related parties	5	**7,159**	14,833
Advances and other receivables		**556**	236
Bank balances and other liquid funds	6	**117,879**	82,255
		125,594	97,324
Total assets		**1,663,720**	1,576,856
EQUITY AND LIABILITIES			
Current liabilities			
Other payables and accruals	7	**4,255**	3,526
Amounts due to related parties	5	**8,102**	11,878
Provision for taxation		**32**	701
Lease liabilities		**114**	110
		12,503	16,215
Net current assets		**113,091**	81,109
Non-current liabilities			
Lease liabilities		**–**	113
		–	113
Total liabilities		**12,503**	16,328
Net assets		**1,651,217**	1,560,528
Share capital and reserves			
Share capital	8	**895,926**	895,926
Treasury shares	8	**(36,377)**	(33,475)
Capital reserves	8	**(15,977)**	(12,044)
Other reserves	8	**71,014**	65,716
Retained earnings		**736,631**	644,405
		1,651,217	1,560,528
Total equity and liabilities		**1,663,720**	1,576,856

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

NOTES TO THE STATEMENTS OF FINANCIAL POSITION OF THE COMPANY

AS AT 31 DECEMBER 2022
(CURRENCY – SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

1. Basis of Preparation and Significant Accounting Policies

The Statement of Financial Position of the Company is prepared in accordance with Singapore Financial Reporting Standards (International) (SFRS(I)). The Statement of Financial Position of the Company has been prepared on the historical cost convention, except as otherwise described in the accounting policies below.

The Statement of Financial Position of the Company are presented in Singapore dollars (SGD) which is the Company's functional currency. All values are rounded to the nearest thousand ($'000) unless otherwise indicated.

Accounting policies, estimates and critical accounting judgements applied to the preparation of the Statement of Financial Position of the Company is consistent with the disclosures in the consolidated financial statements.

The Statement of Financial Position and Notes to the Statement of Financial Position of the Company as at 31 December 2022 were authorised and approved by the Board of Directors for issuance on 23 February 2023.

2. Property, plant and equipment

	Furniture, fittings, office equipment and others $'000	Construction-in-progress $'000	Total $'000
2022			
Cost			
At 1 January 2022	492	–	492
Disposals	(55)	–	(55)
At 31 December 2022	437	–	437
Accumulated depreciation			
At 1 January 2022	347	–	347
Depreciation charge	97	–	97
Disposals	(19)	–	(19)
At 31 December 2022	425	–	425
Net book value			
At 31 December 2022	12	–	12

NOTES TO THE STATEMENTS OF FINANCIAL POSITION OF THE COMPANY

AS AT 31 DECEMBER 2022
(CURRENCY – SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

2. Property, plant and equipment (continued)

	Buildings and improvements $'000	Furniture, fittings, office equipment and others $'000	Construction-in-progress $'000	Total $'000
2021				
Cost				
At 1 January 2021	6	2,124	1,191	3,321
Additions	–	80	–	80
Disposals	(6)	(1,748)	(1,155)	(2,909)
Transfer	–	36	(36)	–
At 31 December 2021	–	492	–	492
Accumulated depreciation				
At 1 January 2021	3	1,181	–	1,184
Depreciation charge	–	279	–	279
Disposals	(3)	(1,113)	–	(1,116)
At 31 December 2021	–	347	–	347
Net book value				
At 31 December 2021	–	145	–	145

3. Subsidiaries

	2022 $'000	2021 $'000
Equity investments at cost		
At beginning of the year	**1,479,070**	1,363,251
Additions	**58,841**	1,415,530
Transfers to subsidiaries	**–**	(1,291,123)
Impairment	**–**	(8,588)
At end of the year	**1,537,911**	1,479,070

In the prior year, the Company transferred its investments in certain subsidiaries to ST Engineering IHQ Pte. Ltd. and ST Engineering Holdings GmbH, which are the regional investment holding companies of the Group, of $761,276,000 and $511,494,000 respectively.

NOTES TO THE STATEMENTS OF FINANCIAL POSITION OF THE COMPANY

AS AT 31 DECEMBER 2022
(CURRENCY - SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

4. Associates

	2022 $'000	2021 $'000
Equity investments at cost		
At beginning of the year	–	17,657
Transfer to a subsidiary	–	(17,657)
At end of the year	–	–

5. Amounts due from / to related parties

Amounts due from / to related parties were non-trade related, unsecured, interest-free and repayable on demand.

6. Bank balances and other liquid funds

	2022 $'000	2021 $'000
Cash and bank balances	**98**	145
Amounts placed with a related corporation	**117,781**	82,110
Bank balances and other liquid funds	**117,879**	82,255

At the balance sheet date, the amounts placed with a related corporation, ST Engineering Treasury Pte. Ltd., under a cash pooling arrangement bears interest ranging from 0% to 4.0% (2021: 0%) per annum. The cash pooling arrangement administered by ST Engineering Treasury Pte. Ltd. is operated at the instructions of the Company. These amounts placed with a related corporation are subjected to an arrangement with a bank where bank balances are transferred from / to a bank account of the related corporation on a daily basis.

7. Other payables and accruals

	2022 $'000	2021 $'000
Accrued operating expenses	**4,255**	3,526

8. Share capital, treasury shares, capital reserves and other reserves

- Share capital and treasury shares have been explained and disclosed in E6 and E7.
- Capital reserve is relating to realised gain or loss on re-issuance of treasury shares under share-based payment arrangements as explained and disclosed in E8.
- Other reserve is relating to share-based payment reserve as explained and disclosed in E9.

NOTES TO THE STATEMENTS OF FINANCIAL POSITION OF THE COMPANY

AS AT 31 DECEMBER 2022
(CURRENCY - SINGAPORE DOLLARS UNLESS OTHERWISE STATED)

9. Financial risk management

- **Interest rate risk**: No interest rate risk exposure was disclosed as the Company had assessed that a reasonable change in the interest rates would not result in any significant impact on the Company's results.

- **Foreign exchange risk**: No foreign exchange sensitivity analysis was disclosed as the Company had assessed that a reasonable change in exchange rates would not result in any significant impact on the Company's results.

- **Liquidity risk**: It is not expected that the cash flows associated with the liabilities of the Company could occur at significantly different amounts.

- **Credit risk**: The Company limits its exposure to credit risk on amounts due from related parties which are mostly short-term in nature and bank balances and other liquid funds placed with reputable financial institutions.

  Management actively monitors the credit ratings of its debtors and does not expect any counterparty to fail to meet its obligations.

  Derivatives are entered into with financial institutions which have long-term rating of at least A3 by Moody's, A- by Standard & Poor's or the equivalent by a reputable credit rating agency.

  Cash and bank deposits are placed with reputable financial institutions.

  As at 31 December 2022, there were no significant concentrations of credit risk.

- **Financial instruments by category**: The carrying amount of the different categories of financial instruments are as follows:

	2022 $'000	2021 $'000
Financial assets, at amortised cost	**125,594**	97,324
Financial liabilities, at amortised cost	**(12,471)**	(15,627)

SHAREHOLDING STATISTICS

AS AT 28 FEBRUARY 2023

SHARE CAPITAL

Paid-Up Capital (including treasury shares)	:	S$895,925,583.505
Number of issued ordinary shares (excluding treasury shares)	:	3,112,387,021
Number of ordinary shares held in treasury	:	10,108,176
Number of subsidiary holdings held	:	Nil
Percentage of the aggregate number of treasury shares and subsidiary holdings held against the total number of issued ordinary shares	:	0.32%
Class of Shares	:	Ordinary Shares One Special Share held by the Minister for Finance
Voting Rights	:	One vote per share

SHAREHOLDING HELD IN HANDS OF PUBLIC

Based on the information available to the Company as at 28 February 2023, 48.47% of the issued ordinary shares of the Company is held by the public and therefore, Rule 723 of the Listing Manual issued by SGX-ST is complied with.

ANALYSIS OF SHAREHOLDINGS

Range of Shareholdings	No. of Shareholders	%	No. of Shares (excluding treasury shares)	%
1 — 99	1,020	2.41	25,109	0.00
100 — 1,000	7,009	16.58	5,450,214	0.18
1,001 — 10,000	26,830	63.48	119,587,698	3.84
10,001 — 1,000,000	7,370	17.44	277,580,562	8.92
1,000,001 and above	36	0.09	2,709,743,438	87.06
	42,265	100.00	3,112,387,021	100.00

Substantial Shareholder	Direct Interest No. of Shares	Deemed Interest No. of Shares	Total Interest No. of Shares	%*
Temasek Holdings (Private) Limited	1,554,764,574	36,344,532 (1)	1,591,109,106	51.12 (2)

Notes:

* The percentage of issued ordinary shares is calculated based on the number of issued ordinary shares of the Company as at 28 February 2023, excluding any ordinary shares held in treasury as at that date.

(1) Includes deemed interests held through subsidiaries and associated companies.

(2) The percentage figure is rounded down to the nearest 0.01%.

SHAREHOLDING STATISTICS

AS AT 28 FEBRUARY 2023

MAJOR SHAREHOLDERS LIST – TOP 20

No.	Name	No. of Shares Held	%*
1	Temasek Holdings (Private) Limited	1,554,764,574	49.95
2	Citibank Nominees Singapore Pte Ltd	399,824,570	12.85
3	DBSN Services Pte. Ltd.	216,322,235	6.95
4	DBS Nominees (Private) Limited	152,778,636	4.91
5	HSBC (Singapore) Nominees Pte Ltd	127,443,053	4.10
6	Raffles Nominees (Pte.) Limited	123,059,215	3.95
7	Vestal Investments Pte. Ltd.	28,501,000	0.92
8	BPSS Nominees Singapore (Pte.) Ltd.	20,620,229	0.66
9	United Overseas Bank Nominees (Private) Limited	14,093,923	0.45
10	OCBC Nominees Singapore Private Limited	10,682,293	0.34
11	Phillip Securities Pte Ltd	9,096,671	0.29
12	iFAST Financial Pte. Ltd.	5,933,013	0.19
13	OCBC Securities Private Limited	4,838,959	0.16
14	Tan Pheng Hock	4,082,283	0.13
15	DBS Vickers Securities (Singapore) Pte Ltd	3,232,056	0.10
16	Mrs Lee Li Ming Nee Ong	2,732,200	0.09
17	Foo Suan Sai	2,490,000	0.08
18	UOB Kay Hian Pte Ltd	2,479,054	0.08
19	DB Nominees (Singapore) Pte Ltd	2,085,921	0.07
20	Shanwood Development Pte Ltd	2,077,000	0.07
		2,687,136,894	86.34

* The percentage of issued ordinary shares is calculated based on the number of issued ordinary shares of the Company as at 28 February 2023, excluding any ordinary shares held in treasury as at that date.

SGX LISTING RULES REQUIREMENT

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INTERESTED PERSON TRANSACTIONS

The Group has obtained a general mandate from shareholders of the Company for interested person transactions in the Annual General Meeting held on 21 April 2022. During the financial year, the following interested person transactions were entered into by the Group:

Name of interested person	Nature of relationship	Aggregate value of all interested person transactions (excluding transactions less than $100,000 and transactions conducted under a shareholders mandate pursuant to Rule 920) 2022 $'000	2021 $'000	Aggregate value of all interested person transactions conducted under a shareholders mandate pursuant to Rule 920 (excluding transactions less than $100,000) 2022 $'000	2021 $'000
Transactions for the Sale of Goods and Services					
SATS Ltd. and its Associates	Temasek Holdings (Private) Limited is a controlling shareholder of the Company. The other named interested persons are its associates.	**–**	–	**1,775**	967
SembCorp Industries Ltd and its Associates		**–**	–	**3,685**	45,638
Singapore Airlines Limited and its Associates		**–**	–	**611**	1,308
SIA Engineering Company Limited and its Associates		**–**	–	**143**	–
Singapore Telecommunications Limited and its Associates		**–**	–	**3,635**	17,679
StarHub Ltd and its Associates		**–**	–	**1,088**	430
Temasek Holdings (Private) Limited and its Associates (non-listed)		**22,768**	–	**85,172**	24,714
		22,768	–	**96,109**	90,736
Transactions for the Purchase of Goods and Services					
CapitaLand Investment Limited and its Associates	Temasek Holdings (Private) Limited is a controlling shareholder of the Company. The other named interested persons are its associates.	**–**	–	**–**	110
Mapletree Pan Asia Commercial Trust		**–**	–	**1,576**	–
SATS Ltd. and its Associates		**–**	–	**295**	4,580
SembCorp Industries Ltd and its Associates		**–**	–	**919**	352
SembCorp Marine Ltd and its Associates		**–**	–	**350**	–
Singapore Telecommunications Limited and its Associates		**–**	–	**2,827**	2,893
StarHub Ltd and its Associates		**–**	–	**2,568**	641
Temasek Holdings (Private) Limited and its Associates (non-listed)		**–**	–	**21,155**	12,171
		–	–	**29,690**	20,747
Total Interested Person Transactions		**22,768**	–	**125,799**	111,483

Save for the interested person transactions disclosed above, there were no other material contracts entered into by the Company and its subsidiaries involving the interests of its Group President and CEO, directors or controlling shareholder, which were either still subsisting at the end of the financial year or, if not then subsisting, entered into since the end of the previous financial year.

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